

SELFLESS GENES, ALTRUISM AND TRAUMA: RESEARCH AND CLINICAL IMPLICATIONS

In this paper I will argue that psychoanalytic thinking might have underestimated the role of altruism as a natural feature of human development. Altruism does not quite feel a satisfactory term for what I want to describe; it might have too many connotations of philanthropy, but equally many alternative words, such as being helpful, considerate, generous, co-operative, warm-hearted, nurturing, also do not quite capture this wish to non-defensively be kind, caring and 'pro-social. In this paper I will use developmental, attachment and neuroscience research alongside clinical examples to show how humans tend to be pro-social and altruistic from early infancy onwards, and also describe some clinical work which I hope illustrates some of these ideas.

I describe a spontaneous propensity to be altruistic which is different from the reciprocal altruism many evolutionary psychologists describe (Trivers, 1971). Such reciprocal altruism undoubtedly exists as well, and is based on more of a 'I'll scratch your back if you will scratch mine' philosophy. This is more like Thomas Hobbes' (1651) belief that human life was naturally 'solitary, poor, nasty, brutish and short', that people come together in a social contract for their own benefit, a view not a million miles away from Freud's, as expressed in *Group Psychology and Analysis of the Ego* (1955), although for Freud it is having similar aims and love that binds individuals into groups rather than fear for Hobbes. Hobbesian philosophy has often been used to justify market-led, 'there is no such thing as society', beliefs. I will describe a less calculated and more spontaneously generous form of altruism which recent research demonstrates occurs naturally in human infants.

A more individualistic discourse, partly derived from a version of evolutionary psychology and the idea of the 'selfish gene' (Dawkins, 2006), seems to me to be a factually limited version of human nature. Yet it is one which might fit all too easily with a model of psychoanalysis that argues that humans are naturally self-interested, drive-driven, destructive and aggressive, and that much that is seen as 'good' or 'decent' is a 'reaction formation' or worse, a form of dissembling which disguises baser motives. Freud's version of human nature was rather similar to this, and he had a view that it is by internalising a sense of what is right and 'civilised' that instinctual impulses are curbed and the social good is protected, albeit in an uneasy truce. Many such psychoanalytic accounts have seen the wish to help

others as a mature form of defence. A famous exception is seen in Searles' (1979) paper, 'The patient as therapist to his analyst', in which he emphasises the importance of a therapist acknowledging the genuine wish of patients to help their analyst and many of Winnicott's writings (e.g 1996) are also examples of psychoanalytic awareness of these areas.

Research suggests (Batson et al., 2003) that capacities such as altruism and the wish to help others arise developmentally alongside empathy and the ability to take the perspective of the other. In fear and massive anxiety our capacity for empathy and altruism is affected (Eisenberg et al., 2010). There is a difference between a spontaneous, empathic wish to help another, and the belief that one should abide by a moral belief or set of tenets (Batson and Ahmad, 2009). Psychoanalysis has focussed more on the latter, the ways in which we take on a culture's moral beliefs and act according to such rules, such as superego formation via the internalisation of parental injunctions. While the two forms of 'doing good', the spontaneously empathic, kind gesture and the act based on a moral code, are different, it is striking how often children and adults who have suffered abuse, neglect or are both less empathic and thoughtful of others (Decety and Moriguchi, 2007), and also end up not acting or living by the dominant moral codes of society. For example, a strikingly disproportionate percentage of maltreated children end up excluded from school or are later in the prison population (Cocker and Scott, 2006).

While humans have evolved to be ordinarily helpful and altruistic to others, especially to those in their own social groups, the coming 'on-line' of such altruistic capacities depends on living in an environment that some believe we have evolved to expect (Cicchetti and Valentino, 2006), in which there is 'good-enough' attention to a child's thoughts and feelings. Abusive, neglectful and traumatic environments tend to dampen or even almost extinguish these capacities, leading to more selfishness and less altruism. Contrary to the claims of some evolutionary psychologists, competitiveness and selfishness are not simply our natural, state but are enhanced by stress, anxiety and fear, for example. This is a historical period when increasing competitiveness seems to have crept into much of public life, when public service can be derided as the 'nanny state' and even those of us in the so-called 'helping' professionals are expected to compete ruthlessly with colleagues in other services. At the risk of being perceived as 'pollyanna-ish' (c.f. also Music 2009), and without denying that any of us can be nasty, cruel or murderous, I think that we might need to rescue 'human

nature' from a trope of pure selfishness, and re-establish the fact that being kind and caring are also part of human nature, and also have a place in psychoanalytic psychotherapy.

Human infants want to be helpful

A swathe of recent research suggests that even children as young as 14 months are innately helpful to adults, given the opportunity. Research (Warneken & Tomasello 2009) found that in experimental situations when an adult feigns having a problem, such as dropping an object or struggling to open a cupboard with full hands, infants were nearly always quick to help. The infants read the *intentions* and goals of the adults, and adjusted their behaviour accordingly, and they had a spontaneous desire to help.

These children do not help to gain any reward. When experimenters rewarded (with exciting toys and smiles) just one of two groups of children when they helped, those who received no reward (not even a smile) and had no idea other children were offered rewards, next time spontaneously and generously helped the most! (Warneken & Tomasello 2008). When mentioning this research, people have queried whether the unrewarded children keep trying 'selfishly' in order to get a reward. Tomasello (personal communication) stated that 'the No Reward kids kept helping at the same rate across 5+ treatment trials and 9 test trials, whereas the others fell off as soon as the reward stopped. The kids in the No Reward never got any reward for 14 trials - why would they be trying hard for a reward after 5 trials of never receiving one.' Only the most resilient children would keep trying more than a few times. Helping is intrinsically rewarding, and indeed it fires reward circuits in the brain (Moll et al., 2005).

The idea that infants and children are spontaneously motivated by empathic concerns contradicts Hobbes', Freud's and others' belief that infants are simply self-interested and need to be trained to be pro-social. In experiments (Vaish et al., 2009) children as young as 18 months watched an unknown adult draw a picture and then another adult snatched and tore up the picture, and all the children showed clear expressions of concern. They did not however show much concern when a blank piece of paper was snatched and torn up.

Hauser argues that humans have what he calls a 'moral organ' (Hauser 2008), a built in ability to spot what seems right and wrong, even if what is considered to be right and wrong might differ from society to society. Six to ten month old babies watching 3-d animations of

kindly or 'nasty' coloured shapes which either 'help' or 'hinder' another shape from climbing a steep hill, later want to hold and touch the toys that look like the helpers rather than the hinderers and fully understand their different 'intentions' (Hamlin et al., 2007). This in itself is not moral behaviour but does suggest an ability to distinguish between helpful and unhelpful acts, and maybe between 'good and bad guys'. Intentionality (e.g. to help or be nasty) is understood by babies as young as 9 months old and so they show surprise when an innocent character approaches the seemingly nasty animated object but not when they approach the 'good guy' (Kuhlmeier et al., 2003). These experiments also showed that babies prefer a helper to a neutral character and prefer the neutral character to the 'hinderer' (Bloom 2010), and they are clearly distinguishing pro-social and antisocial behaviours. Indeed slightly older (18 month old) infants, when watching the same experiment, explicitly convey that the 'helper' is 'good' and the 'hinderer' is 'bad'. Moral judgements are forming and by 21 months many babies will actively reward the 'helpers' and take away treats from (i.e. punish) the bad puppets, which Bloom suggests is a form of 'dispensing justice'. Even more surprisingly, babies not only preferred the puppets who helped the good guys over those who were nice to the bad guys, but they also preferred the puppets that punish the bad guys (i.e. are not nice to the bad guys) over the puppet who is nice to the bad guys. The babies it seems are responding to a moral sense and not just whether a character does something nice or not!

Bad experiences lead to less empathy and less altruism and caring for others

The experiments above suggest that empathy, the wish to help and be altruistic, and some basic moral sense, are naturally occurring tendencies, assuming that certain ordinary attuned and mind-minded attention has been received in childhood. Something different occurs in chronically maltreated and neglected children who often do not show much empathy or care of others, and do not make friends or fit into social groups. By a year or so children have already built up considerable expectations of relationships based on their past experiences. As Dweck points out (c.f. Tomasello 2009, pp.125-14) attachment and other templates, effectively expectations of relationships, are well in place by a year, and are built up through repeated early experiences. Dweck describes research in which children watch a scenario in which a mother and young baby are climbing some steps, the baby cannot keep up and starts to cry in upset. In one example the mother returns for the baby, and in the other the baby is left. Securely attached children show evident surprise when the baby is left, but the insecure children were the opposite, showing surprise when the mother did return to her children

(Johnson et al. 2007). Clearly the expectation of helpful behaviour is built on previous experiences which are required to trigger our altruistic tendencies.

We also know that ongoing maltreatment inhibits the capacity for empathy. For example, Main and George found that ordinarily toddlers respond to other toddlers' distress in nursery, but that the abused children in their sample showed no empathy or concern for other children's distress, and indeed could be quite aggressive to such children (Main and George, 1985). Securely attached children, who have been more sensitively attuned to, generally show more empathy (Mikulincer et al., 2005). They for example tend to play well with other children in pre-school whereas there are more fights and conflicts with insecurely attached children (Sroufe, 2005). As Meins (2002) found, mind-minded parental input, in which parents show awareness of the emotional and mental states of their children, gives rise to more secure attachment and also better capacities for understanding other minds. We also understand from neuroscience that the circuits in the brain central to empathy need to be used if they are to develop and that certain experiences turn off the capacity to be in touch with one's own or other people's states of mind (Shirtcliff et al., 2009), notably stress and fear, thus reducing the capacity for empathy and altruism.

Attachment researchers have helped us understand that being securely attached is more likely to give rise to moral, altruistic and pro-social behaviours (Fonagy et al., 1997). The different attachment styles give rise to different kinds of responses, including how people respond when the opportunity to offer help or care arises. For example experiments showed that while securely attached adults were likely to offer help and compassionate caregiving, those with avoidant attachments had fewer pro-social tendencies, and those with an anxious attachment became so preoccupied with themselves that they were less able to be empathic or directly offer support to others in distress (Mikulincer et al., 2005). The same study showed that when subjects were experimentally 'primed' to think about their attachment figures they were more empathic and more likely to help someone in distress than otherwise, and these results held up in cross-cultural comparisons.

While anxious and avoidant attachment give rise to less empathy and altruism than secure attachment, all of these attachment patterns are adaptive, and have a long history in human evolution. However very serious chronic abuse and maltreatment is maybe less 'evolutionarily expectable' (Cicchetti and Valentino, 2006), and much less likely to trigger

pro-social behaviours and empathy. It is likely that important developmental trajectories are stymied in severely maltreated populations, as they have lacked inputs that we might variously know as mentalization, containment, mind-mindedness, attunement and such. When dominated by subcortically led primitive defences like fight-flight and freeze, and when rage, terror or massive anxiety predominate, our capacities for empathy and altruism shut-down, or sometimes barely develop (Panksepp, 2004). Not surprisingly writers such as Gerhardt (2010), a psychoanalytic psychotherapist who draws on neuroscience, child development and social theory, have argued forcefully for the importance of more attuned, empathic parenting as an antidote to selfish, individualistic social values. In the following sections I describe patients who suffered terrible experiences but who maybe had just enough good compensatory experiences to be able to re-find a sense of their own goodness (Klein, 1998) and to begin to be kinder to themselves, and others.

A case example: Molly

I briefly describe a flavour of my work with a woman I call Molly, a 22 year old from a tough background who was seen in a voluntary sector therapy service for about 18 months. Molly is typical of many who came from a traumatised background and who developed a 'selfish' and unthinking approach to others, but one which can shift slightly following therapeutic work. She was the youngest of 4, and all the children had different fathers. The atmosphere she described in the home would be thought of by most people as uncaring and even cruel, although Molly initially saw nothing unusual in much that went on. There was much teasing and any weakness and vulnerability seemed to be met with a taunting and vindictive response from her siblings and no sympathy from parents who had fought very bitterly for much of her childhood and eventually separated.

In early sessions I found myself quite chilled by her descriptions of her relationships. She used sex (frequently) as a weapon, to wield power and to hurt other people. She was in a relationship with a young man who she often physically hit and attacked, and she was regularly unfaithful to him with a stream of people, and was more likely to be unfaithful when she felt at all vulnerable. The chilling nature of her descriptions was slightly tempered by the obviousness of the vulnerability. She described terrifying dreams of being attacked and chased and reported night terrors and fears of being left alone as a young child. Despite my being nearly three times her age, I was aware of her seductiveness, and she would for example explicitly state the attributes in older men she found attractive, and ask me to

comment on her clothes. She seemed both disappointed and relieved when I could talk about her provocations and how she struggled against believing in a helpful therapeutic relationship, and how she believed that if she could seduce me that would prove that the work we were doing was not really meaningful. Indeed it was clear that she attacked anything that could make her feel ordinarily good, cared for or at ease; she was more likely to attack her boyfriend or have an affair when she felt vulnerable or looked after by him, and she was both more seductive and more dismissive of me when she had allowed herself to be at all touched by our work.

She also described behaviour which was clearly bullying, and was very controlling of her boyfriend, and seemed to ruthlessly pick on any habits she did not like in a harsh way. Weakness was hated and despised, and weakness was mostly projected into others, particularly her boyfriend, but also her father, me, and also female friends and other sexual partners. She manifested a classic example of Rosenfeld's internal mafia-like gangs (Rosenfeld, 1987), viciously defending against any vulnerability and weakness. I was often shocked at her behaviour, struggling mightily to judge her and to continue to try to make sense of why she was acting as she was. Typically she hated all softness and interestingly could not sleep in an ordinary bed with pillows and a mattress and preferred the hardness of lying on the floor. She idealised strong and invulnerable characters, especially athletes who were tough and showed no emotion. Weakness included being helpful and kind and she glorified in taunting and disparaging anyone who was in trouble or needed help. In Molly the lack of empathy and altruistic tendencies was in large part a desperate defence against her own vulnerability but was also driven by her being in highly anxious fear-ridden states of mind, which do not easily lead to empathy in others.

Slowly though I began to see signs of her getting interested in the therapy, in me and in herself. The initial signs were again in projected form, with her getting very fascinated by a woman who came out of a session and into the waiting room streaming with tears before her session each week. She could not understand how anyone could allow that to happen, but she was also increasingly intrigued by the tissues in the room and who might use them. My analytic stance of not answering too many questions and being more silent than she was used to had made her a little angry but she had also viewed this as a sign of my power, something she was rather in thrall to. Slowly though I saw signs that she was taking in something more helpful and nourishing from statements like 'maybe it is hard to believe that I can understand

how that feels for you’ or ‘perhaps myself and others might feel sympathy for what you are going through’, comments that initially were met with disdainful and disbelieving looks but which also led to her showing fleeting emotional signs of being touched and moved. She was by now in a relationship with another young man and was allowing herself to become more dependent, and for the first time was able to admit to missing him. This occurred at the same time as we were approaching a holiday break, and she was able to describe her wish to retaliate, by for example having lots of affairs or leaving therapy. By now some capacity to watch and be aware of her own mental processes was taking root. She could allow herself to be vulnerable and talk about her worries, and also what was even more difficult, she could begin to describe her hopes for her relationship and for the future. She also could give up the idea that I was enjoying her weakness from a superior, invulnerable place.

She was beginning to have some compassion for herself, and, interestingly in relation to the themes of this paper, this was also extending to some compassion for others. She was no longer disdainful of the ‘crying patient’ who preceded her but seemed genuinely interested. She reported for the first time making small and generous gestures, not only to her boyfriend (buying presents, helping him in various ways), but also spontaneously wanting to help look after her oldest brother’s children and taking pleasure in their thriving development. In therapy she suddenly noticed my states of mind, and for example now expressed concern when I had a cold, instead of the previous disdain, and it seemed important that such gestures were accepted with ordinary gratitude by me. I do not want to claim that this work changed her from a tough, selfish individual to a kindly, empathic, altruistic person, but there were some small moves in that direction. This also coincided with other changes. The receptionist, who rarely commented on patients, said how she seemed softer and nicer as well as more feminine, and I thought this too. It was as if a softer and more generous space had opened up inside her and was ready to grow.

Molly arrived at a time when she was still open to being helped, and as we now know, late adolescence and early adulthood is a time when the brain is changing and re-forming (Dahl, 2004), a period which presents real opportunities for psychic change. Molly had had a tough start and had formed a range of powerful defences, but I can only assume that she had had sufficient good experience to enable a more vulnerable side of her to still be reachable.

Many of the children and young people I work with who, for example, have been in the care system, have been multiply traumatised, have had many placements and never had a stable family life of any kind, and are much harder to reach than Molly. These are the children who often end up in the criminal justice system, who are excluded from school, struggle to form peer relationships or sexual relationships, and can be cruel and callous and also of course not very easy to like. Some develop almost psychopathic tendencies and few are likely to present for therapy voluntarily as adults. As children they would rarely have received sensitive, attuned attention or had anyone in their lives consistently able to hold them in mind. Often not only do they form a host of massive defences against unbearable experiences, but they seem not to have developed the emotional equipment to be either self-reflective or empathic, and hence they can seem hard, callous and uncaring. Molly's background was not as abusive as some, and she clearly had some good experiences to build on, but what was striking to me was how, as she developed more mentalizing capacities (Fonagy, 2002), she became more empathic, caring and indeed generous.

An overall developmental understanding

Research suggests that the capacity for empathy and altruism are part of a swathe of developmental capacities that are interrelated and tend to 'co-emerge', given 'good-enough' (Winnicott, 1958) early caregiving. Central is the ability to understand another person's *intentions*, which is needed in order to make moral decisions or judgments. Deliberately hitting someone or just accidentally knocking them over will be judged by most of us differently. The toddlers in Tomasello's experiments understood whether a stranger dropped an object accidentally or deliberately, and they reacted accordingly.

Empathy and altruism and the other capacities that 'co-emerge' seem to be necessary to function as a member of a social group. Humans are a group species and from birth we are primed to learn to fit into any existing cultural group, speak its language, and imbibe social rules. This capacity to be almost infinitely malleable has a short shelf-life, and for example our ability to recognise and learn the different sounds in languages as diverse as Japanese, English or Xhosa diminishes greatly after our first year (Kuhl et al., 2006). Young infants soon prefer their own language and cultural expectations; humans want to fit in and be accepted.

This all requires an ability to understand other minds and other people's expectations and intentions. Such capacities are developing as early as 4 months when infants can know they are the object of another's attention, showing coyness for example (Reddy 2000), and by 6 months they can have sufficient understanding of other minds to be able to 'tease and muck about' (Reddy 2008). Most readers are familiar with how more sophisticated understandings of 'other minds' arise after about 8 or 9 months, when we tend to see 'joint attention' and 'social referencing' and what Trevarthen originally called secondary intersubjectivity (Trevarthen and Hubley, 1978). This allows the development of mutual gazing in which both parties know and appreciate what is in the other person's mind. Such skills continue to develop until what has been called Theory of Mind fully develops at about 4 years old. Such capacities are very much linked to what Fonagy and colleagues describe as mentalization (Fonagy and Target, 1998).

Most children, although not autistic people (Hobson, 2002), develop these capacities if they have sufficient early attuned attention, and what Meins (2002) has called 'mind-mindedness'. Those who suffer neglect and abuse generally have much less ability to understand their own and other minds, or can sense powerful feelings in others but are reactive and aggressive rather than empathic, to such emotions (Decety et al., 2009).

Altruistic tendencies and an ability to understand other minds co-emerge along with a range of other capacities such as 'autobiographical memory, that ability to conceptualise oneself as part of a story, one's own and other people's, with a past, present and a future.

Autobiographical memory starts to develop apace after children start to recognise themselves in mirrors, often between about 18 and 24 months. The classic 'mirror-recognition' test places a blob of 'rouge' on an infant's face and children 'pass' this test if they recognise that it is their face with rouge on in a mirror. Interestingly research in Holland has consistently shown that toddlers who respond empathically and helpfully to another's sadness in experiments were the same children who passed the 'rouge' self-recognition test (Bischof-Köhler, 1994), whereas those who offered no support or empathy failed the test, thus supporting the 'co-emergence' hypothesis. Passing the mirror self-recognition test is also linked to starting to use more personal pronouns (Lewis and Ramsay, 2004), often seen as a sign of a separate 'self' forming. Similarly the ability to play in an imaginary and pretend way is also a linked a capacity and particularly related to achieving understanding of other minds (Harris, 2007).

It is no coincidence that parents who score secure-autonomous in the adult attachment interview (Main and Goldwyn, 1995), and who have been shown to be likely to have securely attached children, have complex and coherent narratives about their own lives and histories. These are just the capacities that most therapists are, I think, hoping will be developing in their patients. Such capacities, for understanding one's own and other minds, for symbolic play, for autobiographical memory, for empathy and the desire to help others, are interlinked and tend to develop together, although sadly in many of the more traumatised children and adults we work with they do not develop all that much.

Also strongly linked are the capacities to defer gratification and self-regulate, which so many traumatised people struggle with, as was indeed the case with Molly who demanded that her needs were met instantly. We know that the inability to self-regulate affects a child's ability to negotiate peer and other relationships. In fact, the ability to delay gratification predicts many outcomes right into adulthood, such as the likelihood of holding down a job, managing a stable romantic relationship, negotiating good friendships, to name but a few (Metcalf and Mischel, 1999). It seems that this ability to defer gratification depends on being able to understand and regulate one's own thoughts and feelings (Moore and Macgillivray, 2004). Moore convincingly argues that deferred gratification and altruism are linked in that they both entail thinking about minds and feelings, either one's own or those of others, and indeed use the same brain regions.

Much therapeutic work is aiming to develop capacities that we sometimes describe as 'containment' (Bion, 1962), emotional holding (Winnicott, 1996), 'mentalizing' (Fonagy, 2002), mindsight (Siegel, 2007), mindfulness (Davidson et al., 2003), mind-mindedness (Meins et al., 2001). These all describe slightly different versions of how we think about our own and other people's thoughts and feelings, without which spontaneous generosity and altruism are not possible. Many traumatised children and adults never develop such abilities. Others may have reached some of these developmental milestones, but being in a near constant state of heightened arousal, anxiety or fear means that such capacities remain off-line. In therapeutic work we are often striving, I think, to help patients stay within a 'comfort zone', what Pat Ogden calls a 'window of tolerance' (Ogden, 2006), as when any of us is over-aroused and dysregulated it is almost impossible to feel empathy or be altruistic. We do

not tend to feel very generous when extremely stressed and it is hard to care for others, for example, when one is in terrible pain or being threatened.

Terry

Terry, 18, came to see me for twice weekly therapy in an NHS service. He had had a troubled history. His father was absent, had previously been violent to his mother and had spells in prison. He was the third of 4 siblings, the only boy, and his mother had alcohol problems but had somehow managed to keep the family together and had mostly escaped social services involvement during his childhood. Terry had been a troublemaker at school, often in fights and had found study difficult. Of the co-emergent capacities that I described above, he certainly had struggled to regulate his emotions, to defer gratification, and had limited ability to get on with peers or understand his own and other people's feelings. He had benefitted from being the only boy who had been doted on, but there was no doubt that his upbringing was very tough, the children having to fend for themselves a lot of the time, and little affection to go around. Following an exclusion from school aged 9, he had received a spell of thrice weekly therapy at the local child guidance clinic which lasted 18 months and his mother also attended fortnightly. Reports from that time suggested that he was very all over the place at first, but had settled down, been able to play symbolically and had seemingly worked through some important issues. Perhaps this experience of therapy that had helped push forward his development and interestingly he had managed to remain in mainstream school during secondary school, albeit apparently with some close shaves.

His re-referral followed a period when he had dropped out of school, had been getting into drunken fights and had had contact with the youth offending services following some petty criminal activity. He was hugely in thrall to toughness and violence and wanted to disown any vulnerable aspects of him, but nonetheless was rather shaken by having to face where his life was heading.

Typically in one early session he told me smirking that he was playing football and had provocatively got another player sent off. He grinned describing being threatened with a knife by the player's friend and says that if a player makes a fool of him he will make sure that he gets them back. He then tells me that he has broken a player's leg before. I say that he

needs me to understand why he acts as he does, not necessarily condone it, but make some sense of his motives. He relaxes slightly.

Ironically he says it is 'therapy', and makes him feel better. I say that maybe it is instead of therapy and bearing the feelings inside him. He parries this, telling me how he feels better if he gets revenge. I wonder if not turning up after a difficult session had been a kind of revenge. He says that it is different and talks about how you need to get back at people, saying 'I have no choice'. I question this, and he says that it is their fault. I say 'if you feel bad it is always someone's fault?', and he says that 'it is, isn't it? And I realise how much he is living in Klein's paranoid-schizoid position with an unshakeable conviction in the law of talion.

He was determined to project badness, weakness, stupidity and incompetence elsewhere, including other racial groups, and also women, boasting of all the sexual conquests he had had. After some months though he met someone he really liked but the threat of vulnerability was almost impossible to bear. For example when his girlfriend was invited to a party he deliberately invited out her best friend and was triumphant when his girlfriend was upset, considering this a victory saying, gloatingly 'she has a crap time and I have a great time, and so there you are, one nil.'. Yet he was able to admit to feelings of neediness and jealousy and watch the projective processes he enacted. He was getting interested in soft, loving feelings, expressing bemusement, as well as jealousy, when noting the affection in his girlfriend's family. He said 'what I do not understand was when her dad kissed her. I mean they kiss each other maybe every day, just because she had not seen him since yesterday, well to my mind that is mad. I mean my dad, he would not kiss any of my sisters if he had been away for a year. '

He was upset and then quickly got angry. I took up how he was determined to rubbish everything that seemed good and hopeful, and he replied that if this is what relationships are like then he does not like it. I say that he demeans and belittles others in the attempt to make himself feel better for a moment. Trusting others a bit, his girlfriend or me, seemed impossibly hard and risky. He says 'but why should I put myself on the line? It is stupid. It is 100% or nothing."

I take up how jealous he may have been of A, and it seems also of her father and the family's warmth and affection. He looks suddenly sad and then says that he never had anything like that, it never happened in his house. Also in his girlfriend's house they had pictures of the children everywhere but in his house there are no photos at all. I say that he cynically tries to believe in a world with no protection and caring support but he also longs for it, maybe he hopes that I will protect him from the Terry that can cause damage to others and especially to himself. He looks visibly touched.

In the next few months a change occurred whereby he began to be less angry and aggressive to others, but more self-hating and self-critical. For example he said "I am just a useless bastard. I have failed at everything, I will never get a job". For the first time I see self-hating and even suicidal feelings, but he is on the verge of allowing himself to be more depressed. When I point out his self-hating thought processes, how he has a thought and then rubbishes it, he says he just cannot understand how I cannot be critical.

He had struggled with a recent break when he was particularly self-destructive and also nasty to his girlfriend. I take up whether he can believe his vulnerability can be accepted and borne. He looks sad and starts to talk about how weak he feels and he pretends to be so strong. I say how hard it is to bear that he has a weak and dependent side. He almost takes this in, looks touched, and then squirms out of this feeling back to self-disgust. I say with a great deal of despair in my voice that he is determined that we will not leave here without me really feeling just a bit of how desperate he feels and he asks 'well do you?' with some cynicism but I thought at least the faintest touch of hope.

He was slowly taking back projections, of weakness, of incompetence, but this was a painful period. In the next months the self-hatred and despair slowly turned towards more depressive feelings and also a more compassionate and self-accepting view of himself. He said for example: 'In fact things have been all right, more than all right. Things have been going great guns with me and A.' He had begun to trust her feelings for him more and when he described how she cried because he had shown caring towards her he made a deflecting joke but in fact was very moved. He particularly could not believe that she still cared as much if not more after he told her about his fears and what he talks about in therapy. I comment that he cannot believe that he can show who he really is and that anyone will still be there, A or me.

As in Molly's case, with more self-reflection came more compassion, not just for himself but for others too. I noticed that his hyperawareness of me was less anxious, and he began to notice and be interested in me in a way which was not manic or manipulative as before. He also started to teach younger children football, and there were other signs of beginning to side with the weak and vulnerable, such as giving an elderly neighbour a lift to go shopping and helping a struggling young person who worked alongside him in a Saturday supermarket job. He always diminished such actions, and made a joke about them, saying for example, of the old man '*I tried to run over the old git when he was coming towards me*', but such statements had lost their venom and were no longer convincing. He was genuinely becoming a more caring person, although of course still with intact aggressive and destructive sides to him.

Discussion: Altruism and empathy as naturally occurring human capacities

The kind of model of social and emotional development I am using assumes an inbuilt human propensity for relationships with others from birth onwards, what Trevarthen called having a 'companion in meaning making' (Trevarthen, 2001) and which Bråten described as infants being born 'alterocentric' (Bråten, 1998) as opposed to the 'egocentric' infant seen in the theories of Piaget and some early psychoanalytic accounts. It suggests that selfishness is not the only natural state, and that it can become exaggerated at times of stress and tension.

As well as being selfish, humans are innately primed to be charitable, decent and generous to others and not just to those to whom we are biologically related. The same reward circuits in the brain light up when we make charitable donations as when we receive a reward for ourselves (Moll et al., 2006). Being generous and caring is rewarding in itself. The circuits involved in attachment and close interpersonal relationships are also activated when we make donations or gifts, again suggesting a link between pro-social behaviour and attachment. These are similar brain circuits involved in both empathy and understanding the motivations and intentions of others (Tankersley et al., 2007).

People with higher levels of oxytocin are also more generous, oxytocin being the hormone that is released when we feel loved and cared for, in breastfeeding, in orgasm and in caring for others (Zak et al., 2007). Deprived Romanian orphans had lower oxytocin levels when cuddled than control groups of children (Fries et al., 2005). Oxytocin can also increase the ability to understand other people's feelings and minds (Domes et al., 2007), it enhances

attachment security (Buchheim et al., 2009), and even improves the understanding of emotions in autistic people (Guastella et al., 2008). It seems that childhood adversity and abuse leads to lower oxytocin levels, lasting into adulthood (Heim et al. 2008), and low oxytocin levels are linked to higher aggression and violence (Siever, 2008), as well as lower levels of mutual trust (Zak et al., 2008), and indeed artificially giving people oxytocin increases their generosity and trust levels and their ability to forgive others.

By as young as 3 years old children are more likely to help those who have been helpful to others or who have already been helpful to them. (Olson and Spelke, 2008). As social creatures most children understand social norms and like to see them enforced and by 3 years old, when rules and normative expectations are broken, such as not playing a game by agreed rules, children express disapproval (Rakoczy et al., 2008). Such wishes to follow rules are not based on a fear of authority, nor on simply a selfish expectation of reciprocal altruism (Trivers, 1971). This of course exists, and indeed more self-preoccupied and anxious people tend to 'give' from more self-interested motives (Crocker and Canevello, 2008). Indeed anxious attachment can give rise to a more anxious form of generosity, one less spontaneous and genuinely caring, and avoidant attachment patterns can lead to more egoistic pro-social acts, with an expectation of getting something in return, while more secure attachment patterns lead to helpfulness driven by genuine care for the other and a wish to help (Mikulincer et al., 2005). More securely attached adults tend to be more generous, even being more likely to volunteer to help others, irrespective of other psychological skills.(Erez et al., 2008).

Tomasello argues that from a young age children possess a kind of 'social rationality' (Tomasello 2009, p.40), a sense of being one in an interdependent group of 'us', that agrees that what 'we' think is right. Again this is something we tend to see less in maltreated children or adults, who often struggle to work out how to fit into groups and peer relationships. To abide by social rules and conventions, as well as dialects, dress codes and other norms, empathy and joint attention are necessary. Children protest when mutually agreed conventions are flouted, such as that a piece of wood stands for a telephone (Wyman et al., 2009). These are all relational, pro-social skills which seem to be finely linked to the wish to both care for and help others in ones in-groups.

It seems that early co-operative capacities are the seedbed of the ability later to follow norms and cultural expectations. This ‘alterocentric’ as opposed to egocentric sense of being part of a ‘we’ depends on a sense of shared intentionality, in which the goals of others can be understood and joint goals constructed. Many evolutionary psychologists argue that such group co-operation is necessary for survival, in a way that a competitive individualism is not (De Waal, 2008). There is evidence that competitive environments give rise to more selfish and less empathic tendencies, whereas more co-operative social situations lead to more caring and altruistic ways of behaving (Lanzetta and Englis, 1989).

The idea that humans are ‘naturally’ competitive and selfish maybe seems more compelling at times when societal and economic forces give rise to more cut-throat environments which lead to counter-empathic tendencies in people; more co-operative and egalitarian forms of social organisation lead to less stress, anxiety and more altruistic tendencies (Wilkinson 2005)

What I hope to have argued is that being generous, empathic and altruistic are part of a range of developmental capacities that co-emerge with others, given a ‘good-enough’, possibly evolutionarily-expectable, environment, but such capacities do not emerge in the same way in the face of extreme early neglect and/or abuse. This has an analogy to what neuroscientists and others seem to be discovering about sensitive periods in general, and in particular for language development (Thomas & Johnson 2008). It is of course the case that ‘ordinary’ children, like any of us, are also capable of sadism and many degrees of nastiness, irrespective of whether we believe that such destructiveness is innate (Klein, 1998), or more a reaction to environmental impingement, as many Independents have believed (Rayner, 1991). Nonetheless being helpful, interested in other people, following social rules and wanting to be part of a moral order develops more ‘naturally’ than is sometimes thought and does so through ordinary social participation rather than being ‘taught’ or by moral inculcation

While I am as convinced as ever that introjective processes or mechanisms such as ‘identification with the aggressor’ (A. Freud 1972) explain something of how aggression can form for example, and I agree that abused children introject extremely pernicious, cold and cruel objects, it may be that we have underestimated how altruistic capacities can develop without being overly influenced by processes of identification. We are born primed both with an inbuilt capacity for altruism, and also to fit into a rule-bound moral and social universe.

This is a different idea to that which Freud originally put forward, the more Hobbesian one of human nature being primarily selfish and driven by id-based mass of instincts which need to be civilised and socialised by parents, society and culture.

However maltreatment, as well as anxiety and stress, inevitably reduces our ability to be empathic and altruistic, and an increasingly stressful, competitive and individualistic culture will lead to a decrease in altruism. This might well fuel a belief that humans are naturally selfish, rather than being co-operative beings who function best in a more egalitarian and mutually caring social system (Wilkinson & Pickett 2009). Therapeutic work, as I hope I have suggested, has a role in facilitating such developments, maybe particularly through the development of mind-minded capacities.

As Gordon particularly has emphasised (Gordon, 1999, 2008), psychotherapy is an ‘ethical’ endeavour, ineluctably linked to what we hope for in human relationships. Of course there are more structured forms of psychotherapy, particularly mindfulness based ones (Gilbert, 2009) that actively aim to increase compassionate tendencies, and seem to enhance other areas of functioning such as increasing heart-rate variability, reducing stress and increasing empathy and theory of mind capacities (Rockliff et al., 2008). Some even argue that trying to be actively kind and altruistic can hugely diminish symptoms such as in OCD and state that being compassionate is good for people’s health (Goetz et al., 2010). Psychoanalytic therapies of course do not have such lofty or concrete aims, but I am sure most readers think that our therapeutic work leads to more empathic, thoughtful, self-reflective and playful people with increased capacities for self-regulation, better able to relate to others, capacities that we believe are genuinely ‘human’.

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