REGULAR ARTICLE

Corporeal Reflexivity and Autism

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Abstract Ethnographic video recordings of high functioning children with autism or Aspergers Syndrome in everyday social encounters evidence their first person perspectives. High quality visual and audio data allow detailed analysis of children's bodies and talk as loci of reflexivity. Corporeal reflexivity involves displays of awareness of one's body as an experiencing subject and a physical object accessible to the gaze of others. Gaze, demeanor, actions, and sotto voce commentaries on unfolding situations indicate a range of moment-by-moment reflexive responses to social situations. Autism is associated with neurologically based motor problems (e.g. delayed action-goal coordination, clumsiness) and highly repetitive movements to self-soothe. These behaviors can provoke derision among classmates at school. Focusing on a 9-year-old girl's encounters with peers on the playground, this study documents precisely how autistic children can become enmeshed as unwitting objects of stigma and how they reflect upon their social rejection as it transpires. Children with autism spectrum disorders in laboratory settings manifest diminished understandings of social emotions such as embarrassment, as part of a more general impairment in social perspective-taking. Video ethnography, however, takes us further, into discovering autistic children's subjective sense of vulnerability to the gaze of classmates.

Keywords Autism · Body · Stigma · Reflexivity · Perspective-taking

Introduction

Autism is the last frontier of anthropology, in that it lays bare the stringent requirements of social belonging. Video recording 16 high functioning children with autism or Asperger syndrome as they navigate their everyday lives, our ethnography of autism

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study captures a range of enactments of social enmeshment co-involving these children with peers, teachers, and family members. ¹ The children are 8–12 years old and all mainstreamed in local public schools. Using remote cameras and wireless microphones, researchers recorded each child at school and home. A corpus of 320 h of recordings captured gaze, demeanor, actions, and talk, including *sotto voce* commentaries on unfolding situations. In addition, parents audio-recorded interactions with their child over a 5-day period in transit to and from school and upon arriving home.

The recordings evidenced moment-by-moment corporeal acts whose form and sequential positioning indicated the children's uneven reflexive sense of self and other. Just as important the recordings documented precisely how children with autism spectrum disorders (ASD) can become socially enmeshed as unwitting objects of stigma at school and how they reflect upon their social rejection both in situ at school and later with their parents.

ASD children's forays into securing social affiliation with peers at school evidenced misreadings of peer expectations and awkward social overtures (Ochs et al. 2004). These moments of social disjuncture are compatible with studies indicating social perspective-taking impairments associated with autism (Baron-Cohen et al. 1985; Baron-Cohen et al. 1999; Bowler 1992; Frith 1989; Frith and Frith 2003; Happé 1994). Video ethnography, however, also revealed "autistic sociality"— a range of appropriate sensibilities to the social situation at hand displayed by children with ASD (Ochs and Solomon 2010). Video and digital technologies provide the singular advantage of synching image with sound to capture embodied communication as it unfolds over increments of real time. Video ethnography offers researchers, clinicians, family members, and teachers a window on how the body is a primary site in which autistic sociality is inscribed. The body provides a window into the reflexive capacities of children with autism, especially how they perceive their own and others' acts.

In Husserlian phenomenology, the *lived* body (*Leib*) is heralded as the center – the zero point - from which a person becomes aware of self and the world, where subjectivity is quintessentially experienced and refracted as consciousness (Husserl 1977: 81): "My body is given originally to me and to me alone, as that in which my psychic life governs. My psychic life is for me quite directly and in the strictest sense of the word perceived, and directly perceived not alongside my body but as animating it." At the same time, the physical body (körper) has an exterior form that can be apprehended as an object (Zahavi 2008: 95). In social encounters, the body is vulnerable to the interpretive gaze of others, which in turn mediates how we reflect upon ourselves. Indeed, from a phenomenological perspective, the lived body makes intersubjectivity comprehensible and the objective body makes intersubjectivity possible (Zahavi 2008:159). Garfinkel (2006: 181) notes that bodily movements can be read as an "expressional field ... accessible to interpretation as signs of the communicator's thought". Because verbal representation of what children with ASD are thinking and feeling is often limited, the body becomes especially relevant in discerning how the children apprehend others and, critically, how they apprehend themselves through the

¹ To confirm diagnosis, researchers administered the Autism Diagnostic Interview-Revised (ADI; Le Couteur et al. 1989) and the Autism Behavior Checklist (Krug et al. 1978). The children's abilities were assessed using the Wechsler Intelligence Scale (WISC-III, Wechsler 1992), and a series of theory of mind tasks (Baron-Cohen 1989; Baron-Cohen et al. 1985; Happé 1994; Leslie and Frith 1988).



perspectives of others. This level of perspective-taking is challenging but not elusive to these children, as the video record indicates.

Autism research has invested heavily in the idea that autistic children display diminished capacity to read the minds of others or even to reflect on their own minds (Dennett 1991; Gopnik and Meltzoff 1994). Yet, scholarship on how autistic children *corporeally* manifest degrees of understanding of their own and others' mental states has been little understood. Surprisingly, we know little about how the ASD child's body navigates its way through the thicket of ordinary social encounters – in the intimacy of households, the academic exchanges of classrooms, and, as the focus of the present study, the harrowing social geography of playgrounds (see Solomon 2011, 2012 for exception).

Corporeal reflexivity involves displays of awareness of one's body as both an embodied, experiencing subject and an embodied physical object accessible to the gaze of others. In displays of corporeal reflexivity, the embodied, experiencing subject turns its attention to its physical body, re-visioning it as an object of scrutiny, usually under the normative gaze of others, as Foucault (1988) has so aptly described as the essence of the modern regime of power. Such corporeal displays may evidence a willingness to consider and accommodate other's beliefs, that is, to enter into intersubjective relationships.

Corporeal reflexivity can also, poignantly, evidence what children with autism spectrum disorders, as embodied subjects, are *not* aware of. Of consequence, the children may not understand that their bodies are vulnerable to the gaze of others and that, in particular, their corporeal eccentricities can render them targets of stigmatizing acts (Goffman 1963; Link and Phelan 2001). Particularly noticeable to neuro-typical classmates is symptomatic repetitive, rhythmic self-stimulating motor activity referred to as stimming (Goldman et al. 2008), which children with autism initiate to stimulate or regulate themselves, particularly when experiencing sensory overload, e.g. rocking, nodding, flapping arms, spinning, touching, and vocalizing (Wing 1997).

In stigmatizing interchanges with classmates, children with ASD are drawn into a joint activity that positions them as an exception rather than a full member of the body politic (Agamben 1993, 1998). Goffman (1963: 138) considers 'normal' and 'stigmatized' not as social categories of persons but rather as perspectives provoked during "mixed contacts". Link and Phelan (2001: 367) emphasize that "stigmatization is entirely contingent on access to social, economic, and political power that allows the identification of differentness, the construction of stereotypes, the separation of labeled persons into distinct categories, and the full execution of disapproval, rejection, exclusion, and discrimination."

As a quintessentially social and moral perspective, stigma should prove difficult for children with autism spectrum disorder to comprehend. Our ethnography of autism study indicates that high functioning children diagnosed with autism or Asperger syndrome vary in their awareness of peers' negative stances towards their comportment at school. Some were oblivious to the derisive moral gaze of their classmates. Some children tried to mask their oddities from classmates during the school day by wandering to the far corners of the playground at recess or pretending to be a clown. And some returned home from school to report to their parents how stigmatizing incidents on the playground and elsewhere left them feeling frustrated.



Erin on the Playground

To understand how children with ASD experience stigma at school, the present analysis examines a playground encounter involving one of the children in the ethnographic study: 9-year-old Erin, a high functioning girl with autism. Erin's diagnosis had never been revealed to the public school teacher or the other children in the classroom prior to our participant observations and video recordings at the school. In clinical tasks, Erin displayed first- order theory of mind, the ability to infer what another person likely thinks, a capacity achieved by typically developing 4-year-old children (Baron-Cohen 2001). Yet, she was not able to pass second order theory of mind tasks: Erin did not display the capacity to understand what one person believes another person believes to be the case, an ability demonstrated at roughly 6 years of age for typically developing children. This limitation contributed to Erin's uneven awareness of stigmatizing encounters with classmates. At times she displayed little awareness that others were viewing her corporeal activity as odd. At other times she did realize her classmates' derision but felt misunderstood and disappointed that she could not convince them that she was more like them than they assumed. Indeed, in these encounters, Erin indicated that she felt that her classmates lacked the perspective-taking needed to interpret Erin's behavior. Encounters between Erin and her classmates sometimes demonstrated the character of 'cross-talk' associated with cross-cultural misunderstandings Gumperz (1982).

Although Erin's autism diagnosis had never been explained to her classmates, they seemed well aware that she was different. During lesson time classmates were reluctant to work alongside Erin. During recess Erin ate lunch by herself and spent time wandering around the playground or watching others play. During these moments of free time, she engaged in stimming motor activity, discretely jiggling her legs, flapping her hands, and vocalizing in a low voice.

The Playground Incident: Peer-Initiated Stigma

Playgrounds in the United States are vast spaces that draw children together for sports, games, gossip, and random encounters out of the earshot of their teachers. In one such encounter, Erin is sitting alone at the end of a bench watching a kickball game during lunch recess when her classmate Anita walks over and sits on the bench at a distance. Turning towards Erin Anita issues a command, "Erin, shake!" Erin keeps looking at the game and does not respond. Anita then calls emphatically, "ERIN!" As Erin turns her head and torso in Anita's direction, Anita re-issues her command "Shake!" (Fig. 1).

Subsequently, Erin looks towards Anita, raises and bends her forearms, vigorously swivels her torso, and loudly vocalizes "uh-uh-uh-uh:::", sounding like a motor (Fig. 2).

Anita follows this command with another: "What about the other one, the other one?". This specification indicates that Anita not only knows that Erin "shakes" but also has in mind a typology of Erin's motor activity. Erin hesitates, a little confused, then begins to sway her upper torso, in a circular hula motion, with her hands on her lap. This swaying motion does not resemble her usual self-stimulating motor activity. Instead, it resembles a dance movement possibly learned in her dance lessons or habitual watching of musical videos (Fig. 3).





Fig. 1 "ERIN! shake!"

Anita briefly laughs, and the encounter is over. After a few minutes Anita leaves, and Erin is alone.

Several forms of reflexivity regarding self and other are indicated in Erin's corporeal response to this command. When Erin shakes in response to Anita's commands, she displays an intersubjective awareness of the conventional illocutionary act - a directive- that Anita has intended her to carry out (Austin 1975; Searle 1969). Erin's response fulfills Garfinkel's (2006: 184) specifications for 'seeing sociologically':

A acts toward B as if the signs that B provides are not haphazardly given. When we say that A understands B we mean only this: that A detects an orderliness in these signs both with regard to sequence and meanings.

Erin both recognizes and provides appropriate corporeal uptake to the specific types of actions that Anita stipulates, namely two kinds of shaking. As such, Erin and Anita enter into a joint activity undergird by shared sociological meanings. This level of sociality loosely corresponds to Erin's successfully passing the first level of theory of mind false belief task.



Fig. 2 Erin sits upright, lifts arms, shakes torso vigorously while vocalizing



Fig. 3 Erin slowly swivels her body

Yet, Erin's corporeal response evidences another kind of reflexivity. When Anita commands "Shake. Erin, shake!", Erin does not jiggle and vocalize as she does when she is stimming by and for herself. Instead, Erin *performs* her shaking as a piece of theatre for Anita. That Erin understands Anita to be requesting a performance of her motor activity is corporeally keyed by her exaggerated physical movements and the loudness and rapidity of her vocalizations. The performance implies that Erin, as an embodied subject, has stepped outside her usual way of being to reflect upon and modify the actions of her physical body as an object under scrutiny. She is not shaking as she ordinarily shakes; she is acting "shaking," pretending "shaking," to amuse Anita, her audience.

Pretend play has been treated as a simple form of multiple perspective-taking, as in instances when a child transforms a "real" object into an "imagined" entity (Charman et al. 1997; Taylor and Carlson 1997). Such play presages first order theory of mind projections that entail imagining what another person may be thinking or feeling. Yet, in the case of Erin's "shake" performance, pretend assumes a more sophisticated cast. First, more than treating a physical object as an imagined object, Erin converts a sequence of her own stimming motor activity into a showpiece of these actions for another person. In theory of mind terms, Erin's corporeal display indicates that she interprets Anita's command not only as a simple directive to carry out an activity but also as directive to undertake a piece of theatre, hence, the outsized jiggling and vocalizing demonstration.

Erin performs the shaking in an effort to please and establish sociality with Anita. Yet, in the exaggerated manner in which she performs stimming Erin transforms herself into Goffman's (1963: 142) depiction of the mascot, clown, or village idiot who "welds others into a participating circle around him, even while it strips him of some of the status of a participant". Such eagerness to please and respond to peers is how children like Erin become public objects of exhibit as exceptions to the ordinary (Agamben 1998).

The Playground Incident: Erin Internalizes "Shake"

A few minutes pass, as Erin continues to watch her classmates play ball. Then Erin does something strikingly relevant to corporeal reflexivity. She gently shifts her torso side to side, mouths inaudible words, then re-issues Anita's command to *herself*:



"Shake!". Following this self-command, she sways and tilts her head more exaggeratedly side-to-side and forward with her hands on her lap, almost as she had performed for Anita:

After these moves Erin comments, "Not gonna work." This comment, however, appears directed to a dramatic play in the ball game that she has been carefully following with her gaze (Figs. 4 and 5).

Erin's re-enactment is both delayed echolalia (Sterponi and Shankey 2013) and a private rehearsal of the shaking performance. Developmentally, it exemplifies the kind of self-directed speech and embodied reflexivity that Vygotsky (1978, 1986) proposed is central to human learning. In the Vygotskian paradigm, private speech and corporeal re-enactments of interpersonal communication guide the immature self in appropriating new skills. Erin's private re-enactment of her encounter with Anita – Anita's command and Erin's performance of shaking – suggests, however that Erin is learning more than an interactionally generated manner of corporeally presenting herself to her classmates, a little piece of theatre that is rehearsed as a possible path to peer sociality. In that Anita is in the position to exert control over Erin and in that Erin's "shake" performance displays a stigmatized motor activity, Erin's private re-enactment also indicates that a hegemonic process is taking place, wherein Erin is unwittingly learning to display herself as an object of derision.

The Playground Incident: Erin's Repeats Performance for Others

This possibility is borne out just minutes later. Erin, still sitting alone, begins stimming - lightly jiggling her legs, flapping her hands, and very quietly vocalizing to herself - all very contained. After a few seconds, Anita returns and climbs over the bench right next to Erin. Anita touches Erin's shoulder as she does so (Fig. 6).

At this precise moment Erin revs up her stimming behavior to full throttle. Her jiggling becomes full-on leg-shaking and head-bobbing vigorously; her vocalizations become very loud and high pitched over an extended stretch of time. Anita sits down briefly next to Erin but then abruptly leaves to join a group of classmates. Erin continues shaking, bobbing, loudly vocalizing, and grinning like a Cheshire cat.

It may well be that Erin's amplified shaking, bobbing and vocalizing is triggered by Anita's touching Erin's shoulder. Our video recordings, however, show no such





Figs. 4-5 Erin re-animates Anita's command "Shake!" and shifts torso and tilts head, practicing her shake



Fig. 6 Anita climbs over bench, touching Erin's shoulder

reaction on other occasions when a classmate touches Erin. Alternatively, Anita's re-appearance may trigger Erin's desire to repeat her theatrical performance of "shaking" as previously requested by Anita and as Erin had requested of herself when she was sitting alone just a few minutes earlier. The intensity of her shaking and vocalizations resembles the earlier performance for Anita. Moreover, Erin turns her body towards Anita as she re-initiates her shaking and vocalizing. This exaggerated behavior differs from the more discreet stimming in which Erin engages when by herself.

Unfortunately, Erin continues her shaking and vocalizing even after Anita - her original audience - leaves the scene and several other classmates approach the bench and stare at her (Fig. 7).

Erin then orients her shaking body towards these classmates, possibly as a social overture: she maintains a fixed grin as she shakes, bobs her head, and vocalizes in a dramatic manner in their direction. The classmates, however, did not solicit this activity (as did Anita earlier). They do not realize that Erin may be trying to entertain them with a theatrical version of her shaking. Instead, they make derisive comments. Approaching the bench, one of the classmates, Jenny, asks, "What's your problem?" Another classmate, Gary, asks, "What the heck is she doing?" Erin pauses momentarily but then resumes her performance. Goffman (1963: 13) depicts such encounters, in which "the normal and stigmatized do in fact enter into one another's immediate presence," as "one of the primal sites of sociology; for, in many



Fig. 7 Anita leaves the bench as other classmates approach



cases, these moments will be the ones when the causes and effects of stigma must be directly confronted by both sides (Figs. 8 and 9)."

The approaching classmates then turn their backs to her, forming a closed circle (Figs. 10, 11 and 12).

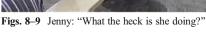
Yet, Erin refuses to shrink back into the shadows of the playground. Erin leans over the back of one of the seated classmates, Alison, who often helps her out in the classroom. She pleads her to "Hey, watch this! Alison!" (Figs. 13, 14 and 15).

Eventually Alison and the others turn their gaze to Erin. Erin offers an exaggerated performance of shaking and vocalizing. Alison and the other classmates show no signs of appreciation. Instead they discredit Erin's performance as a "scene of degradation" (Goffman (1963: 134). They gawk, smile collusively, and, as Erin finishes, Gary echoes his earlier bewilderment, "What the heck did she just do?" to the others, leaving Erin unrecognized as a knowledgeable addressee (Fig. 16).

Erin answers Gary anyway, albeit delayed and so softly and high-pitched that they do not hear her. She sighs, "Just doing my silly little thing" and then, after a beat, she rhetorically comments, "Wha-at?," shrugging her shoulders. These remarks and shoulder shrug index the range of Erin's reflexivity on her own behavior and others' interpretations of her behavior. Erin's comment "Just doing my silly little thing" evidences that she sees her own embodied activity as quirky and in this sense, within the bounds of normality (Goffman 1963). Indeed, her attempt to frame her behavior as merely "my silly little thing" is a common strategy of the stigmatized to disguise their disability as goofy (Goffman 1963). In effect, Erin's response implies that she understands her classmates' derision but feels they have misunderstood her intentions. Her "Wha-at?" chides them for their rebuff, as if "What's the matter with you?" or "What's the big deal?".

Bateson (1972: 180) introduced the critical, evolutionary importance of distinguishing play from serious behavior in his famous comment "the playful nip denotes the bite, but it does not denote what would be denoted by the bite". Like the playful nip, Erin's excessive shaking, bobbing, and vocalizing hark back to her stimming behaviors, but from Erin's point of view, they do not denote that she is actually stimming. This playful frame of reference, however, is not a shared point of departure for Erin's classmates. And therein the line between citizen and exception is drawn (Agamben 1993, 1998).









Figs. 10-12 The other students turn their backs on Erin

Over the course of just a few minutes, corporeally enacted consciousness of the self and other fails miserably on both sides. On one side, Erin appears to be viewing herself as a *theatrical* fool, but on the side of her audience, classmates are viewing her as a *natural* fool.

Conclusion

Ethnographic video recordings of children with autism spectrum disorder provide a torrent of information about what the body can say about the mind. In Erin's case, the body says that she displays somewhat sophisticated self-reflexive capabilities: Erin corporeally evidences the distinction between ordinary stimming behavior for her own self-regulation and mock performance of such behavior for an audience. This transformation requires not just an embodied subject reflexively acting on her body as a physical object and not just introspection. It involves a phenomenological modification of a bodily act that entails a logical shift in the *frame* of that act from serious to pretend (Duranti 2009).

When such a logical shift is initiated in the context of social interactional with another person – as when Anita issues the command "Shake!" – Erin displays consciousness of a complicated desire of an interlocutor. Anita is not eliciting just any kind of shaking but Erin's particular ways of shaking, recipiently designed for her viewing as solo audience. The complexity of this intersubjective moment reveals subtle social and cognitive skills beyond what might be expected of a girl like Erin, whose theory of mind test scores evidenced only the ability to comprehend first order beliefs and intentions of others.

Yet, the video recordings also detail how this rosy picture of sociality breaks down terribly on the moral and affective plane. Erin's social slide is precipitous. Erin is unable to understand that a performance that partly worked for Anita the first time does not



Figs. 13-15 Erin attempts to get Alison's attention: "Hey, watch this! Alison!"





Fig. 16 Erin performs for her uncomprehending classmates

merit repeating for Anita when she hurriedly arrives back at the bench. Anita had not requested another shaking performance; Erin's re-start of exaggerated shaking and vocalizing likely chased Anita away. Worse, Erin miscalculates that other classmates would also be amused by her performance, perhaps accepting her as their class clown. Ultimately, she realizes that she cannot manage her stigma by making it theatre. Although she chastises her classmates "Wha-at?"; her bodily demeanor and comments indicate that she is crestfallen.

Eventually Erin falls back on her tried-and-true strategy for managing her rhythmic self-stimulation: she creates physical distance. Using the default ploy of many children with autism spectrum disorders, Erin leaves her classmates on the bench and spends the rest of the recess wandering the margins of the playground in circles alone.

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