Introduction

* Fundamental human motivation: to understand the unobservable characteristics, intentions, traits, motives, goals, and needs of others
* First impressions, especially online, can open either brave new worlds, or destroy even a slightest chance of a shortest peek
* The tendency to form first impressions is absolutely fundamental to the processes of the person perception and social cognition
* Perceivers form impressions of others from a host of cues that originate from both appearance and behaviour
* Accuracy in such perceptions could help a group as a whole to function, allowing people to be appropriately fit to the various roles (e.g. hunter or negotiator) that might emerge during the group interactions
* Evolutionary benefit – accurate understanding of others can substantially aid one’s ability to function in a group – for instance, judging who would be a partner that one could trust, or, alternatively, that one could safely swindle
* One difficulty with evolutionary arguments is that the available data are often open to alternative explanations
* See Schaller’s theoretical position
* Studies relating brain structure to social inference making: Social thinking uses different brain structures or substrates than non-social thinking.
* Specific and recurring cognitive and behaviour patterns that deviate from the norm can often suggest abnormalities in the neural substrates that underlie thought, and some of these abnormalities may be unique to the social domain.
* Prosopagnosia 🡪 a disorder that involves the loss of the ability to recognise familiar others without a more general loss of perceptual or pattern-recognition abilities (see KcKone, Kanwisher & Duchaine, 2007)
* Williams syndrome 🡪 a rare genetic disorder characterized by intellectual impairment and deficits in visual-spatial cognition but relatively undiminished language and face recognition and a strong appetitive drive toward social interaction
* Chakrabarti & Baron Cohen. Autism and empathy (the ability to identify others’ emotions and thoughts and to respond to these with an appropriate emotion). To empathize one clearly must be able to infer other’s mental states
* Inference making is often geared toward understanding the goals of others
* Darwinian speculations about the information value of emotion expression
* Environmental cues encountered before the information of first impressions can influence the impression through the process of assimilation or contrast
* Research on appearance cues and facial expressions was dominated by ecological and Darwinian views, while research on first impressions from trait descriptions was dominated by information processing views
* Zajonc (1980) argues that prejudice is nothing more than am evaluative preference
* The evolutionary explanation presupposes that there is some degree of accuracy in inference making. Without accuracy, why would the tendency to make social inferences be functional? See Kenny & West
* Ambady & Rosenthal (1992).
* Expectations derived from first impressions can lead to biases in processing as well as self-fulfilling prophecies. Moreover, inaccurate or biased first impressions may have serious implications for later affect, cognition, and behaviour.
* More specifically, the first impression that may seem fleeting now may actually persist in an individual’s mental representation of others and may subsequently affect: (1) the kinds of information that are subsequently sought out about the other; (2) the information that is attended to in the array of other relevant information that is received; (3) how received information in encoded or interpreted; (4) the affective responses to new information; (5) how information is stored; (6) how information is retrieved and reconstructed from the memory; (7) how one ultimately acts toward the target.

Ch 1. Schaller. Evolutionary Bases of First Impressions

* Being social increases the chance of finding a potential mate. Loners and outcasts are relatively unlikely to have access to desirable mates or to receive the material benefits of kinship, simple being an accepted member of any social group has fitness-relevant advantages
* However social interactions can be a source of a threat as well. Forms of peril: (1) potential harm from others due to competition for mates or material resources; (2) conspecifics carrying a communicable disease; (3) conspecifics who cheat, steal, or otherwise fail to uphold social contracts
* Specific aspects of human cognition may have evolved that facilitate detection and physical avoidance of disease-bearing conspecifics
* Thus, specific aspects of human cognition may have evolved that facilitate the detection and punishment of such norm violators
* Prospects to be achieved and perils to be avoided
* The key point is that, because these problems have endured across vast stretches of ancestral time, they may have exerted nontrivial selection pressures on the evolution of human social cognition
* People form impressions spontaneously and with minimal cognitive effort (Carlston & Skowronski, 2005; Gilbert and Malone, 1995; Newman & Uleman, 1989).
* When detecting the fitness-relevant features of others, it is often essential to act fast. If someone is untrustworthy, tends to injure or cheat us, it is better to detect that trait immediately in order to avoid getting hurt or cheated. If someone nearby has an infectious disease, it’s better to stay away and not to get infected.
* Accordingly, there may have been substantial adaptive advantages associated with any mechanism that promotes instant inferences about the threat-relevant characteristics of other people
* Inferential speed is probably the most essential to the avoidance of social dangers
* When mating opportunities arise, for instance, it may be necessary to make an immediate decision whether to pursue that opportunity or not as it may not be open for a long time.
* Thus, there may have been adaptive advantages associated with mechanisms that promote the immediate discrimination between fit and unfit mates.
* There were evolutionary advantages associated with psychological mechanisms that are fast and frugal – mechanisms that promote inferences immediately and with a minimum expenditure on cognitive resources (Gigerenzer, Todd & the ABC research group, 1999)
* Over the history, spontaneity was adaptive.
* As long as immediate impressions are even minimally diagnostic, it may be more advantageous to form these first impressions than to dither and deliberate. When it comes to avoiding social perils, the fitness implications follow what Nesse (2005) has called the “smoke detector principle”: the failure to detect a real danger (a false-negative error) typically has implications that are far more costly than the detection of a danger that doesn’t really exist (a false-positive error).
* Different costs of a failure to men and women in terms of mating
* However, it is extraordinarily tricky to draw conclusions about evolutionary adaptations – especially those that might actually qualify as instincts – solely on the basis of contemporary psychological observations. Still, it’s within the realm of possibility that our tendency to form fast and frugal first impressions is not merely a product of practice; it may actually be instinctual
* If our mind evolved to facilitate fitness-enhancing behaviour, then we may be predisposed to be on the lookout especially for information bearing on the potential perils and prospects of social life.
* From an evolutionary perspective, the ultimate goal is the reproduction of one’s genes.
* The most basic evaluative dimension is that of interpersonal warmth and agreeableness (Neuberg & Li, 2007)
* Only very little negative information is enough to form an impression, whereas we need a larger amount of information to create a positive impression. In addition, positive impression can easily be reversed to the contrary, while it is a lot harder to reverse a negative impression to a positive.
* Another dimension – capability
* Impressions of people are located within a two-dimensional space anchored by the evaluative dimensions of interpersonal warmth and agency (Judd, James-Hawkins, Yzerbyt & Kashima, 2005)
* See Skowronski, 2002; Skowronski & Carlston, 1992
* Classic findings: the dimensional structure, negativity and positivity biases. They may be the inter-related consequences of the same adaptive mechanisms.
* Compared with other kinds of facial expressions, angry faces are especially likely to grab and/or hold attention (Fox et al, 2000; Schupp et al, 2004). Angry facial expressions are presumably predictive of aggressive inclinations and so are diagnostic of potential danger
* Because of the powerful fitness costs associated with parasitic infection, it is likely that people are sensitive to cues signalling the possibility that another person is the carrier of an infectious disease. A wide variety of morphological anomalies (eg pustules, rashes, and other disfigurements) may have been symptomatic of parasitic infections over the long course of human evolutionary history. Consequently, our minds may be hypervigilant to any kind of perceptible disfigurement or morphological oddity; and, when perceived, those anomalies may inspire negative inferences (Perrett et al, 1999; Schaller & Duncan, 2007)
* Moreover, consistent with the spontaneous and associative nature of many first impressions, some of this evidence indicates that these negative inferences are formed even when the perceivers know that the perceived anomaly is misleading (eg Carlston & Skowronski, 2005)
* Duncan (2005). Photographs of two men: one with birthmark, described as strong and healthy, another fine-looking, described as being infected with a drug-resistant tuberculosis. Results revealed a tendency to associate the disfigured man with the word ‘disease’
* This line of reasoning also implies that physical unattractiveness of any kind may serve as a sort of crude heuristic cue for ill health, and thus led to aversive trait inferences (Schaller & Duncan, 2007; Zebrowitz, Fellous, Mignault & Andreoletti 2003). This additional line of reasoning focuses not on unattractiveness as disease cue but rather on attractiveness as cue for genetic fitness
* Evolutionary processes operate on genes, after all, and the causal relationship between genes and cognitions involves lots of steps and is extraordinarily complicated.
* One of the things that may have evolved is a preparedness to learn – very quickly and efficiently – that particular association between social stimulus and adaptive response
* Phenomena pertaining to first impressions: spontaneous trait inferences, the dimensional structure of person perception, the effect of attitude similarity on liking

Ch 2. Rule & Ambady. Peeking at the Neural Underpinnings

* First impressions can be defined as the initial perception and formation of thoughts about another.
* We begin with the initial perception of a person, a face, or an object from the environment. We then move to the initial, most primitive, subcortical structures (eg the amygdala), where this information is first filtered and formed into what we might consider social thought. From there, we go on to the upper cortex – the part if the brain that most separates us humans from other primates and in which the information takes on a meaning that is truly social. Finally, we end with the processing of this information in the frontal and prefrontal cortices. This is where the information drawn in from the outside world becomes fully processed and crosses the barrier into what we think of as consciousness and the mind. At that point, our impression of another is formed, and this is where we begin to have access to that impression via our conscious thought. At consciousness, our impressions begin
* Perception from various sensory systems
* The principal senses for perceiving other people are sight and sound.
* Therefore, we consider the starting point of person perception and first impressions to lie within the domains of the visual and auditory cortices
* Our first representation of others occurs in the primary visual cortex. The visual cortex shows the differentiation of objects versus people very early in the perceptual process (Wand et al, 1999). Signals from the eyes, essentially representing colours, feed to the visual cortex straight to area V1. These colours are then assembled into patterns and the patterns assembled into shapes. The shapes are then interpreted and sorted for transport out of the striate cortex along two paths. One, the dorsal or “where/how” stream, primarily deals with motion – sending the semi-refined visual information in a dorso-cortical direction toward areas in the parietal and temporal cortices, such as the middle temporal and posterior parietal areas (Claeys et al, 2004). The other, ventral or “what” stream primarily deals with object, body parts, and faces, with such perceptions resulting in the identification of others (Herholtz et al, 2001)
* On leaving the striate cortex, the first stop along the ventral stream is the extrastriate. The extrastriate constrains two areas of particular interest regarding person perception and first impressions. The first of these is extrastriate body area (EBA), which deals with the perception of both human and nonhuman body parts (with the exception of face) and is distinctly sensitive to biological forms. For instance, TMS delivered to the EBA causes a temporary lesion to the area that results in the impairment of body part perception while leaving object part perception unaffected (Urgesi, Berlucchi & Aglioti, 2004). Moreover, unlike higher-order cortical structures that code for the actions of body parts, the EBA is preferentially responsive to the perception of static aspects of the human form, such as identity (Downing, Peelen, Wiggett & Tew 2006; Urgesi, Candidi, Ionta & Aglioti, 2007). Hence, the EBA plays an important role in perceiving others.
* The second extrastriate structure is the fusiform gyrus. The fusiform shows specificity for both perceptual expertise, as well as responsiveness to faces (Kanwisher, 2000), suggesting that humans are expert face processors. Hence, the face-selective area of the fusiform gyrus is known as the fusiform face area and is one of the most important neural structures in the formation of first impressions
* Although we may tend to assume that our perception of the world is like a camera, feeding directly to our consciousness, growing evidence shows that this is not the case. For example, the concept of “blindsight” refers to patients with damage to visual cortex whose capacity for retinooptical perception is unimpaired. Although these individuals may experience the world as blind, they nonetheless take in the visual information from their eyes, which provide input to the brain and cortex (Vuilleumier et al, 2004). Thus patients with blindsight show activation to threatening stimuli in the amygdala. Although these patients do not report conscious experience of seeing anything, they show amygdala responses to threatening stimuli similar to the way that individuals with intact visual cortices do. Blindsight patients also report fairly accurate intuitive guesses about the physical properties or valence of stimuli (Tong, 2003; Vuilleumier et al 2004). Insights from blindsight patients regarding nonconscious visual information processing have important implications for intuitive judgements, which often form the basis of first impressions.
* Although the face is extremely important in the formation of first impressions, other channels of communication also provide visual information that is processed when perceiving others.
* The tone of voice has been consistently shown in behavioural studies to signal cues to identity (eg Gaudio 1994), emotion (eg Johnstone, van Reekkum, Oakes & Davidson, 2006), and intent and thought (see Schiffrin, Tannen & Hamilton, 2001). Hence, perceptions of others’ voices play an important role in forming first impressions, as well.
* Studies suggest that certain parts of the brain may be especially attuned to particular types of sounds produced by other people.
* Sander, Roth & Scheich (2003) explored how the brain responds to nonverbal vocalizations of laughing and crying. Using a low-noise fMRI scanner, they were able to locate differences between the perception of laughing and crying in the amygdala, insula, and auditory cortex. Activation was greater for laughing in the auditory cortex than for crying, activation in the amygdala during the control task was reported as evidence for amygdala activation independent of the emotional aspects of stimuli.
* Although the role of the amygdala in impression formation is somewhat debated, most researchers agree that the amygdala is responsive to a range of emotional stimuli, particularly fear (Fitzgerald, Angstadt, Jelsone, Nathan & Phan, 2006). The amygdala is necessary for both the acquisition as well as the expression of conditioned fear responses (Phelps, 2006). For example, amygdala lesions impair fear recognition, causing unfriendly faces to be perceived as friendly (Adolphs, Baron-Cohen & Tranel, 2002). The amygdala responds even to subliminal presentation of fearful faces and to eyes expressing fear (Whalen et al, 1998). In addition, heightened amygdala activity has been shown to correspond to higher emotional intensity (Cunnningham, Raye & Johnson, 2004)
* Amygdala activation is important in the perception of threatening and affective stimuli that are important in forming first impressions of others, whether by the faces, bodies, or voices.
* The amygdala has also been implicated in judgements of trustworthiness. Winston et al (2002) have shown that the amygdala bilaterally responds to untrustworthy faces. Although unilateral damage to the amygdala does not disrupt trustworthiness judgements (suggesting that either left or right amygdalae are sufficient to produce responses to untrustworthy faces), damage to the ventral-medial prefrontal cortex, which is projected to by the amygdala, does produce deficits in such judgements.
* Detecting emotions in other individuals is critical to forming impressions of their mental states, and connection patterns between the amygdala and other brain areas attests to the amygdala’s importance in this regard.
* However, although amygdala is highly involved in such social inferences and subserves frontal activations, damage to the amygdala does not entirely eliminate social acuity, suggesting that multiple systems are involved in the process of understanding others (Adolphs, 2006)
* The frontal cortex serves as the terminus for both dorsal and ventral streams from the amygdala and serves as a final point of integration for information derived from these senses.
* From the anterior cingulate cortex (ACC), information is distributed to areas of the frontal cortex for higher-level thought.
* Thus, the ACC has primarily been implicated in decision making and the integration of more “rational” cognitive processes with more “irrational” emotional processes
* The ACC is clearly a very important structure for forming first impressions about others
* Further information about the formation of first impressions may also be gleaned from studies of prosopagnosia, or “split-brain” callosectomy patients, as well as from psychopathological (Shin et al, 2005) and neurophysiological (Harrison, Singer, Rothstein, Dolan & Critchley, 2006) work.
* This chapter presents a schema for how the brain perceives and forms impressions about others in light of what is contemporarily known
* Capgrass syndrome 🡪 when a patient can recognize the face but do not feel that it is a familiar one

Ch 3. Chakrabarti & Baron-Cohen. The Biology of Mind Reading

* In the normal case, we start to empathize as soon as we make eye contact with another person, or as we look at their posture, actions, and the context. Empathizing is the drive (skill/ability) to identify another person’s emotions and thoughts and to respond to these with an appropriate emotion (Davis, 1994).
* Empathizing is done in order to understand another person, predict his or her behaviour, and to connect or resonate with the person emotionally.
* Possible constituent “fractions” of empathy include: (1) “emotional contagion/affective empathy”; (2) “cognitive empathy”; (3) sympathy. The cognitive element also enables you to predict the other person’s mental state or behaviour. The “emotional contagion” is defined as the tendency to automatically mimic and synchronize facial expressions, vocalizations, postures and movements with those of another person, and consequently, converge emotionally (Hatfield, Caccioppo, Rapson, 1992). E.g. when witnessing someone else in a state of fear, the observer may catch a similar state of fear. Such a mechanism can act as a “quick-and-easy” route to alerting observers to environmental dangers without having to face the dangers themselves. Sympathy, or “concern mechanism”, represents a case where the observer feels both an emotional response to someone else’s distress and a desire to alleviate their suffering.
* “Mindreading system” (Baron-Cohen, 1994, 1995). Mind reading is defined as the ability to interpret one’s own or another agent’s actions as driven by mental states. The model was proposed in order to explain (1) ontogenesis of a theory of mind and (2) neurocognitive dissociations that are seen in children with or without autism
* By 3 years old, little girls are already ahead of boys in their ability to infer what other people might be thinking or intending (Happe, 1995). This sex difference appears in some but not all studies (Charman, Ruffman, & Clements, 2002).
* Women are better at decoding nonverbal communication, picking up subtle nuances from the tone of voice of facial expression, or judging a person’s character (Hall, 1978)

Ch 4. Hall & Andrzejewski. Who draws accurate first impressions?

* Forming first impressions of people is phenomenon that is both ubiquitous and irresistible in daily life. The human proclivity to perceive, and generalize from, covariations between behaviour or appearance and other personal qualities provides a sense of order and predictability in social interaction.
* Standardised interpersonal sensitivity tests: Diagnostic Analysis of Nonverbal Accuracy (DANVA, Nowicki & Duke, 1994), the Interpersonal Perception Task (IPT; Costanzo & Archer, 1989), the Pictures of Facial Affect (POFA; Ekman, Friesen, 1976), and the Profile of Nonverbal Sensitivity (PONS; Rosenthal, Hall, DiMatteo, Rogers & Archer, 1979).
* The cues judged by these tests predominantly are facial expressions of basic emotions such as anger, sadness or happiness, or personality traits.
* By ‘accurate’, researchers typically mean that the average accuracy score exceeds the level that would be obtained if perceivers were just guessing, according to a statistical test, they’re not aiming for a 100% accuracy.
* Researchers find that accuracy in judging truthful versus deceptive cues, though significantly above the guessing level is actually only barely above that level (Bond & DePaulo, 2006). In contrast, perceivers are typically extremely accurate at judging prototypical facial expressions of basic emotions, such as happiness, sadness, or disgust (Ekman, Sorenson, & Friesen, 1969), and they are significantly accurate when they are exposed to emotional facial expressions that last only a fraction of a second (Matsumoto et al, 2000). Indeed, studies that successfully use facial expressions as subliminal primes demonstrate that perceivers can make unconscious accurate inferences about faces they do not even know they have seen (Murphy & Zajonc, 1993)
* One might judge from subtle emotions, personality traits, intelligence, ethnic/minority group membership, the relationships between people, and status.
* How well are different Accurate First Impressions (AFI) tests correlated together? Mostly, such correlations are small and negligible (Hall, 2001)
* Women tend to score higher on AFI tests (McClure, 2000; Rosenthal et al 1979). Females’ advantage holds for judgements of face, body, and voice (1978). Female are also better at judging emotions, while men tend to score better on status between two people domain
* Other groups whose AFI is elevated include married women with preverbal toddlers (compared to similar women without children – Rosenthal et al, 1979), homosexuals (when judging whether a person is homosexual or not – Ambady, Hallahan & Conner, 1999), individuals who are people-oriented occupations(compared to people in object-oriented occupations – Trimboli & Walker, 1993), and people from higher social class families (Hall, Halberstadt & O’Brien, 1997). Adaptive requirements? Level of motivation? Acquired knowledge about the individuals in the stated group?
* Low AFI often characterizes members of groups identified as having a wide variety of clinical disorders such as schizophrenia, mania, depressions, alcoholism, and autism (eg Adwards, Jackson, Pattison, 2002; Lembke & Ketter, 2002; McGee & Morrier, 2003; Philippot, Kornreich & Blairy, 2003)
* High AFI related to how well one gets along in the social world; children and adults with high AFI are more popular (Nowicki & Duke, 1994). High AFI adults report themselves to feel less lonely (Pitterman & Nowicki, 2004) and to have higher relationship well-being (Carton, Kessler & Pape, 1999)
* High-AFIs has heightened pro-social tendencies (March et al, 2007); more positive attachment styles (more secure and preoccupied, less dismissive and fearful) – (Cooley, 2005).
* Those with higher AFI receive higher salary raises (Byron, Teranova & Nowicki, 2007) and tended to be in higher ranks within university (Hall & Halberstadt, 1994)
* Among the individuals in the normal range of functioning, those who experience fewer depressive symptoms have higher AFI (Ambady & Gray, 2002). They also report less anxiety, shyness, and communication apprehension (Pitterman & Nowicki, 2004); they report higher social competence (Barnes & Sternberg, 1989); and they describe themselves as functioning better on self-report personality scales labelled “interpersonal adequacy” and “maturity” (Rosenthal et al, 1979)
* Individuals with high AFI have higher internal locus of control than those with low AFI (Pitterman & Nowicki, 2004) and are more open to new experiences (Matsumoto et al, 2000; Realo et al, 2003), both of which suggest a confident, mentally healthy approach to the world. They also score higher on conscientiousness (Matsomoto et al, 2000)
* People with higher AFI report being more generally interested in, and attuned to, the social environment (Riggio & Carney, 2003); they report themselves as being higher in expressiveness (DiMatteo, Hays & Prince, 1986, Riggio & Carney, 2003), and they report themselves to have better conversational skills (Miczo et al, 2001)
* Those with high AFI report a higher need for social belonging (Pickett, Gardner & Knowles, 2004), describe themselves as high on communication (eg warm, sociable, seeking closeness to others; Vogt & Colcin, 2003), and are reported by friends as seeking reassurance from others (Funder & Harris, 1986).
* Those with high AFI sometimes score higher on self-monitoring, but the effect seems to be carried by the acting and extraversion components of self-monitoring (Ames & Kammrath, 2004). Extraversion generally predicts higher AFI (Matsumoto et al, 2000; Realo et al, 2003)
* The trend of these findings suggests that persons who are high in AFI may be particularly attuned to decoding the cues of others in order to be accepted and liked by others. Alternatively, their greater comfort around other people and the rewards that follow may promote the acquisition of interpersonal accuracy.
* Individuals high in AFI are also more empathic (Barnes & Sternberg, 1989; Pitterman & Nowicki), although there are exceptions (Hall, 1979)
* Funder & Harris (1986). Those who scored higher on AFI teat were seen by their friends as being sought out for advice and reassurance. They were also seen as warm, compassionate, and capable of close relationships; as sympathetic and considerate; as low on hostility and deceitfulness; and as low on rebelliousness and noncomformity. These results converge with the self-report findings listed above
* Unfortunately, self-insight into AFI is relatively weak (meta-analysis by Hall, Andrzejewski & Yopchick, 2008). Perhaps in real life, people do not get enough timely feedback on their AFI to develop accurate self-awareness. Perhaps much of this phenomenon is due to those at the lower end of measured AFI, as these individuals should, by definition, lack insight into how well they can judge others and they may not be able to make good use of others’ feedback
* Higher AFI is positively related to knowledge of nonverbal communication as measured on an objectively scored pencil-and-paper test (Rosip & Hall, 2004); knowledge of psychological gender differences (Hall & Carter, 1999), knowledge of friend’s interpersonal sensitivity as measured objectively based on friend’s actual sensitivity (Carney & Harrigan, 2003), and having more interpersonal cognitive and attributional complexity (Woods, 1996). Thus, it would seem that measures that fall broadly under the heading of social intelligence predict AFI.
* An intriguing study by Bernieri (1991) suggested that the ability to learn in a face-to-face situation may be influenced by one’s AFI.
* Hall & Carter (1999) found that AFI was positively related to higher need for cognition, that is, the desire to think and be challenged mentally.
* Earlier, we reported that higher AFI is associated with higher social class and higher ranks within a university. Other research suggests that higher AFI is also related to higher personality dominance (Hall et al, 1997). See Hall, Rosip, Smith LeBeau, Horgan & Carter, 2006; Snodgrass, 1992.
* Hall et al (2006), Snodgrass, Hecht & Ploutz-Snyder (1998). In the dyadic power paradigm, low-power individuals are more accurate decoders of nonverbal cues because their own expressions are relatively difficult for their high-power partners to decode
* Hall & Carter (1999) conducted research that suggests that those who are good at AFI use less gender stereotyping and score lower on social dominance orientation scales (ie they do not endorse the belief that some groups are superior to others). Research on the topic of AFI and prejudice shows that people who are better at decoding affective states are less prejudiced than those who have lower accuracy scores (Andrzejewski, in press). The research also found that people who scored higher on a test of judging emotional meanings in African Americans’ faces were less prejudiced against African Americans. Research on the identification of Jewish ethnicity based on facial cues shows that those who are more accurate at such task also exhibit less anti-Semitic attitudes (Andrzejewski, Hall & Salib, under review). These findings are consistent with other research that suggests that those who are more interpersonally sensitive tend to be more democratic and less dogmatic (Rosenthal et al 1979)
* AFI seems to be related to an array of positive social characteristics, social adjustment and mental health
* Practical implications of having high AFI: enhanced ability to detect compatibility with potential dating partners, employer’s ability to detect whether or not someone would be a good fit for their company, and greater ease of interaction with the people one meets on a daily basis. Perhaps the high-AFI person can more easily discriminate friend from foe and be more productive in occupations and daily lives. Indeed, higher AFI is associated with tangible rewards such as increased raises and higher performance ratings on the job.
* No firm answers are available for the question where high (and low) AFI comes from. Hodgins & Koestner’s (1993) longitudinal study implicated both temperamental and home environment factors, suggesting that optimal development may depend on a combination of person and situation. Certain developmental experiences are associated with greater AFI. Individuals who reported spending more time travelling abroad scored higher on AFI (Swenson & Casmir, 1998), suggesting that the travel experience may expand interpersonal sensitivity because of the need to communicate in spite of language barriers.
* Other causal paths for this result are possible. For example, a person who is more interpersonally oriented may opt for foreign travel, and the correlation between travel and AFI is the spurious result of the correlation between interpersonal orientation and AFI. Or, those who travel more may be from higher socioeconomic groups, whose AFI has been shown to be elevated. These distinctly different causal possibilities highlight the ambiguities inherent to the simple correlational approach that is the mainstay of this research literature.
* Thompson, Schellenberg & Husain (2004) found that college students with higher AFI reported higher level of previous music study; those authors also performed an experiment demonstrating that providing music and drama lessons improved AFI in children as compared to a control group.
* Pitterman & Nowicki (2004) found that college dancers had higher AFI than a comparison group of nondancers, suggesting a causal path from dancing to AFI. Feldman, Coats & Spielman (1996) also found that children who watched more television were more accurate in judging the meanings of facial expressions – perhaps television watching is a good practice for emotional decoding. All these experiences may cause people to be more attuned to other’s nonverbal nuances or may even enhance the knowledge base required for AFI.
* Certain experiences in the workplace could similarly have the effect of promoting the development of AFI. A person working in human relations or supervising others on the job might acquire a higher level of AFI than a worker who spends the day underneath automobiles or looking at a computer screen.
* Cause-effect issues pose a difficult challenge to further progress in understanding the role of AFI in daily life.
* Required more experimental and longitudinal design, as well as efforts to control for possible confounders and to test meditational models.
* If higher AFI leads to better workplace outcomes, one should also ask how this relationship compares to other possible causal inferences on such outcomes such as general aptitude, other job-related skills and knowledge, or mental health.

Ch 5. Gray. To What Extent, And Under What Conditions, Are First Impressions Valid?

* 2004 Nov 12 – Scott Peterson case
* What conditions improve or diminish our accuracy?
* Demonstrations of the “Fundamental attribution error” reveal that when behaviour is shaped entirely by situational forces, perceivers will still attribute that behaviour, in part, to stable predispositions (Jones & Harris, 1967; Ross, Amabile & Steinmetz, 1977)
* However, other scholars suggest that in everyday interactions this “error” may actually allow perceivers to function quite effectively (Krueger & Funder, 2004). For instance, people more prone to making the fundamental attribution error tend to be more socially engaged and competent as well as more emotionally well adjusted and satisfied with their lives (Block & Funder, 1986). Block & Funder (1986) suggest that in most real-life situations attributing behaviour to a mixture of both dispositional and situational forces may well be an appropriate strategy of inference.
* Another common error of social judgement is egocentrism, the tendency for perceivers to falsely assume that other share their knowledge, preferences, and attitudes (Keysar, Ginzel & Bazerman, 1995; Roos, Greene & House, 1977). But, like in fundamental attribution error, egocentrism may be beneficial in real-life relationships when people DO have similar knowledge, preferences and attitudes (Murray, Holmes, Bellvia, Griffin & Dolderman, 2002)
* What conditions foster or impair accuracy?
* First impressions have lasting consequences for a perceiver’s ability to create positive relationships. For instance, job interview, blind date, first meeting with a potential roommate.
* Spontaneous or even without awareness (eg Ulemen, Newman & Moskowitz, 1996)
* As outlined by Kruglanski (1989), there are three ways to define accuracy. First, one could access the degree of correspondence between a judgement (such as a perceiver’s impression of personality) and a criterion (such as a target’s self-assessment of personality). Alternatively, one could access interpersonal consensus: the degree to which perceivers independently come to the same conclusion regarding a target’s personality. A third option is to somehow measure the pragmatic utility of a judgement – such as whether a personality judgement accurately predicts a target’s behaviour in a given situation. The majority of researchers in this area have chosen to adopt the first or second criterion.
* Estes (1938) compared perceivers’ impressions of personality
* Extraversion and conscientiousness tend to emerge as the most discernable traits (Borkenau & Liebler, 1993; McCrae & Costa, 1987)
* See Gray & Ambady
* Situational and person-level factors help to shape accuracy levels. People who rely on their “gut reactions” when forming impressions tend to be more accurate, as do those who have the skill to draw out more diagnostic information from their interaction partners. Accuracy generally increases with exposure and acquaintanceship, but expressive behaviour reveals a great deal even in small doses.
* There are substantial benefits to forming valid first impressions of personality. People who are successful in this endeavour are granted the ability to predict a wide range of behaviours. Including job performance (Barrick & Mount, 1991; Thoresen, Bradley, Bliese & Thoresen, 2004), suitability as a spouse (Botwin, Buss & Shackelford, 1997), and even preferred tactics of manipulation (Buss, 1992).
* Higher-order social skills like deception, deception detection, and forming coalitions require the skill of mind reading – recognizing other people’s mental states – like thinking, believing and wanting. Mental states must be inferred on the basis of external cues such as facial expressions, because they are not directly observable (Siegal & Varley. 2002). Because people act on their beliefs about the world – rather that the true state of the world – perceiving mental states is crucial for predicting behaviour.
* Wimmer & Perner, (1983). Between the ages of 4-6, children begin to have “first-order beliefs”, that is, they begin to understand that other people have their own distinct mental representations of the world (John thinks that the toy is in the box). A few years later they being to develop competence in understanding second-order, or embedded, beliefs (John thinks that Mary thinks the toy is in the box)
* Individuals with autism show a selective impairment in the ability to use nonverbal behaviour, particularly eye movements, to infer mental states (Baron-Cohen, Wheelwright, Hill, Raste & Plumb, 2001). Abnormalities in the neural network known as the “social brain” (which consists of the medial, inferior frontal, and superior temporal cortices, and the amygdala) may be responsible for these deficits (Golan, Baron-Cohen, Hill & Golan, 2006; Brothers & Ring, 1992). Whatever its cause, an ability to infer mental states makes the social world seem unpredictable and incomprehensible. Confusion and withdrawal likely contribute to the social impairment often apparent in autism spectrum disorders (eg Hill & Frith, 2003)
* On the other hand, biological processes can sometimes facilitate the ability to infer mental states. Recognizing that the hormone oxytocin plays a key role in prosocial behaviour and affiliation (eg Young & Wang, 2004), and that affiliation results, in part, from having a clear understanding of social situations. Domes, Heinrichs, Michel, Berger & Herpetz (2007) studied whether oxytocin facilitates the inference of mental states. They found that a single dose of oxytocin substantially improved men’s ability to interpret subtle facial cues to mental states.
* Most healthy adults are experts in emotion recognition from the face (Isaacowitz et al, 2007) and the voice (Johnstone & Scherer, 2000)
* To aid their survival, children can interpret facial signs of emotion as early as 3 months – even earlier if the emotion is expressed by the infant’s own mother (Walker-Andrews, 1997). Preschoolers can verbally label facial expression of emotion at above-chance levels (eg Widen & Russel, 2003), but they do not acquire full proficiency until about age 10 (Walker-Andrews, 1997)
* Adults with certain developmental disorders and psychiatric illnesses experience some of the same difficulties. Eg autism challenges recognizing sadness (Boraston, Blakemore, Chilvers & Skuse, 2007), and people with schizophrenia (Feinberg, Rifkin, Schaffer & Walker, 1986), social anxiety (Montagne et al, 2006), and depression (Feinberg et al, 1986) all struggle with both emotion recognition and social adjustment
* According to Bond and & DePaulo (2006), the average rate of lie detection is only 54%, only slightly above the chance. Why are the base rates of accuracy so low? First, perceivers often fail to receive prompt and accurate feedback regarding their detection performance (DePaulo & Pfeifer, 1986). As a result, they cannot assess and refine their judgemental strategies. Second, detecting deception requires a lot of cognitive flexibility. One must gather all observable cues – from the verbal and nonverbal streams of behaviour – and then reconsider this evidence in light of information about deceiver’s goals, pursuits and personal character. And finally the cues to deception may be too idiosyncratic for perceivers to develop a general judgemental strategy that applies to a whole group of targets
* The relationship between the liar and the lie detector is indeed emerging as one potential moderator of accuracy in the detection of lies
* Facial displays / gestures / tones of voice
* Throughout our evolutionary history, we have had a basic need to make quick and accurate assessments of others’ relationship patterns. This is essential for identifying, for instance, whether a certain group of individuals is forming an alliance that may be threatening to one’s safety or resource availability. Even nonhuman primates show an ability to quickly scan the social environment and recognize relationship patterns (Cheney & Seyfarth, 1990).
* Costanzo & Archer (1989) explored how observable is the relationship type. Participants watched the video and were asked to answer questions about things like kinship, relationships, and status. They performed well above the chance level
* People who are more motivated to understand others – as reflected in higher ratings of social skill and competence – perform better on the Interpersonal Perception Task (eg Costanzo & Archer, 1989; Schroder, 1995). On the other hand, people who are highly preoccupied with themselves and their perceived shortcomings perform worse on the same task (Aube & Whiffen, 1996).
* Knowledge about social relations is also an important person-level moderator. People who have had advanced theatrical training score higher on the Interpersonal Perception Task, perhaps because their theatrical training sensitizes them to the meaning of particular gestures, facial displays, and vocal patterns (Bush & Marshall, 1999; see also Costanzo, 1992)
* We tend to project our own thoughts, feelings, and beliefs onto the canvas of another’s mind, therefore we make mistakes in our judgements. We often lack the motivation or ability to sufficiently adjust from the perspective, which results in impressions that are egocentrically biased. We can also be blind to the situational forces that shape other people’s behaviour, preferring to attribute that behaviour to stable dispositions
* Observer are biased to attribute one’s behaviour to personality
* States and traits
* See Funder
* In sum, first impressions are sometimes accurate and sometimes inaccurate. Accuracy depends partly on the construct being judged, partly in the information available to the perceiver, partly on the perceiver’s motivation and ability to understand others, and partly on a host of other factors. Research that explores both the outcomes and the process of first impressions will set the stage for a deeper understanding of the accuracy of first impressions.

Ch 6. Kenny & West. Zero Acquaintance

* The person-perception literature often uses the terms “zero acquaintance”, “thin slices”, and “first impressions” interchangeably.
* One common element of both the zero-acquaintance and thin-slices paradigms is that, unlike the situation in everyday person perceptions, the perceiver does not interact with the target prior to making judgements. However, on many zero-acquaintance studies, perceivers and targets make perceptions while they are face-to-face; there is the possibility of nonverbal dyadic behaviour between the perceiver and the target. For example, the target may directly smile or make eye contact with perceiver. Research using controlled procedures (Borkenau & Liebler, 1992), such as videotapes or targets where there is no possibility of perceiver-target interaction, has shown essentially the same pattern as studies using less controlled procedures.
* The key feature of a thin-slices study is that information that is communicated is brief and in some cases degraded (eg content-filtered audio). The key feature of a zero-acquaintance study is that the information given to perceivers is presumably unrelated to the judgement task.
* The most typical zero-acquaintance paradigm, following the Norman and Goldberg study (1966), involves face-to-face judgements. Groups of strangers are formed from classes or as part of an experiment (DiPilato, West & Chartier, 1989), and most zero-acquaintance studies instruct participants not to speak, although some do. (Borkenau & Liebler, 1992; Levesque & Kenny, 1993)
* The Social Relations Model (SRM; Kenny & La Voie, 1984) is a two-way random effects analysis of variance model. One’s perception can be decomposed into the following four components:  
    
  A’s perception of B = Group Mean + A’s Perceiver Effect + B’s Target Effect + Relationship Effect of A toward B  
    
  The mean refers to how people generally see other on the trait in question; the perceiver effect refers to how A generally sees others; the target effect refers to how B is generally seen by others; and the relationship effect refers to how A uniquely sees B, above and beyond how A sees others and how B is seen by others. The relationship effect can be viewed as the interaction of perceiver and target.
* In most zero-acquaintance and more generally first-impressions studies, the key component of a Social Relations Analysis is the target effect, which assesses the degree to which a target is perceived consistently across perceivers. Reliable target variance indicates that perceivers agree in their ratings of targets.
* However, when targets are rated by multiple perceivers, the average perceivers’ judgement is sometimes used to obtain a measure consensus (eg Gosling et al, 2002)
* Beginning with Norman & Goldberg (1966), zero-acquaintance research initially concentrated on agreement of personality measures using the Big Five
* Round-robin design – everyone rates everyone
* When SRM analysis of perception data is performed, self-other agreement is assessed as the correlation between the target effect and self-perception.
* Some researchers define accuracy as the correlation between self-perception and consensus (eg Blackman & Funder, 1998). Others have defined accuracy as the correlation between peer ratings and observer ratings, or interjudge agreement (Funder, 1987). However, consensus of peer ratings does not necessarily imply accuracy. Peers may agree with one another, but they may be inaccurate if agreement is based on shared stereotypes among perceivers (Funder & Colvin, 1998)
* An additional approach is to define the criterion for accuracy as the combined perceptions of self and peer (eg Gosling et al, 2002)
* Perhaps the least controversial criterion measure for accuracy of personality traits is behaviour. Although not all personality traits map clearly onto behaviours, accuracy for perceptions of extraversion can be examined by correlating perceptions with a behavioural measure of extraversion.
* Metapercepcions – the perceptions that individuals think than others make of them (Kenny, 1994; Laing, Phillipson, Lee, 1966). In some first-impressions contexts, eg, in job interviews and on the first dates, meta-accuracy is of strong interest