

SECTION IV

Trust and Skepticism

4.01	The Gaze of Others	205
4.02	Empathy Deficits in Autism and Psychopaths: Mirror Opposites?	212
4.03	Status Seeking: The Importance of Roles in Early Social Cognition	216
4.04	Reputation Is Everything	220
4.05	Understanding Expertise: The Contribution of Social and Nonsocial Cognitive Processes to Social Judgments	225
4.06	Respectful Deference: Conformity Revisited	230
4.07	Children's Understanding of Unreliability: Evidence for a Negativity Bias	235
4.08	Biased to Believe	241
4.09	Food as a Unique Domain in Social Cognition	245



4.1

The Gaze of Others

PHILIPPE ROCHAT

We care how we look. This simple proposition defines us as a uniquely self-conscious species. No other animals dwell on appearance like we do. Peacocks, fish, and other butterflies use colorful self-displays to either disguise or advertise their presence to predators, competitors, or sex mates. All of this is done instinctively, the product of natural selection. In humans, however, self-presentation has arguably a profoundly different psychological meaning. It is incomparable because of the self-reflective psychology associated with it. This is what is discussed here in the perspective of development.

A trademark of all human cultures is the systematic use of self-branding devices like makeup, fashionable clothes, and complex panoplies of etiquettes and practices that mark each individual's personality and class distinction (Bourdieu, 1984; Goffman, 1959).

If we care how we look, it is primarily for social reasons, not just to please ourselves like Narcissus caught in the circularity of his self-love. We care about how we look with *others in mind* (Rochat, 2009). It is a deliberate attempt at controlling how others perceive us: how we project the self to the outside world. But it is also more than just our public appearance. It is about our reputation, the calculation of how others construe us in terms of enduring qualities such as intelligence, charm, attractiveness, or moral integrity. Etymologically, the word *reputation* does indeed derive from the Latin verb *putare*, meaning “to compute or calculate.” We work hard on appearance to signal deeper qualities regarding who we are as persons.

In human affairs, we gauge the incomparable secure feeling of social affiliation or closeness: the fragile sense of belonging to our social niche by having agency and a place among others. We gauge our social affiliation via the attention, respect, and admiration of others, namely our “good” reputation. The equation is simple: good reputation = good affiliation. The struggle for recognition and

the maintenance of a good reputation shapes the development of human social cognition. It is, I would argue, a major drive behind it.

SELF-CONSCIOUS PSYCHOLOGY

Human psychology is primarily self-conscious, giving particular power to the gaze of others: a *self-evaluative* power. Arguably, such power shapes much of what we construe of others (i.e., social cognition). From a very early age, it is through the gaze of others that we measure our own worth, gauging our reputation, how people respect, admire, or on the contrary tend to despise us. It is against the construal of how others see us (i.e., the evaluative gaze of others onto the self) that we measure our social affiliation, how securely accepted by others we are. Indeed, there is no more dreadful fear than the fear of being socially rejected and alienated from others (Rochat, 2009). One contemptuous look can destroy our social standing at least in our eyes if not in that of others. An admiring look, on the contrary, boosts our confidence and social well-being. This is not trivial because in human affairs, reputation is often all that matters. It explains why, for example, most people rank public speech as their greatest fear (Furmark, 2002). But where does it all start? What might account for reputation and the struggle for social recognition as cardinal features of human “self-conscious” psychology?

EMERGING SELF-CONSCIOUSNESS

For decades now, the mirror mark test has been used as an acid test of conceptualized self-awareness from both a developmental and comparative perspective (Amsterdam, 1968, 1972; Gallup, 1970). Self-directed behaviors toward a mark surreptitiously put on the face and discovered in the mirror would attest of self-concept, in other words an objectified sense of the self (but see also Mitchell,

206 TRUST AND SKEPTICISM

1993; Rochat & Zahavi, 2011 for alternative views on the mirror mark test). What the individual sees in the mirror is “me,” not another person, a feat that is not unique to humans since chimpanzees, orangutans, dolphins (Parker, Mitchell, & Boccia, 1995), magpies, and elephants are also reported to pass the test (Plotnick & De Waal, 2006; Prior, Schwarz, & Güntürkün, 2008).

The majority of children pass the mirror mark test by 21 months (Amsterdam, 1972; Bard, Todd, Bernier, Love, & Leavens, 2006; Bertenthal & Fisher, 1978; Lewis & Brooks-Gunn, 1979), although it depends on culture (Broesch, Callaghan, Henrich, Murphy, & Rochat, 2011). But beyond the mirror mark test and what its passing might actually mean in terms of emerging self-concept, there is an early and universal reaction to mirrors that, in my view, is most revealing of human psychology. This reaction is the typical expression of an apparent uneasiness and social discomfort associated with mirror self-experience. The same is true for seeing photographs of one’s self, or hearing the recording of one’s own voice. Across cultures, mirror self-experience is *uncanny*, an expression of deep puzzlement. This is evident even by adults growing up with no mirrors and who manifest “terror” when confronted for the first time with their own specular image (see Carpenter, 1976). Looking at the self in a mirror puts people, young and old, in some sort of arrested attention and puzzlement. Mirror self-experience is indeed an uncanny experience (Rochat & Zahavi, 2011).

In general, aside from the landmark passing by a majority of children of the mirror mark test from around the second birthday, mirror self-experience develops to become incrementally troubling and unsettling for the healthy child. Such development is not observed by young autistic children, impaired in their reading of others’ mind (Baron-Cohen, 1995), but passing the mirror mark test (Neuman & Hill, 1978). They will remove the mark from their faces when they perceive it but do not show the signs of coyness and embarrassment so typical of nonautistic children (Hobson, 2002, p. 89). It appears that for autistic children, there is a different meaning attached to the mark they discover on their faces that they eventually touch and remove. This meaning would not entail the same kind of self-evaluation or self-critical stance in reference to the evaluative gaze of others expressed in typical children via self-conscious emotions. Autistic children’s passing of the mirror test is not self-conscious proper and does not appear to entail any sense of reputation as defined earlier.

In her pioneer research on children’s reactions to mirror and establishing (in parallel with Gallup, 1970) the mirror mark test, Amsterdam (1968, 1972) describes four main developmental periods unfolding between 3 and 24 months: a *first period* of mainly sociable behaviors toward the specular image. Infants between 3 and 12 months tend to treat their own image as a playmate. A *second period* is accounted for by the end of the first year in which infants appear to show enhanced curiosity regarding the nature of the specular image, touching the mirror or looking behind it. By 13 months starts a *third period* where infants show marked increase in *withdrawal behaviors*, the infant crying, hiding from, or avoiding looking at the mirror. Finally, Amsterdam accounts for a *fourth period* starting at around 14 months but peaking by 20 months when the majority of tested children demonstrate embarrassment and coy glances toward the specular image, as well as clowning. These changes index the self-reflective and ultimately the unique self-conscious psychology unfolding in human ontogeny. Such psychology is the product of a complex interplay of cognitive and affective progress that take place during this early period of child development (Amsterdam & Levitt, 1980), something that Darwin already inferred observing his own child, long before the recent wave of experimental works around the mirror mark test.

In his book *The Expression of the Emotions in Man and Animals*, Darwin (1872/1965) is struck by the unique and selective human crimsoning of the face, a region of the body that is most conspicuous to others. He writes: “Blushing is the most peculiar and the most human of all expressions” (p. 309).

Observing blushing in his son from approximately 3 years of age, and not prior, Darwin highlights the mental states that seem to induce human blushing: “It is not the simple act of reflecting on our own appearance, but the thinking what others think of us, which excites a blush. In absolute solitude the most sensitive person would be quite indifferent about his appearance. We feel blame or disapprobation more acutely than approbation; and consequently depreciatory remarks or ridicule, whether of our appearance or conduct, causes us to blush much more readily than does praise” (p. 325). These observations capture something fundamental and distinctive about humans, a unique motivation behind their social cognition: the exacerbated quest for approbation and affiliation with others, the unmatched fear of being rejected by others (see Rochat, 2009).

AQ: Please note that the cross-reference “Rochat & Zahavi (in press/2011)” has not been provided in the reference list. Please provide the same.

As I will suggest next, this is likely the by-product of childhood evolution, in particular the prolonged immaturity and protracted dependence of the human child.

EVOLUTIONARY CONTEXT OF HUMAN SELF-CONSCIOUS PSYCHOLOGY

Compared to other primate species, humans are born too soon, greatly immature and markedly dependent on others to survive. As a species, we are both “precocious” (born early) and “altricial” (in need of extended intensive care from others to survive; see Gould, 1979). It is useful, even indispensable not to lose track of this basic context when thinking about the origins of human self-conscious psychology, in particular the human exacerbated need to gain the recognition of others.

The human precocious birth and “external gestation” (Montagu, 1961) evolved under the combined pressure of a proportionally larger brain and the narrowing of the female’s birth canal that is associated with the emergence of bipedal locomotion (Konner, 2010; Trevarthan, 1984). The narrowing of the birth canal in human evolution led to a precocious birth and, in turn, shaped the unique ways we are brought up and cared for over a uniquely protracted period of dependency (human prolonged immaturity, see Bruner, 1972). It is also probably what contributed to our unique self-conscious and reputation psychology that gives radically new self-evaluative meanings to the gaze of others.

HUMAN EXISTENTIAL CONUNDRUM

The prolonged immaturity and dependence on the care of others that characterize human childhood gave rise also to a unique existential conundrum: the conflicting pressures of maintaining proximity with those dispensing the indispensable care, and a growing, insatiable need for infants to roam the world in independence of others, away from the secure base of the mother or other attachment figures.

All healthy children are faced with this basic existential conundrum that is particularly exacerbated in humans. Such a conundrum enters the psychological landscape of the child from around 8 months of age on average, the typical onset of independent locomotion that is operationally defined as the child’s ability to creep or crawl a distance of 4 feet in 1 minute (Benson, 1993; Bertenthal & Campos, 1990). Coincidentally, and this is at the

crux of my argument here, it is at the same point in development that infants are known to show first signs of stranger’s and separation anxiety (the eighth month “anguish” described by René Spitz, 1965), as well as first signs of joint attention with social partners (Scaife & Bruner, 1975).

In joint attention, children engage others in their object exploration, checking back and forth whether others are attuned to and in visual alignment with their own object of exploration (Tomasello, 1995). Although rarely thought of in this way, joint attention is probably the basic process by which children resolve the “proximity maintenance versus independent roaming” conundrum. With joint attention, children de facto incorporate the gaze of others, hence self-recognition, into their own free roaming and object exploration. They manage, at a distance, to be alone but together, “alone in the presence of someone” to coin Winnicott (1968, pp. 47–48), who construes such frame of mind as a major achievement in human development.

Construed in this way, joint attention would be, in part at least, the expression of a deliberate attempt by the child at controlling the gaze of others and maintaining recognition via objects while irresistibly drawn toward roaming the world away from the close proximity of caretakers (the child’s secure base according to Bowlby, 1969/1982 and other attachment theorists).

Via joint attention, children thus gain *tele-control* (control at a distance) of others’ attention. In this development, the gaze of others now conveys new, evaluative meanings about the self. It is through the gaze of others that infants start to gauge their social place and situation: how much attention and recognition they command from others while physically separated from them as they are pushed toward exploring larger portions of the world on their own.

It is interesting to note that in starting to gauge their social place and situation at a distance, via the monitoring of others’ gaze, children are helped and probably guided in their behavior by what amounts to a unique feature of the human eye.

Compared to all other primate species, the anatomy of the human eye evolved a uniquely high contrast between iris and sclera (white part of the eye), making gaze direction particularly public and conspicuous to others (Konishi & Kohshima, 1997). In primate evolution, such a feature appears to be highly correlated with social complexity, the relative size of the cortical frontal lobe, as well as the relative mobility of eyes in their sockets, independently of head movements.

AQ: Please note the year discrepancy “Trevarthan (1984)” in cross-reference and “Trevarthan (1987)” in reference.

AQ: Please note the spelling discrepancy “Konishi & Kohshima (1997)” in cross-reference and “Kobayashi & Kohshima (1997)” in reference.

This evolution accompanies an apparent change in the function and meaning of gaze as a social signal (Emery, 2000). For humans, it correlates with a unique propensity toward “gaze grooming,” a search for eye contacts and looking into each other’s eyes as an expression of mutual affiliation (Kobayashi & Hashiya, 2011).

The 2-year-old running toward a cliff or a busy road, despite the mother’s insistent screams and invectives to stop, is probing his place and recognition in the mind of significant others. The mother screaming and running toward the child is indeed, for the child, a measure of her attention and care toward the self, an attention that children from 8 months of age never seem to have enough. As succinctly captured by Montgomery (1989), a child about to jump into the swimming pool and screaming, “Watch me! Watch me!” is “not just pleading for attention, but for existence itself.”

This, I propose, is the basic script at the root of human unique struggle for social recognition. It is also what might be at the origins of our unique propensity to experience shame and guilt, in other words to blush the way we blush as described by Darwin. Shame and guilt are indeed cardinal spin offs of the self-conscious psychology emerging during the second year and blossoming by the third, when children begin to objectify themselves through the evaluative gaze of others. Together, shame and guilt as well as their polar opposites (pride and innocence) become major emotional experiences that drive the development of social cognition (what we understand and construe of others as evaluators of the self).

In general, shame, guilt, and pride demonstrate the primacy of self-evaluation through the gaze of others, a process that might be at the origins of the moral and ethical stance children develop in the preschool years (e.g., explicit sense of “fairness”), particularly from the time they begin to claim possession on objects with expletives like “That’s mine!” once again around 21 months (Rochat, 2009, 2011; Tomasello, 1998), when the majority of children also pass the mirror mark test with combined embarrassment.

Self-conscious emotions, in particular shame and guilt, are distinct for subtle and intricate reasons that I discuss next because they are particularly illuminating of the *human self-conscious psychology* emerging by the end of the second year: the “looking-glass self” psychology first proposed over a century ago by sociologist Charles Orton Cooley (1902). As Cooley writes: “The thing that moves us to pride or shame is not the mere mechanical reflection of ourselves, but an

imputed sentiment, the imagined effect of this reflection upon another’s mind” (p. 183).

SHAME AND GUILT

“Shame is all that we would like to hide and that we cannot bury,” writes Levinas (1935/2003, see discussion pp. 63–65). Its polar opposite, pride, is about praises, positive feelings about the self and its accomplishments. It is about the pleasure and public expression of being positively judged by others, having control of social proximity, and being recognized. The exact inverse is true for shame.

Shame, like pride, can be experienced both directly and indirectly, via the shame (or pride) of others as in the case of an individual experiencing shame but also “shaming” a family and those carrying the same name. Adolescents, for example, are particularly prone to be shamed by their parents, a painful experience mediated by them. As a psychological process, shame as opposed to pride is therefore a negative, anhedonistic, deeply unpleasant human experience that has the particular characteristic of *befalling upon us*. No one enjoys being shamed. It is fundamentally involuntary, like blushing or yawning: It happens when it happens, automatically and against our will, befalling upon us as the cone of a searchlight trapping an escapee. It arises from the public display of what we would prefer to conceal, pertaining to the self or close affiliates of the self (e.g., family or friends).

The source of shame is more often than not objective, in the sense that it can be associated with an event or a situation that is recognizable not only by the shamed person but also presumably by those surrounding that person: the absence of cloth on the shamed individual caught naked by lustful eyes, or the adolescent dreading being seen by peers with his mother whether she wears a flowery hat or is too publicly demonstrative of her protective love.

Interestingly, the contrast between guilt and shame illuminates the psychological nature and subjective intricacies of human self-conscious emotions, all becoming explicit by the third year of life, including blushing, as observed by Darwin.

Guilt, in contrast to shame, captures a painful experience that might befall upon the individual, either directly or indirectly (via other people), but that is not necessarily objective in the sense that its cause or audience can be very elusive or in one’s imagination. Anthropologist Ruth Benedict in her classic 1946 book on Japanese culture (*The Chrysanthemum and the Sword*) captures

AQ: Please provide a page number for this quote.

something fundamental that specifies the social experience of shame in contrast to guilt. She makes the following observation:

A man is shamed either by being openly ridiculed and rejected or fantasizing to himself that he has been made ridiculous. In either case it is a potent sanction. But it requires an audience or at least a man's fantasy of an audience. Guilt does not. (...) a man may suffer from guilt though no man knows of his misdeed and a man's feeling of guilt may actually be relieved by confessing his sin. (Benedict, 1946/2005, p. 223)

Benedict's contrast between shame and guilt is conceptually, as well as ontologically, important. It helps specifying the basic psychology behind it, hence why there is a distinct name for such human experience. A key hint of the psychology behind shame revealed in contrast to guilt is the fact that we can *feel guilty of a crime that goes unnoticed*. Not with shame, as shame depends on the "objective" observations of others (quoted from Ian Buruma's foreword to Benedict's 1946/2005 book). This is a subtle yet significant and highly revealing difference.

It is interesting that shame entails primarily the testimony of an objectified audience with an evaluative (negative) gaze on the self. This potential dread becomes part of what children know about others as potential judges. Interestingly, shame stands for a dreadful experience that cannot be alleviated with a confession. Once shamed, always shamed. Contrary to guilt, there tends to be no redemption to shame, as suggested by Benedict (see earlier quote). It is part of our human nature that we can forget shame, tame it, live with it, and eventually let the painful experience fade, but we cannot get redeemed from it via public disclosure. Aside from the fact that guilt can arise outside of the witnessing and testimony of an audience, in contrast to shame, innocence (the opposite of guilt) can be reclaimed through confession or payback toward whom might have been offended, whether it is via fines, prison time, or other time-outs for children.

As a fundamental psychological dimension, shame reveals the motivational tensions underlying the way we relate and understand others (i.e., our social cognition). Shame cannot be that easily reversed or repaid, and pride (the opposite of shame) cannot be easily reclaimed once lost. Once shamed, there is nothing to confess, because the causes are out there in the open, not much to be hidden (my nudity, my mother's ugly hat). With

shame, in contrast to guilt, there is nothing to be regained and not much room for changes. One has to live and cope with it, like the shame of being the one who survived death camp, poignantly described by Primo Levi (1969) and corroborated by many other deportation survivors.

Children start facing, dealing, and ultimately struggling with all these social contingencies from the time they begin to recognize themselves in mirrors, but in particular when they start to objectify themselves through the gaze of others—when they recognize not only that what they see in the mirror is their own reflection, but that it is also what others actually can see: the source of potential judgments and more or less valued recognition of the own person (Rochat, 2003, 2009). This opens a whole new, specifically human line of social-cognitive development.

SUMMARY AND CONCLUSION

Human psychology is ontologically self-conscious. At its core there is an exacerbated care for reputation. This psychology defines us as a species and becomes explicit by the end of the second year with the expression of self-conscious emotions such as shame or pride. From this point on, children not only demonstrate evidence of recognizing themselves in a mirror, a feat evident in other animals, but they also show apparent emotional weariness and self-consciousness. As a human trademark, mirror self-experience changes status, becoming construed in reference to the evaluative gaze of others.

Human self-conscious psychology cannot be thought of independently of the particular evolution of childhood, an evolution that led toward a prolonged immaturity and the incomparably protracted social dependence of the human young. As a by-product of this evolution, the gaze of others gained unique power as a social signal: the power to assess and reflect self-worth. This evolution also led us to become the shameful and guilt-prone species we are, always under the spell of the evaluative gaze of others.

Reputation and the struggle for recognition are staple expressions of our basic need for social affiliation. I suggested that from at least 2–3 years of age and all through the life span, it shapes, orients, and drives much of what we know about others, in particular the power of their judgment on the self.

REFERENCES

- Amsterdam, B. K. (1968). *Mirror behavior in children under two years of age*. Unpublished Ph.D.

210 TRUST AND SKEPTICISM

AQ: Please note that the reference "Amsterdam & Greenberg (1977)" has not been cross-referred in the text. Please provide the same.

- dissertation, University of North Carolina. Order No. 6901569, University Microfilms, Ann Arbor, MI.
- Amsterdam, B. (1972). Mirror self-image reactions before age two. *Developmental Psychobiology*, 5, 297–305.
- Amsterdam, B. K., & Greenberg, L. G. (1977). Self-conscious behavior of infants. *Developmental Psychobiology*, 10, 1–6.
- Amsterdam, B. K., & Levitt, M. (1980). Consciousness of self and painful self-consciousness. *Psychoanalytic Study of the Child*, 35, 67–83.
- Bard, K. A., Todd, B. K., Bernier, C., Love, J., & Leavens, D. A. (2006). Self-awareness in human and chimpanzee infants: What is measured and what is meant by the mark and mirror test? *Infancy*, 9(2), 191–219.
- Baron-Cohen, S. (1995). *Mindblindness: An essay on autism and theory of mind*. Cambridge, MA: MIT Press.
- Benedict, R. (2005). *The chrysanthemum and the sword: Patterns of Japanese culture*. New York: Houghton-Mifflin. [Original work published in 1946].
- Benson, J. B. (1993). Season of birth and onset of locomotion: Theoretical and methodological implications. *Infant Behavior and Development*, 16(1), 69–81.
- Bertenthal, B., & Campos, J. J. (1990). A systems approach to the organizing effects of self-produced locomotion during infancy. In C. Rovee-Collier & L. P. Lipsitt (Eds.), *Advances in infancy research* (Vol. 6, pp. 1–60). Norwood, NJ: Ablex.
- Bertenthal, B., & Fisher, K. (1978). Development of self-recognition in the infant. *Developmental Psychology*, 14, 44–50.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge, MA: Harvard University Press.
- Bowlby, J. (1982). *Attachment and loss*. New York: Basic Books. [Original work published in 1969].
- Broesch, T., Callaghan, T., Henrich, J., Murphy, C., & Rochat, P. (2011). Cultural variations in children's mirror self-recognition. *Journal of Cross Cultural Psychology*.
- Bruner, J. (1972). Nature and uses of immaturity. *American Psychologist*, 27(8): 687–708.
- Carpenter, E. (1976). The tribal terror of self-awareness. In P. Hockings (Ed.), *Principles of visual anthropology* (pp. xx–xx). Berlin: Walter de Gruyter GmbH & Co.
- Cooley, C. O. (1902). *Human nature and the social order*. New York: Charles Scribner's Sons.
- Darwin, C. (1965). *The expression of the emotions in man and animals*. Chicago, IL: Chicago University Press. [Original work published in 1872].
- Emery, N. J. (2000). The eyes have it: The neuroethology, function and evolution of social gaze. *Neuroscience and Biobehavioral Reviews*, 24, 581–604.
- Furmark, T. (2002). Social phobia: Overview of community surveys. *Acta Psychiatrica Scandinavica*, 105(2), 84–93.
- Gallup, G. G. (1970). Chimpanzees: Self-recognition. *Science*, 167, 86–87.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Doubleday.
- Gould, S.J. (1977). *Ontogeny and phylogeny*. Cambridge, MA: Harvard University Press.
- Hobson, R. P. (2002) *The cradle of thought*. London: Pan Macmillan.
- Kagan, J. (1981). *The second year: The emergence of self-awareness*. Cambridge, MA: Harvard University Press.
- Kobayashi, H. & Hashiya, K. (2011). The gaze that grooms: Contribution of social factors to the evolution of primate eye morphology. *Evolution and Human Behavior*, 32, 157–165.
- Kobayashi, H. & Kohshima, S. (1997). Unique morphology of the human eye. *Nature*, 387, 767–768.
- Konner, M. (2010). *The evolution of childhood*. Cambridge, MA: Harvard University Press.
- Levi, P. (1969). *The truce (La tregua)*, London: Abacus.
- Levinas, E. (1935/2003). *On escape*. Stanford, CA: Stanford University Press.
- Lewis, M., & Brooks-Gunn, J. (1979). *Social cognition and the acquisition of self*. New York: Plenum Press.
- Lewis, M., & Ramsay, D. (2004). Development of self-recognition, personal pronoun use, and pretend play during the 2nd year. *Child Development*, 75(6), 1821–1831.
- Lewis, M., Sullivan, M., Stanger, C., & Weiss, M. (1989). Self development and self-conscious emotions. *Child Development*, 60(1), 146–156.
- Mitchell, R. W. (1993). Mental models of mirror-self-recognition: Two theories. *New Ideas in Psychology*, 11/3, 295–325.
- Montgomery, M. R. (1989) *Saying goodbye: A memoir for two fathers*. New York: Random House.
- Montagu, A. (1961). Neonatal and infant immaturity in man. *Journal of the American Medical Association*, 178(23), 56–57.
- Neuman, C. J., & Hill, S. D. (1978). Self-recognition and stimulus preference in autistic children. *Developmental Psychobiology*, 11, 6, 571–578.
- Parker, S. T., Mitchell, R. W., & Boccia, M. L. (1995). *Self-awareness in animals and humans: Developmental perspectives*. Cambridge, England: Cambridge University Press.

AQ: Please update the reference.

AQ: Please provide page range for the reference.

AQ: Please note that the reference "Lewis & Ramsay (2004)" has not been cross-referred in the text. Please provide the same.

AQ: Please note that the reference "Lewis et al. (1989)" has not been cross-referred in the text. Please provide the same.

- Plotnik, J., & de Waal, F. B. M. (2006). Self-recognition in an Asian elephant. *Proceedings of the National Academy of Sciences USA*, 103(45), 17053–17057.
- Prior, H., Schwarz, A., & Güntürkün, O. (2008). Mirror-induced behavior in the magpie (*Pica pica*): Evidence of self-recognition. *PLoS/Biology*, 6(8), e202.
- Rochat, P. (2003). Five levels of self-awareness as they unfold early in life. *Consciousness and Cognition*, 12(4), 717–731.
- Rochat, P. (2009). *Others in mind—The social origin of self-consciousness*. New York: Cambridge University Press.
- Rochat, P. (2011). Possession and morality in early development. *New Directions in Child and Adolescent Development*, 2011(132), 23–38.
- Scaife, M., & Bruner, J. S. (1975). The capacity for joint visual attention in the infant. *Nature*, 253, 265–266.
- Spitz, R. A. (1965). *The first year of life: A psychoanalytic study of normal and deviant development of object relations*. New York: Basic Books.
- Tomasello, M. (1995). Joint attention as social cognition. In C. J. Moore & P. Dunham (Eds.), *Joint attention: Its origins and role in development* (pp. 103–130). Hillsdale, NJ: Erlbaum.
- Tomasello, M. (1998). One child early talk about possession. In J. Newman (Ed.), *The linguistic of giving* (pp. xx–xx). Amsterdam, The Netherlands: John Benjamins.
- Trevarthan, W. R. (1987). *Human birth: An evolutionary perspective*. Hawthorne, NY: Aldine de Gruyter.
- Williams, D., & Happe, F. (2009). Pre-conceptual aspects of self-awareness in autism spectrum disorder: The case of action monitoring. *Journal of Autism and Developmental Disorders*, 39, 251–259.
- Winnicott, D. (1968). Playing: Its theoretical status in the clinical situation. *International Journal of Psychoanalysis*, 49, 38–52.

AQ: Please provide page range for the reference.

AQ: Please note that the reference “Williams and Happe (2009)” has not been cross-referred in the text. Please provide the same.