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Macquarie Monographs in Cognitive Science

INDIVIDUAL DIFFERENCES IN THEORY OF MIND

Implications for Typical and Atypical Development

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and

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*This book is dedicated to the memory of Linda Mealey,
Professor of Psychology at St. Benedict's College
in St. Cloud, Minnesota, and Adjunct Professor of Psychology
at the University of Queensland, Australia.
Linda's death at the age of 46 from colon and liver cancer
was a great loss for the field. She was a pioneer
in her thinking about the potential impact
of individual differences in theory of mind.*

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Bypassing Empathy A Machiavellian Theory of Mind and Sneaky Power

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DISCERNING NEEDS AND THE EXERCISE OF SNEAKY POWER

Being good at discerning what another person needs doesn't mean that you will necessarily meet those needs. No personality style illustrates this more powerfully than the Machiavellian, where empathy is either lacking or bypassed. In such a person, skill in mapping the intentional states of others, that is, having a good theory of mind (ToM), is a basis for the exercise of sneaky power. Lacking, it seems, moment-to-moment sensitivity to the affective states of another, more cognitive processes seem to suffice. The Machiavellian (Mach) worldview targets the human weaknesses and lack of insight that leave others open to tactical manipulation. It seems that the Mach worldview does a stand-in for the online reading of others' affective states, suggesting that one does not need to use affective processes to discern affective processes in another. The Mach's tactics set up a power imbalance, restricting the other's awareness of relevant facts and cues, intensifying motivational and emotional states, playing on or priming normatively held false beliefs the Mach does not share. The gap between the Mach's worldview and that normatively held by others gives her a darkly charismatic edge. The person whose mind is read may be manipulated against her best interests.

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The personality style of Machiavellianism is chosen here as a case study relevant to ToM, because Machs are strategic manipulators who are able to map the intentional states of others. Yet there is a puzzle at the heart of Mach manipulative abilities. To successfully manipulate another, that is, to align her motivation with one's own goals, one needs to discern the beliefs, affective states, and need states of that other, in order to influence them to one's own advantage. Yet research suggests that those high in Mach tendencies not only lack empathily, but lack skill in correctly recognizing the expressive cues of others (Simon, Francis, & Lombardo, 1990). How then are the beliefs, affective states, and need states of others discerned? The ability to map such states is central to ToM concerns. Machs seem to be able to map even affective states without using affective processes. What are the consequences for development of a disorder of empathy in conjunction with an intact ToM?

Let me set up my line of argument. First, I make a case for the relevance of individual differences to theory of mind. Machs exemplify two kinds of individual differences with implications for theory of mind research. The Mach's individual differences in belief systems require us to extend the concept of theory in ToM to include shared understandings (rather than a more restrictive account of "theory" as epigenetically unfolding module). Taking seriously differences in empathic functioning (exemplified by Machs) broadens our research concerns to include the mapping of affective states in addition to beliefs, and the manner in which this is achieved.

Since not everyone who is steeped in the ToM literature is as familiar with the Machiavellian literature, I give a thumbnail sketch of the views and tactics that the Mach scales measure and discuss definitions of empathy. I then use Machiavellianism as a case study of a disorder of empathy. By selectively considering such individuals, it is almost as though one had experimentally diminished the capacity for vicarious, compassionate arousal in response to the affective state of another. The developmental literature shows that young Machs are good at behavioral manipulation, lack compassionate empathy as a correlative of exploitation, and fail to help another in evident need. While it is a developmental achievement in ToM acquisition to realize that another may not have access to all the information that you do (perspective-taking), I show that young Machs may actively use tactics to restrict access to information, the better to manipulate others.

Legendary for using foxy cunning, do Machs reveal their actorly skills in controlled empirical studies? Are they skilled in observing the emotional cues of others? I discuss their impression-management skills, noting their capacity to split being from seeming, and the ToM skills required for such discretion and deception. I discuss contexts in which such skills may be put to prosocial use and form part of a civilized and highly subtle use of ToM.

Given that Machs can manipulate, but seem to have no moment-to-moment sensitivity to the states of others, I then consider the possibility that rather than

lacking empathy, Machs do experience vicarious affective arousal, but bypass it in some way. Relevant to this is the prevalence of an external attributional bias in Machiavellians. Such a bias apportions to others and to chance causal responsibility and blame. It's a kind of "it wasn't me" attributional style. I suggest it may in fact have an affective-management function; some Machs may feel some guilt and anxiety over their exploitative tendencies, and have to deal with it. In this scenario, any affect that may arise as a result of the shoddy treatment of others is dealt with by an external attribution bias where the world, chance, powerful others, anyone but the Mach herself is attributed causal responsibility. The worldview itself may function as a cognitive schema that further minimizes affective responsibility to the plight of another, since that other is cynically viewed as likely to do the very same thing if given the chance. In summary, I contend the Mach worldview may well have a dual function: to diminish discomfort via the cognitive modification of empathic tendencies (and I show how this is possible even in non-Machs), and to point out weaknesses ripe for exploitation. The Mach worldview maps prevalent human weaknesses; the tactics maximize those weaknesses, with an eye to situational contingencies. The lack of sustained, vicariously aroused affect on behalf of another means that the Mach manipulator never gets sidetracked or loses focus on the goal, while she maximizes the distraction of the other to create a power imbalance ripe for manipulative victory.

I then consider the possibility that a lack of empathy for others actually has a causal role in the development of a theory of nasty minds. Does a Machiavellian theory of nasty minds arise via externalizing responsibility for one's own actions and coming to view others with contempt and disdain after the fact of having exploited them? A close look at the data suggests cynicism, some early mistrust, and affective blunting might characterize the young Mach very early on.

Despite the affective blunting that seems to characterize Machs, there are limits to the Machiavellian cool. They do still have affective responses to others, if not of the compassionate, vicarious variety as is shown in pilot data concerning their experiences of rage. In conclusion, I consider whether a primary and secondary subtype of Mach depends on the developmental starting point regarding affective responsibility. I note finally the limits to empathy in coming to take the perspective of another, and suggest that it does take cognitive skills to map the intentional states of markedly different others.

THEORY OF MIND: ROOM FOR INDIVIDUAL DIFFERENCES?

Theory of mind research has not been an obvious intellectual context for those of us interested in individual differences in personality. Most theory of mind research until recently has addressed species-general human capacities. Looking

for universals is congenial to an austere, sparse conception of what constitutes a theory in ToM research and sits well with assuming an innate, epigenetically developing, but largely preprogrammed, module. This stance does not readily bring within one's research ambit the role of individual experiences, or cultural differences.

Many propose that a person's ToM develops as the result of an informationally encapsulated module. Meltzoff (1999) noted that modularity can't explain qualitative change in development, other than by the triggering of something preprogrammed. He took the position that although there may be an innate structure, the qualitative reorganization in children's thought occurs on the basis of input from people and things in their culture. Experience makes a difference to the acquisition of ToM, which entails qualitative shifts in a child's reasoning about the inferences another will make based on the evidence the child realizes is available to that other. It is a remarkable developmental achievement when a child comes to realize that the evidence another has may be more restricted than the information possessed by the child, representing a marked qualitative shift in ability. Hobson (1990) suggested that experiences and abilities arising from complex interpersonal exchanges (particularly of a shared, affective nature) form the experiential basis of ToM. It is possible that systematic differences in these interpersonal exchanges will have systematic influence on the acquisition of ToM. Whether or not social and individual difference factors arising from differential life experience influence the acquisition of theory of mind, this chapter attempts to show that they certainly influence the use made of ToM. It is not ToM as ascription of beliefs and desires alone, but beliefs and desires in the context of affects and needs. First we must address whether a case can be made for the significance of within-culture differences in social functioning and ToM.

A Robust Role for Experience in ToM: The Case of Cross-Cultural Differences

Although cross-cultural differences in the concepts and processes involved in the acquisition and functioning of a theory of mind have been explored (Lillard, 1998), a case has not been explicitly made for within-cultural differences in mind-reading abilities. Lillard argued that culture (like language) might be seen to function as "a continual priming effect, getting people to think about certain concepts and not others, thereby influencing the inferences people draw" (1998, p. 6). From her point of view, culture "makes its way into the mind-reading processes much more than theories have described" (p. 23). She suggested a terminology by which "theory of mind" may consist of core beliefs, and "folk psychology" may be noncore, built on top of that and influenced by culture. Whether or not between-culture variation does truly complicate the search for

universals in the processes and concepts involved in an intentional mapping of others, one's folk psychology in this wider sense is likely to shape the manner in which a ToM shapes social functioning.

Within-Cultural Variation: Individual Differences

Within-culture variation of an individual difference form has been addressed in the theory of mind literature regarding autism (Baron-Cohen, 1995; Baron-Cohen, Tager-Flusberg, & Cohen, 1994). This chapter broadens the consideration to include personality differences that occur as a matter of degree within the general population. The child-as-scientist model promoted by researchers such as Gopnik (1996), Gopnik and Wellman (1992), and Meltzoff (1999) already allows a robust role for the world in the formation of a theory of mind. This world we bump up against is a social and cultural world, with affectively charged relationships (see Hobson, 1990, in his reply to Leslie, 1987, and see also Preston & de Waal, in press). Because it is already accorded causal role in the formation of ToM, it is a small step to acknowledge its *differential* effect on certain individuals. Such differences might be relevant to the development of the component processes of ToM itself: for example, having an inherent disorder of the component abilities that promote the development of empathy, or a lack of relevant, optimal early life experiences (see Saltaris, 2002).

Or if ToM does prove to be innate/modular, or a result of preprogrammed processes unfolding contingently from a world structured by Gibsonian affordances in a highly invariable way (Leslie, 1987), then such differences might be relevant at least to the implications of ToM for social functioning. In short, whatever theory of theory of mind you prefer, individual differences matter. Social factors might influence performance rather than competence in theory of mind, and may be downstream from more modular ToM processes that provide input to competent performance (Currie & Sterelny, 2000). Currie and Sterelny (2000) noted that as Machiavellian reasoning seems to depend on integrating information from a wide variety of sources, it is unlikely that such social judgments are produced by an encapsulated mechanism (p. 153). Such theoretical models may be postponed while we show the phenomena to be taken seriously. Before presenting the case study of the Machiavellian personality, here is a word about the use of terms.

Extending the Meaning of Theory in ToM: Shared Understandings and Affective Processes

Performance in the wider world relevant to ToM may be shaped by individual differences, and may result in individual differences in the subtlety of theory of mind use. "Theory" here is used in a broad sense, as a system of interconnected

understandings, which may show cultural and within-cultural variability. In examining within-cultural variability, the relevance of social, developmental, and personality factors to ToM becomes apparent.

ToM and Empathy: Do We Need to Feel Emotion to Discern Emotion?

Empathy and role-taking abilities enable us to suppress our own perspective and entertain that of another person. Individual differences in perspective taking and empathy are relevant to the intentional mapping of the beliefs and desires of another. Perspective taking is the ability to recognize the experience of another *without* experiencing vicariously that person's emotional state. Affective perspective taking involves an understanding of another's internal affective state; empathic concern does not. Empathic concern, in contrast, is the tendency to experience the specific emotional reaction of sympathy/compassion in response to another's misfortune (Davis & Kraus, 1991). This latter empathic resonancing or "hot" empathy also shapes what use is made of the information gained about the state of another, whether it is used to help another person, or to exploit them.

Contemporary ToM researchers have placed more emphasis on discerning the beliefs of another (rather than affects/emotions/desires). Affects are more readily read off the expressive facial and bodily displays and the behavior of another person (Hobson, 1990; Tomkins, 1962). Affective experience is not as private as belief states. A person undergoing an emotional experience does not have the same privileged access to their state. Others may in fact discern a person's state more rapidly than the person herself does. As Simmel (1950) so eloquently noted, "To the man with the psychologically fine ear, people innumerable times betray their most secret thoughts and qualities, not only *although* but often *because* they anxiously guard them" (original emphasis, pp. 323-324). Simmel was at pains to point out that it is not indiscreet in itself to acquire such knowledge—it is, for some, virtually automatically read off the behavior of others. "Conclusions happen so quickly that no power over this skill, no normative position is possible; it is a matter of individual decision."

Possessing a psychologically fine ear may consist of the cognitive ability to understand the affective perspective of another, which is different from actually experiencing the affect of the other person. Let's take a moment to clarify affective perspective taking and empathy.

Preston and De Waal (in press) defined empathy as "any process where the attended perception of the object's state generates a state in the subject that is more applicable to the object's state of situation than to the subject's own prior state or situation" (p. 8). Empathy and role taking are two ways we can pick up on the needs of others. Empathy is usually seen as multidimensional, involving cognitive and emotional abilities, usually complexly interacting. The "cold" and "hot" distinction between the more cognitive elements and the more emotional resonancing elements fits well with le Doux's two systems for pro-

cessing emotional stimuli, as Preston and de Waal (in press) noted. Empathy processes "likely contain fast reflexive sub-cortical processes (directly from sensory cortices to thalamus to amygdala to response) and slower cortical processes (from thalamus to cortex to amygdala to response). These roughly map onto contagious or cognitive forms of empathy respectively" (Preston & de Waal, in press, p. 251).

Self-report measures sustain the distinction between hot and cold empathy. The Interpersonal Reactivity Index (IRI; Davis, 1980) is a multidimensional measure of empathy that assesses separately both emotional (hot/contagious) and cognitive (cold) aspects. Hot empathy is reliably assessed by the IRI subscale "Empathic Concern" (an affective response to the distressed other). The more cognitive features of empathy are addressed by the subscales of Fantasy (the tendency to place oneself in the life situation of fictitious others) and Perspective Taking (the cognitive ability to understand another's affective state).

Cold, or cognitive, empathy refers to the ability to understand the need state of another. This undergoes dramatic changes developmentally since it depends in part on the level at which a person is aware of other people as entities separate from herself. Hoffman (1978) noted that young children will offer their own mother as comforter to another child in distress, even when that child's own mother is available. What we know about others may alter the very quality of experience of any particular affect. Cognitive empathy is one way of discerning the need state of another where we may obtain the knowledge we seek, but there is no guarantee that we will behave altruistically (Krebs & Russell, 1981). The experience of the warmer features of empathy, namely, emotional resonancing, makes us more likely to help when another's need is obvious or when asked (Barnett & Thompson, 1985). Altruistic action may be promoted by the feeling of kinship that may arise in some observers from the sharing of affective states, via the vicarious arousal of one's own bodily and emotional states as a result of observing a person's situation. Such emotional resonancing may give highly exact information about another's state, which theoretically may be used for manipulation. Empirically, though, it has been found that those who manipulate, or who don't help another, tend not to have this aspect of empathy.

MACHIAVELLIANISM: CASE STUDY AS NATURAL EXPERIMENT

Machs seemingly lack all empathy and thus provide us with a natural experiment; without invoking the wrath of any ethics committee, we can see what happens to ToM use if empathy is excised from a personality. First, we offer a general portrait of Machs, then a few words about what the Mach scales measure (because there is more to Machiavellianism than a lack of empathy), and

lastly a discussion of the relevance to ToM of the Machs' lack of empathy or capacity to bypass it.

Portrait of a Mach: Sneaky Power and Deceptive Self-Presentation

Simmel (1950) saw as uniquely human the split between "being" and "seeming" that so perturbs us in the skilled Machiavellian. He noted: "No other object of knowledge can reveal or hide itself in the same way, because no other object of knowledge modifies its behavior in view of the fact it is recognized" (p. 310). Whiten's research suggests that other species may in fact share this ability.

These abilities perturb us in Machs, yet the same abilities underpin discretion and deception. Although the difference between them is a matter of degree, the attitude we take to each is also shaped by the goals served, and whether we share those goals. In discretion we artfully do not reveal all that we know about the other (or at least conceal all that has not been expressly told to us by the other) to smooth social exchanges, and not to intrude upon the privacy of another person. Yet Simmel noted "all of human intercourse rests on the fact that everybody knows somewhat more about the other than the other voluntarily reveals to him, and those things he knows are frequently matters whose knowledge the other person (were he aware of it) would find undesirable" (p. 323). So not revealing all that we know, using skilled sending abilities (to use the language of impression-management research), involves an element of deception. Yet this is not seen as antisocial in that it is required for civilized society. The art as outlined by Machiavelli himself was to conceal the self and to avoid identifying too fully with "the enemy." There are parallels here with the art of hostage negotiation, where negotiators must identify sufficiently with terrorists to be trusted by them, but not sufficiently to slip into true allegiance (see Serrano & Rodriguez, 1993). Very few negotiators are ever thanked by the victims, who can be forgiven in the circumstances for not understanding the subtlety of the process and are usually just screaming, "Give them the helicopter and the \$16 million."

So deceptive self-presentation, one of the hallmarks of Machiavellianism, to conceal artfully and reveal ruthlessly, is not *per se* antisocial. The goals and worldview of the manipulator shape our views of his or her behavior. The truncation in empathy felt for the terrorists on the part of the hostage negotiator arises as a function of the negotiator not identifying with the goals of the terrorists. The negotiator holds a worldview that sees the sacrifice of the lives of terrorists as a necessary evil should the success of his or her own mission require it. From a morally neutral perspective, this is using those others against their own interests. Arguably a negotiator does this not merely for personal gain, but for collectively (although rarely universally) agreed-upon good.

Subtlety of theory of mind is required for skilled deceptive manipulation. One must be able to discern needs, affective states, and beliefs of the to-be-

manipulated other although that individual herself may not know her own true intentional state, nor her implicit beliefs. Further, one must avoid alerting the to-be-manipulated other that one has discerned his intentional state until (if ever) it is in one's interests to do so. This requires considerable stagecraft.

Splitting Being and Seeming: Are Machs Good Actors?

Machiavellians and high self-monitors are immune to cognitive dissonance type pressures because they are quite able to partition off what they "really feel and believe" from what the situation requires. This "role distance," the ability to separate "self" from "role" (Ickes et al., 1986; Goffman, 1961), enables them to "distinguish their more stable and enduring dispositions (attitudes, values, sentiments) from those that they are only temporarily espousing in order to create a desired impression" (Ickes et al., 1986, footnote, p. 61).

Machs have high poise and high competence in expressive performance. Cerulnik, Way, Ames, and Hutto (1981) note that high Machs were never seen as irritating or cold in their experiment. Yet Mach is inversely linked with emotional expressivity or the ability to send emotional displays (as measured by Krug, Smith, & Neal's 1994 Emotional Expressivity Scale) (McHoskey, 1997, cited in McHoskey, Worzel, & Szyarto, 1998, p. 197). Further, Mach is unrelated to the spontaneous affective displays assessed by extraversion ($r = .02$, ns, Riggio & Friedman, 1982), whereas it is slightly positively related to the more measured acting ability implied in "posed sending" skills ($r = .23$, $p < .05$, Riggio & Friedman, 1982).

What the Mach Scales Measure: A Multidimensional Personality Style

The Machiavellian scales used in current research are predominantly the Christie and Geiss (1970) Mach IV (a Likert scale), the Kiddie-Mach, and the Mach V, a forced-choice scale where subjects must choose one item from among three. In the Mach V, of the three options per item, one is the socially desirable response. Of the latter two, although both are equally socially undesirable, only one is indicative of a Machiavellian response. The Mach V has been plagued by reliability problems, however, so many use the Mach IV. It is very difficult to interpret much of the literature uncritically, as many use sample-specific median splits to determine high and low Machs (whereas Christie and Geiss required an absolute cutoff). This means that sometimes the same researcher is using a different criterion for what constitutes a high-Mach person across different samples within the same study.

Machiavellianism is characterized by a set of attitudes toward the interpersonal world, and by a preparedness to use exploitative tactics. This distinction between "tactics" and "views" was made by Christie and Geis (1970) and has

proved robust enough (see Fehr, Samson, & Paulhus, 1992, for a review). Hunter, Gerbing, and Boster's (1982) study produced a four-cluster model: "Tactics" split into Deceit (dishonesty in social relationships) and Flattery (telling people what they want to hear), and "Views" split into Immorality and Cynicism (clusters that correspond closely to Christie and Lehman's [1970] "Distrust in People" and "Affirmative Negativism" factors). Although correlations between the clusters are all positive, other evidence they present (showing the clusters relate differentially to other personality dimensions) suggests we must embrace the finding that Machiavellianism is multidimensional in nature. What this means is that having a Machiavellian style is likely to be not only a matter of degree. Using the total score on a Mach scale may be a rather blunt measure for research aims addressing individual differences among those classed as high Machs. There are subtler profile differences. For instance, some have the views without the tactics, like the cynical but moral student protestors studied by Gold et al. (1976, cited in Martinez, 1989, p. 50). Some Machs may experience anxiety and socialized affects like guilt. Drake (1995) suggested there are high Machs who also score highly on the guilt questionnaire by Moshier (1988). However, Drake used a score of 60 as the cutoff for high Machs, which is extremely low by comparison with other studies. It may be that such Machs who experience anxiety and the socialized affects of guilt and shame are secondary Machs. McHoskey et al. (1998) claimed that current Mach scales confound two styles as distinct as primary and secondary psychopathy, an issue I return to later.

For some purposes, taking seriously the different components of the personality style is preferable to aiming for unidimensionality. Much that is relevant to ToM gets lost in more behaviorally oriented self-report measures such as that of Allsopp, Eysenck, and Eysenck (1991). Mudrack and Mason (1995) noted that while the Christie and Geis and Allsopp et al. measures correlate at .57 ($p < .001$), the Allsopp et al. measure is unrelated to external locus of control, a feature robustly associated with Machiavellianism that we discuss in detail later. Further, Mudrack and Mason noted "Subtlety . . . is largely absent in the Allsopp scale, which seems to capture a more direct and straightforward orientation" (p. 197), which they suggested might be more related to dominance than Machiavellianism. If it is sneaky power that concerns us, then we must wrestle with the more multidimensional scales.

Over and above the views and tactics (assessed by the scales) that make them such smooth operators, Machs have the "cool syndrome" (Christie & Geiss, 1970). This is not directly assessed by the Mach scales, but is invariably associated with Machs' real-world performance. They betray little spontaneous affect, and thus are good deceivers; they respond little to the emotional situation of others, and thus are exceptional at exploitation. As children and as adults, they lack empathy. They do not report being vicariously compassionately aroused by the emotional experience of others. This makes them almost a natural experiment. It is as if they are the experimental group where empathy is excluded

from operation so we can see what difference this lack makes to ToM use. It may seem obvious at a commonsense level that to discern the affective and need states of a person one would use empathy or skill in correctly recognizing the expressive cues of others. Let's see whether the evidence on Machs bears out this assumption.

EMPATHY AND SNEAKY POWER

We know Machs are competent manipulators from an early age. Even before the budding Mach has an articulated worldview, those identified as Machiavellian are willing to use and are adept at using manipulative tactics and give "explanations" to the deceived others that are plausible, if wide of the full truth (Braginsky, 1970; Barnett & Thompson, 1985). They are certainly behaviorally skilled at getting compliance, and it seems they do not suffer from expressive leakage of emotion because others do not detect their deceit. In Braginsky's (1970) experiment, children were required to get a fellow student to eat nine-soaked biscuits, with reward to the manipulator being contingent on the number eaten. It was the young Mach who manipulated successfully and (particularly the young girl Mach) left the experimental situation with the full trust of the manipulated other, and good relations intact (Braginsky, 1970). Braginsky likened the boy Machs to used-car salespeople, who sought one-off success, whereas the young girl Machs rather resembled life-insurance salespeople.

Affective coolness is there by age 10 in the form of an absence of the emotionally based, empathic concern dimension of empathy. Thompson and Barnett (1985) found among fourth and fifth graders that low-empathy children had higher Mach scores. Those who were Machiavellian were high in affective perspective-taking abilities (the cognitive capacity to accurately identify and infer the emotional state of another) and low in empathic concern. These were the children least likely to behave prosocially, in that they were less helpful when another's need was clear than were their peers. Thompson and Barnett (1985) suggested that Machs may have a heightened awareness of the feelings of others, yet be insensitive to the feelings of others. It is as if a Mach knows the words but not the music of emotion (John & Quay, 1962, cited in Saltaris, 2002, p. 736). To be motivated to help another, Thompson and Barnett suggested one needs to be affectively, empathically aroused, and to anticipate the cessation of mutually experienced personal distress. So hot empathy seems to block exploitation and promote helping. Although it may fine-tune our information about the emotions being experienced by another, it seems to diminish the likelihood that we will harm or exploit that other.

The developmental findings that young Machs are low in this vital dimension of hot empathy, "empathic concern," have also been demonstrated in adult Machs. Pellmar (2001) found that high levels of Machiavellianism were

associated with low empathic concern ($\text{path} = -.43, p < .01$) and high levels of Fantasy ($\text{path} = .27, p < .05$). There were no paths from either Personal Distress or Perspective Taking to Machiavellianism. Pellarini used Davis's multidimensional measure of empathy (the IRI) and the Mach IV in a path analysis examining the simultaneous influences of personality and empathy in 64 university students. She noted, "The tendency of Machiavellians to callously engage in interpersonal exploitation is enhanced by their cold, cognitive empathy style, which enables them to imagine another's position (Fantasy), without the buffering warmth of Empathic Concern" (p. 48). Using the same scales, on a student sample of 109, Lauria (2002) found significant negative correlations between Machiavellianism and the following features of empathy: Perspective Taking ($r = -.22, p < .02$), Empathic Concern ($r = -.27, p < .004$), and Fantasy ($r = -.24, p < .01$). She found no correlation between Machiavellianism and Personal Distress ($r = -.06$, ns). The Tactics cluster of Machiavellianism was significantly negatively related to all dimensions of empathy—Perspective Taking ($r = -.25, p < .001$), Empathic Concern ($r = -.38, p < .001$), and Fantasy ($r = -.277, p < .05$)—whereas the Views cluster of Machiavellianism was only significantly negatively related to Empathic Concern ($r = -.20, p < .001$) and to Fantasy ($r = -.25, p < .02$). A lack of both hot and cold empathy is broadly linked with a willingness to use Machiavellian tactics, and with a high endorsement of the Mach worldview.

Machiavellians are famously described as having the "cool syndrome" and one wonders how they could go on to exploit others if they did have any aspect of hot empathy. It is possible, however, that current empathy scales are overly loaded with what for the Mach would feel like socially desirable, morally inflected, touchy-feely nuances that she cannot bring herself to endorse. Twenty-two of the 26 items in the IRI include the word "feel" even though the scale ostensibly measures cold empathy as well as hot. If this bias toward the language of feeling turns Machs off, preventing their endorsement of the items even when they do have the relevant abilities, then the scales will not pick up on some very real skills the Mach has. The scales may fail to tap skills that are relevant to detecting and understanding the feeling and need states of others, independently of experiencing vicariously those same states, or feeling compassionately about the plight of another.

As case study, Machiavellianism seems to suggest that affective processes need not be involved in mapping the affective state of another. In short, Machs' manipulative success suggests it may not be essential to use emotional processes to discern emotional, need-state processes. Thus Machs enable us to explore what is involved in the competent use of theory of mind—namely, what are the component processes involved in discerning the intentional state of another? Being deprived of certain features of empathy may not hinder Machiavellians' mind-reading ability—not if they are skilled readers of subtle cues.

Readers of Subtle Cues: Do Machs Have Skilled Receptive Abilities?

Considering the experimental literature on the receptive abilities of Machs, the short story is . . . they don't seem to have them. A general receptivity to the expressive influence of others was found to discriminate high Machs from low Machs in Madonna, Wesley, and Anderson's (1989) study, but this general receptivity does not seem to extend to accurate recognition of the particular emotion portrayed—quite the reverse. (Blair's work on psychopathy, in this volume, is relevant here, and see also McHoskey et al., 1998.) Simon et al. (1990) found that decoding accuracy and Mach V scores were significantly and negatively linked ($r = -.23, p < .03$); the link seemed to come from the Machiavellian women's relative lack of emotional decoding ability. For Machiavellian individuals, the correlation between decoding accuracy and masculinity was $-.15$ (ns) and for women $-.31$ ($p < .01$). Their study used the Profile of Mood States (POMS) and had Machs decode from still photos in which emotional expression was being shown. They suggested that the decoding task may not have been particularly challenging because the POMS usually requires sound, motion-picture scenarios that are much more complex than the still photographs used in this research. And, may I add, there was nothing to gain by accuracy for the Machs. However, given the finding of differential inaccuracy across genders, Simon et al. suggested the possibility that "women who are capable of effective interpersonal manipulation must actively suppress their sensitivity to and subsequently their detachment from others" (p. 246).

BYPASSING EMPATHY: THE COGNITIVE TRANSFORMATION OF AFFECTIVE STATES

This comment about suppressing sensitivity to others raises the possibility that Machs (or at least some Machs) do have the emotional accompaniments of empathic resonancing to the observed emotional states of others. They may experience them just long enough to get the information relevant to manipulation and then "turn them off" or "block them from awareness" in some way, the better to exploit the other person. The worldview may be responsible for diminishing empathic response.

Hoffman (1978) noted that it is possible to transform empathic distress into some sort of derogatory feeling toward the other, if causal attributions made result in one feeling responsible for the origin or continuation of another's distress, such as when one could have helped but did not. This may suggest that a theory of nasty minds may arise as a result of the mistreatment of others through behavioral exploitation if one attributes agentic responsibility to oneself for the plight of the other. However, far from having dismissive and contemptuous views of the manipulated others, the high-Mach girls in Braginsky's study were

concerned with maintaining good, ongoing relations, which is shown in the strategies they selected: omisive lying, the money-split bribe, and external attribution of power to the experimenter. Further, high-Mach girls increased their liking of the manipulated other more than low-Mach girls, whereas low-Mach boys tended to increase their liking more than high-Mach boys. It doesn't seem a clear case for suggesting that "a person may convince himself that the people to whom he lies are not worth liking" (p. 93). The cynicism about others must be sought elsewhere than mere post hoc justification of manipulative actions. Hunter et al. (1982) would of course suggest that the cynicism predated the behavioral manipulation.

However, Hoffman's point about the transformation of empathy is not really refuted by this evidence because Braginsky's research evidence suggests that the Mach children were not taking responsibility for the manipulation. Braginsky (1970) noted the tendency of the high-Mach children to attribute responsibility externally to the experimenter or to the experimental situation. This may be one early way of dealing with whatever anxiety or discomfort may arise for some from the use of others for one's own aims, or it may simply have been the child's perception of the experimental setup. Certainly, an external locus of control is robustly associated with Machiavellianism in the adult literature.

It Wasn't Me: Managing Affect via an External Attributional Bias Invoking Powerful Others and Chance

One of the hallmarks of Machiavelli's writings is a belief that as humans we are subject to Fortune (La Fortuna . . . a woman). Hannah Pitkin, in her book *Fortune is a Woman*, noted of Machiavelli that he was entirely disenchanted with religion, and believed one's fate to be controlled by the wheel of fortune, "which grimly turns," and by "the fleeting maiden, opportunity." Satisfyingly enough, contemporary research reveals that Christie and Geiss managed to retain the richness of his dark philosophy in their items to the extent that those high in Machiavellianism are very much oriented toward having an external locus of control.

Although an external attributional style is not a psychometric feature of Machiavellianism, it seems to be robustly associated with the personality style. Mudrack (1990) noted that "Machiavellianism does indeed seem associated with an external locus of control" (p. 125). His meta-analysis was based on results of 20 separate studies that investigated Machiavellianism and locus of control (with most researchers using the Mach IV or Mach V scales, and some variant of the Rotter, 1966, Internal-External locus-of-control scale). He noted that all of the studies were from Western European or North American populations, and queried how robust the relationship might be in other cultural contexts. The

Machiavellianism-focus of control correlation was .38 after correcting for both sampling error and attenuation resulting from unreliability. A 93% confidence interval surrounding this estimate was bounded on the upper end by .55 and on the lower end by .22. It is because this interval does not span a zero point that Mudrack suggests Machiavellianism is associated with an external locus of control. "The use of manipulation, deception or ingratiation tactics may thus reflect an attempt on the part of the Machiavellian to assert some influence over a hostile environment that subverts the efficacy of more internally oriented approaches, such as hard work" (p. 126).

In fact, on closer analysis, an external attributional style is linked only to the flattery (tactics) and cynicism (worldview) components of Mach. Let me run through the findings. There are two elements to an external locus of control, believing that outcomes are reliant on chance or on the actions of powerful others. Hunter et al. (1982) noted that although the two components (powerful others and chance) of external control only correlate .72 with each other, they have similar correlations with all other variables, which suggests that they are consequent variables to the same factor, which Hunter et al. named Fatalism. There are clear links between Fatalism and Mach. "External control, in terms of both powerful others and chance is moderately correlated with the Mach IV scale ($r = .45$ and $r = .33$, respectively)" (p. 1301). At the level of correlations, there is a clearly differentiated pattern of relationships among the subcomponents of Mach. The Fatalism variable (powerful others and chance combined) is correlated moderately with the Flattery ($r = .65$) and Cynicism ($r = .72$) components of Machiavellianism, and to a much lesser degree with Deceit (.27) and Immorality (.13), which contribute little. So Fatalism is powerfully linked with the preparedness to use tactics of flattery and the cynical views of others espoused as part of the Mach worldview, and weakly linked to the immorality or preparedness to deceive components of the Mach IV scale. "Those who perceive themselves under the control of powerful others and subjected to the whims of fate perceive others as cynical ($r = .59$ and $r = .64$ respectively) and recommend the use of flattery ($r = .70$ and $r = .41$)" (Hunter et al., 1982, p. 1301).

The Hunter et al. analysis does not rest at the level of demonstrating associations between variables; it does not merely demonstrate correlations. They were able to suggest a pattern or process that relates the variables to each other, and suggested that the development of Cynicism comes before an exploitative, competitive stance. In their path analysis, Hunter et al. (1982) suggested that "those who develop a cynical worldview towards others, especially if they are not religious, tend to adopt a competitive stance towards others. Those who develop a cynical view of others but who reject competition and are religious develop highly dogmatic abstract philosophies of life" (p. 1302).

CYNICALLY MAPPING HUMAN FRAILTY: THE MACH WORLDVIEW

In concert with a cynical, underlying basic distrust of others, attributional bias is linked to a preparedness to use the tactics of flattery. Yet one must know where to aim one's flattery. To manipulate, one needs to know something of the material one is working with, specifically the manipulable features of the other's motivational system. Wrightsman (1991) spoke of the perverse trust of the Machiavellian that we can all be manipulated. The Machiavellian worldview assumes that we are all more or less vulnerable to manipulation. Kligman and Culver (1992) cited an array of features of human's motivational system making them ripe for manipulation: "playing on human weaknesses, exploiting a character flaw, pandering to human frailty" (p. 190). If one were to read many of the items of the Mach scales, the worldview components are a litany of such human tendencies. One does not need to be alive to the moment-to-moment need state of another via mind-reading ability if human weaknesses are prevalent, or can be intensified through the strategic portrayal of the situation and its possible outcomes. Human weakness is more prevalent than we might like to think, with some suggesting it is "a universal tendency to indulge one's lower tastes in defiance of one's governing standards" (Feinberg, 1980, cited in Kligman & Culver, 1992, p. 190). In such a case "the victim acts not against his will, but against his better judgment and his initial disposition." Listing common character flaws leaves us in no doubt that to someone with a willingness to manipulate, there are plenty of openings: "insecurity, gullibility, fear, vanity, curiosity, (morbid) superstitiousness, sentimentality, misplaced anger or wishful thinking" (Kligman & Culver, 1992, pp. 190-191).

Giving Machs the Charismatic Edge: Normatively Held Self-Deceptive False Beliefs

Learning the tacit rules of culture, being able to be discreet, to present ourselves in the best light means that we sometimes are neither accurate nor ruthlessly honest with ourselves about what we are likely to do in competitive, zero-sum situations. Self-presentational concerns, presenting a less than accurate picture of oneself to others, may come to blur with self-deception. It is common to hold more favorable attitudes about our likely actions than our actual behavior warrants. False beliefs about oneself and about one's action propensities are quite widely shared within Western cultures. This discrepancy may become a weakness or foible that leaves us open to manipulation by flattery, and to those who might enable us to enact our baser motives without having to confront the fact that we are doing so (which La Barre, 1980, suggested is one aspect of charisma). That many self-deceive is precisely the point at which the Mach's exploitation of others can begin. To think better of oneself than one

can live up to is a modern operationalization of a character weakness central to those with narcissistic tendencies (Bushman & Baumeister, 1996). It is the root of vanity, conceit, complacency, and insecurity—a stunning list of character weaknesses exploitable by Machs.

It is possible that self-deceptive, flattering beliefs are a chink in the human folk psychological armor and precisely what the Mach does not share. Machs are prepared to be almost psychopathically honest about their capabilities; a striking feature of a Mach's worldview is that her cynical belief that others are untrustworthy does not exclude herself. There is little self-deception at this level. Machiavellianism is robustly negatively correlated with social desirability (Fehr et al., 1992; Ray & Ray, 1982). However, although a Mach is psychopathically honest and clear about what she is prepared to do (see Ray & Ray, 1982, and McHoskey et al., 1998, for a discussion of the overlap between psychopathy and Machiavellianism), from the Mach's point of view, others have cherished, self-serving false beliefs about themselves. The weakness the Mach exploits in those others is that, unlike the Mach, they do not recognize clearly the discrepancy between their avowed beliefs and what they are prepared to do. Thus from the Mach's point of view, others endorse a folk psychological notion that avowed beliefs predict actions—that people are as good as their word. The Mach is more like a social scientist knowing that attitudes and actions are poorly correlated (in the range of .3). The Mach takes a very dark view of the direction of that discrepancy, cynically expecting the worst of others, and getting in first. This basic distrust in people and affirmative negativism is perhaps the earliest hallmark of a Machiavellian worldview (Erik Erikson, 1950, take a bow). This distrust may be inchoate in young Machs, featuring as a behavioral preparedness to manipulate rather than a fully articulated set of beliefs (Sutton & Keogh, 2000). The combination may selectively elicit negative responses from others, operating as a self-fulfilling schema in that the tactics and attitudes used in competitive situations by a Mach may bring out and intensify the worst features of others. Thus, the budding Mach may mature past contingent behavioral manipulation based on a basic distrust to acquire a more fully articulated, jaded view of human nature. Sutton and Keogh (2000) found an increasing lack of faith in others with age, particularly in boys.

The Mach's cynical beliefs about others mark out likely points of weakness at which to aim their tactics. The Machiavellian worldview demarcates human weakness and provides a theory-theory basis for effective manipulation. What is central to manipulation and exploitation is that the manipulator sets up a power imbalance, and does not regard the object of manipulation as an equal negotiating partner. Using persuasion in relation to attitudes, seduction in relation to actions, one can gain seamless obedience or cooperation as one can more deeply discern the needs of others. One can augment those needs and weaknesses by appealing to "a baser nature rather than to a higher morality" (Kligman & Culver, 1992). If there is a continuum from rational persuasion through

manipulation to coercion (Kilgman & Culver, 1992, p. 185), the middle ground is where the Machs are. High scorers on the scale are "cynical, suspicious, motivated primarily by self-interest and expediency and are relatively unconcerned with considerations of interpersonal attachment, ethics and conventional morality" (Mudrack & Mason, 1995).

Manipulation, it seems, requires a detailed and accurate view of aspects of others, yet the Machiavellian worldview is one that many of us would shun as a compelling portrait of humanity. For the Machiavellians, their worldview is a theory of the way humans really operate, as opposed to the ways they believe they operate. For them, it is because the populace lacks insight into its true motives and views, because people don't know themselves but ascribe to a folk psychology laced with false, self-serving beliefs, that is a far more flattering view of themselves than their actual behavior suggests that they can be manipulated. The evidence suggests that faced with a Machiavellian, many can be manipulated, at least on a one-off basis.

The Machiavellian worldview may also be seen as bypassing hot, empathic, moment-to-moment sensitivity to the states of others in order to exercise sneaky power over others. It may also deflect any residual self-sanction like shame and guilt in those who are Mach manipulators. Who could feel shame for exploiting those who prove themselves time and again to be worthy of contempt and disdain? This may come to perpetuate the cool syndrome, the lack of empathy that promotes exploitation, the lack of affect that permits deception.

Can Worldview Modify Online Empathy?

It seems that the fully articulated Machiavellian worldview develops later than earlier Mach propensities, as the findings by Sutton and Keogh (2000) suggest. The worldview or theory of nasty minds may have a dual function within the system of skills and beliefs that make up Machiavellian functioning. It serves to further diminish any residual discomfort felt at exploitative manipulation, and it points out where the weaknesses lie in others, at which to aim tactics of flattery. The worldview hinges on a cynical view of others, felt anxiety or remorse is pointless because, as a Mach, one is merely doing what one believes others would readily do given the chance.

Even non-Mach people can change their level of empathy via following instructions to take a detached view. As Hoffman (1978) noted "If the observer's set is to fragment the victim or make him the object of intellectual scrutiny, this set will put a distance between him and the victim, or at least distract him from the victim's affective state thereby reducing the observer's empathic response" (p. 232). Assessing whether this occurs would require a more experimental paradigm and monitoring of physiological indicators indicative of affective arousal

(see Blair, this volume). Historical accounts of Machiavelli's character are intriguing on the issue of a more cold or cognitive relationship to affective experience. He is reputed to have had "a flair for the dramatic coupled with a wry self-awareness; a temperament that allowed the fullest rein to intellectual enthusiasms, while never fully releasing personal ones" (Hale, 1972, p. 4). Hale (1972) noted that there was some self-conscious inhibitor at work that prevented his feelings from having free and natural play. The tendency toward a more intellectual control of affective display and a more intellectual understanding of others would predispose a person to manipulative success.

Whatever affective impact manipulation does have on Machs' personal experience may be further dealt with by the relativistic morality that is also a feature of the personality style. This relativistic morality endorses the necessity for lying in certain situations, suggesting that "right" behavior does not always lead to good consequences (Leary, Knight, & Barnes, 1986).

Discerning Intentional States or Intensifying and Creating Manipulation?

Given that Machs lack empathy or can bypass it, and lack subtle cue-detection skills regarding the emotional states of others, how do they manage to manipulate? Perhaps they don't need to pick up on the specific state of another. Perhaps the worldview and tactics are a winning combination. The tactics enable a smooth operator to capitalize on existing need states and intensify the common foibles and character weaknesses of the to-be-manipulated other demarcated by the cynical worldview of the Machiavellian. Such tactics may thus promote in the manipulated other actions against his or her initial better judgment (as in the case of seduction) or the adoption of beliefs he or she might initially have rejected or disputed (as in the case of persuasion).

The Mach thus uses tactics to create or intensify the affective/need states of another. The tactics the Mach uses function to restrict the to-be-manipulated other's awareness of vital situational contingencies. Flattery plays on the weaknesses and (even) strengths or virtues of others in manipulating them. For instance, lacking much experience of guilt themselves, Machs nonetheless do not hesitate to use guilt induction as a manipulative strategy (Vangelisti, Daly, & Rudnick, 1991, cited in McHoskey et al., 1998, p. 196). So Machs can create the relevant state they need in the other to be successful manipulators. Their worldview seems to point them in the direction of where weak points might lie. It may be that they use this more "sedimented" awareness of the minds and proclivities of others as a basis for manipulation rather than a moment-to-moment sensitivity to the needs of others.

A DEVELOPMENTAL TRAJECTORY: DOES AFFECTIVE BLUNTING RESULT IN A THEORY OF NASTY MINDS?

Which features of the full Machiavellian mosaic arise first developmentally? Research has shown that while there is an ability to deceive from an early age, and links have been shown between Mach and willingness to engage in and success in behavioral manipulation, the full articulation of the worldview components may arrive much later. Sutton and Keogh (2000) found using the Kiddie-Mach with 9- to 12-year-olds that "lack of faith in human nature was negatively correlated with age, suggesting that children get more cynical as they get older" (p. 143). Sutton and Keogh also suggested that the belief components of Mach clustered more tightly in boys than in girls; "dishonesty and distrust were significantly more positively correlated in boys than girls ($p < .05$) as were both lack of faith in human nature/P[sychoticism] ($p < .01$) and dishonesty/P[schoticism] ($p < .001$)" (p. 145). This confirms sex differences in Mach and its relationship to personality. Sutton and Keogh (2000) noted:

Mealey (1997) points out that males are more susceptible than females to the environmental conditions of their early years, and boys are subsequently more likely than girls to respond to competitive disadvantage by associating with delinquent peers and adopting an anti-social lifestyle. A range of factors such as socioeconomic status, intelligence, physical attractiveness and social skills may lead a competitively disadvantaged boy to "make the best of a bad job by seeking a social environment in which they may be less handicapped or even superior. (Sutton & Keogh, 2000, p. 147)

Dien and Fujisawa (1979) showed that because of the disparate pressures on girls and boys in Japanese culture, girls may learn to espouse a more socially desirable worldview than boys, although nonetheless being predisposed to acquire Mach tactics to fend for themselves. Sneaky power may be more of a requirement for girls in a situation where they have less culturally endorsed access to power. Dien and Fujisawa suggested that there might be a greater belief/behavior divide in girls than in boys. They found suggestive evidence of this in that girls were significantly lower on Mach scores than boys, but cheated the same amount. This chimes with Sutton and Keogh's finding that lack of faith in human nature was correlated with age, especially for boys. Girls may acquire a readiness to use the tactics, but because they retain a less cynical view of others may have a lower score on Machiavellianism.

It seems that the behavioral preparedness to use manipulative tactics is the first feature readily detected developmentally (Sutton & Keogh, 2000), and there seems to be early success in this (Braginsky, 1970), particularly when combined with the cognitive ability of affective perspective taking (Barnett & Thompson, 1985). However, although manipulative behavioral and persuasive tactics may

be the first sign detected, the sheer preparedness to manipulate that characterized the young Mach suggests an underlying distrust or cynicism toward others, and that cynicism should come first is consonant with the statistical path analyses of Hunter et al. (1982). I am suggesting that there are two features here that may be the first features of the nascent Machiavellian and they may or may not be linked. First, there is a basic if inchoate distrust in others early on, and second, a cool syndrome. What contributes to a basic sense of distrust in others may be a less-than-optimal experience of receptivity, matching, and its consequences for self-soothing (Gerrans & McGeer, this volume; Preston & de Waal, in press; Saltaris, 2002). Disruptions in these processes may be an early precursor of the cynicism that Hunter et al. (1982) deemed so central to the development of Machiavellianism.

There is indirect evidence of the cool syndrome being an early feature of Mach. The skill in manipulation shown in the developmental studies attest to a reduced level of emotionality that otherwise may betray the budding Mach in her attempts to manipulate. That there is an early absence of "empathic concern" for others already (Barnett & Thompson, 1985) shows a reduced capacity for the vicarious arousal of affect. Although Braginsky (1970) noted that the successful young girl Machs experienced discomfort, it did not hinder their performance. The cool syndrome may be innate or may arise from early attenuation in affective expressiveness (in the range and intensity of affects expressed), which I call affective blunting. Tomkins (1962) suggested emotional expression is intimately linked with the proprioceptive experiencing of the emotion central to the very formation of an affect. So not expressing emotion may in fact hinder the formation of it. Such affective blunting seems central to the Mach's tactical abilities in deceiving and exploiting. Consider for a moment an undated poem by Niccolò Machiavelli himself:

I hope and hoping feeds my pain
I weep and weeping feeds my failing heart
I laugh but the laughter does not pass within
I burn but the burning leaves no mark outside. (cited in Hale, 1972, p. 9)

Such an affective style would make one a good exploiter and deceiver. If affective responses do not pass within, one is not emotionally concerned. There is no emotional resonancing to events, to the feelings of others . . . this would make one a good exploiter. Not feeling strongly the proprioceptive effects of emotion, one is not hindered in one's willingness to exploit, not revealing or expressing much emotion one is thus a consummate deceiver. It is perhaps the affective coolness that may permit the development of successful tactics, manipulation, and deceit. The worldview that characterizes the personality style may be a later development.

However, what this analysis shows is that even at the level of behavioral

tactics, we are talking sneaky power, implicating abilities relevant to ToM. Machiavellian behavioral tactics are not synonymous with the open use of dominant problem-solving strategies. It is not a straightforward use of power. Deception is a component from the start. Manipulative goals are pursued at the expense of another, without the consent of another right from the start. This means that even at the behavioral level, the skills involved are those relevant to ToM. To advance one's own aims entails persuading or manipulating another into complicity (intentional or otherwise), and this requires some insight into that person's weaknesses, if not an ongoing awareness of the affective state and needs of another, in order to manipulate them.

In teasing apart the component features of Machiavellianism, center stage is the disorder of affective experience, of which empathy is a part. The central feature of the Machiavellian "to conceal artfully and ruthlessly to reveal" (Pitkin, 1984) may arise from an innate or early-acquired diminished emotional expressivity and responsivity—an affective blunting. Research is required as to whether the deficits Machs evidence in relation to empathy generalize to their affective experience in general, or are unique to vicarious affective experience.

Intolerability of Intense Affect

It is possible that there is something intolerable about intense affect for the Machiavellian. It may be difficult to sustain impression management under conditions of intense affective arousal. Machs may deal with it so that it will not be seen by observers to be a sign, an uncontrolled emanation of what matters (as it were). From a Machiavellian point of view, this would be to leave oneself open to having one's needs/desires read and thus ripe for manipulation. Machs never seem to imagine that someone might meet their needs rather than exploit them and this may be a function of the basic distrust or cynicism research suggests underpins their worldview and is linked with their flattering tactics. It is as if they want to have no spontaneous expressive participation in society (because its meaning can't be controlled). Highly willing to use deceit and flattery, their cynical worldview makes them inviolate to the same tactics. In this regard they are like the protagonist in the novel *Perfume* (1987), by Patrick Suskind, who could triumph over others via his preternatural capacity for the detection of smell yet he did not have a signature, personal location on that very sensory dimension.

The affective mutability of the Machiavellian can perhaps only be achieved at low intensities, since high intensity emotion may be less controllable. Recent pilot research by McIlwain and Asciak (2001), content-analyzing interviews of Machiavellians' and Narcissists' experiences of rage, shows that their profile is quite similar on certain dimensions. High narcissists and high Machs were similar in terms of ego threat felt, tendency toward outward aggression, the instantaneity of rage in response to a trigger, and their sense of entitlement. High Machs

reported a higher frequency of aggression toward the trigger of their rage than did high narcissists, and although there was less mention of shame in their accounts than in those of narcissists, it was more than the general population. Machs show higher affective intensity of rage experience than do those high in narcissism. Given the sound findings of narcissists' defensive self-esteem, proneness to ego-threat, and ease of being shamed into rage (Bushman & Baumeister, 1996; Rhodewalt & Morf, 1998; Tangney, Wagner, Fletcher, & Cramkow, 1992; Watson, Hickman & Morris, 1996), this represents a serious chink in the affective armor of the Machiavellian. As yet these are only pilot data based on a community group subsample of 107 people (59 males and 48 females) with a mean age of 30.3. Narcissism was assessed using the Narcissistic Personality Inventory (Raskin & Hall, 1979) and Machiavellianism was assessed using the Mach IV with a relatively low cutoff of 81.

Primary and Secondary Machiavellianism: Does the Developmental Starting Point Differ?

It is not possible to say which feature of the Mach personality style arises first and predisposes the person to develop others. However, because Mach is not a single construct but a cluster of views and tactics that co-occur in some people, a developmental story is required as to when and how these features come to exist together. I map a very tentative picture based on developmental and social literature as to the timing of when particular features might arise, and how one feature might predispose a person to developing others in the Machiavellian cluster.

I emphasize a disorder of affective sensibility (inherited or acquired) and a lack of basic trust in others as initial predispositions. The lack of affective expressivity is likely to make behavioral manipulation contingently successful; the lack of affective resonance to another minimizes the internal sanction of shame, guilt, and anxiety. The legendary coolness in affective style may be innate in some (primary) Machs, acquired in others. There is certainly evidence that taken as a group these largely cool people still experience anxiety (see Fehr et al., 1992), are not ubiquitously manipulative (Barber, 1994), and have narcissistic-like vulnerabilities that mean that of all the strategies they will use, they will not play dumb (Shepperd & Socherman, 1997). The group called high Machs in the literature may shelter a confounded subtype: some who are more like the classic portrait of the secondary psychopath rather than the primary that shows no such tendency toward anxiety and neuroticism. Those who still show anxiety, and discomfort at manipulation, may be differentially more endorsing of an external attributional style to lay the blame elsewhere. This style, where "powerful others" and "chance" are seen as the causal locus of events (Mudrack, 1990), may deflect or cope with any residual felt discomfort at manipulation (Braginsky, 1970). Residual affective experience thus might predispose a person to an external attributional bias.

For others, the affective style may be the result of a temperamental difference that contingently promotes success in behavioral manipulation due to an absence of "give-away" discernable, spontaneous emotional reactions. Those who have no emotional resonancing from the start may be primary Machiavellians (as it were). This distinction between innate or early-acquired affective attenuation may be crucial in discerning a primary/secondary Machiavellianism parallel to that found in recent work on psychopathy (McHoskey et al., 1998). Primary psychopathy is a more dispositional characterization of which emotional detachment is one feature (along with grandiosity, and glibness or superficial charm), whereas secondary psychopathy is seen as similar at a behavioral level but "motivated by different dispositions" (McHoskey et al., 1998), such as neurotic conflict. Imagine there were (primary) Machs born without the more simulation-like empathic resonancing; they would never have had vicariously felt access to the emotional states of others, and they would treat people from the start as "thinking objects" (Graham, 1996, p. 68). They might also lack the discomfort at manipulation found by Braginsky, and the anxiety that research finds to be related to some Machs, and thus not proceed to develop an external attributional bias. Nor might they develop the highly articulated and contemptuous worldview of the adult Mach, and score more highly due to a willingness to use tactics.

Postulating such a subtype raises questions of methodology. Our current methodologies do not enable us to discern whether there is an inherent or acquired disorder of the component abilities and experiences that promote the development of empathy, or whether Machs actually do fleetingly experience vicarious affective arousal, but bypass it in some way. Are vicariously aroused affects fleetingly experienced by Machs, only to be "turned off" in some manner? Cognitively or otherwise? To answer this we need to expand our consideration from self-reported empathy as currently operationalized, to include additional measures that are less focused on feeling terms and without such prosocial overtones. We need to select individuals on a detailed profile basis, checking that they are high (or low) in all of the relevant dimensions of Machiavellianism. We also need to use performance-based measures where there is something at stake for the Machiavellian, for without something that tweaks self-interest, they don't perform and the relevant abilities may not be manifest. Machiavellianism as overall style may subsume real differences in personality profile at the level of the etiology of components, and their organization with other features of the personality style. More detailed research may reveal systematic real-world behavioral and affective differences that are currently confounded.

Given that from the evidence available Machs can manipulate perfectly well without empathy, we need to look more closely at what skills they do have in observing and theorizing about others. We need to explore longitudinally how a theory of nasty minds arises, and whether and how early distrust in others

might predispose a child to behavioral exploitation, external attributional bias, and the exercise of sneaky power. It may be that this is the only form of power available to them due to other aspects of social disadvantage (Mealey, 1995). It may be their preferred form of power, if they manage to get others to do the more hands-on exercise of power for them (see Sutton, this volume) and thus escape further the affective consequences of manipulating others against their interests. Machs as case study reveal how an excessively cognitive use of ToM, split off from tempering affective processes, may predispose a person to atypical development. The Mach style may actively shape the nature of interactions with others and create a subculture of distrust. The Mach may selectively attend to and recall evidence of others as self-serving and two-faced. The Mach's treatment of others in setting up power imbalances and always having an eye for the main chance may selectively elicit reciprocity of distrust and suspicion. In this way the Mach maximizes in others the cynical tendencies he or she ascribes to them.

LIMITS TO EMPATHY

Empathy can only help us feel our way into the intentional life space of relatively similar others. For most of us, that won't give us a strong grasp on the intentionality of the psychopath or the Machiavellian. We need theory to get us there. In trying to understand another person's point of view or experience, we use a more cognitively based understanding where the other is too radically different from us for simulation to give us reliable results. Currie and Sterelny (2000) noted, "our basic grip on the social world depends on our being able to see our fellows as motivated by beliefs and desires we sometimes share and sometimes do not" (p. 145). They perhaps meant this as being able to see people as having beliefs and being motivated by desires in a given moment that we, at that moment, may or may not share. There is another sense of mapping dissimilar others central to the consideration of personality and ToM; that is, being able to map intentional states, common to certain personalities, that we may never share, such as a psychopath's pleasure in harming another for no reason. Thus, where others are radically disanalogous to ourselves, we need a coordinated set of beliefs to understand their perspectives and predict their actions. Many a clinician has dreamed as much. For Machiavellians, lacking perhaps the moment-to-moment sensitivity to the ongoing experience of another, their worldview is central to their mind-reading ability, to their ability to discern the desires and need states of another that their tactics can intensify or mold. What this case study shows is how ToM manifests itself in behavior is influenced by individual differences in the attitudes taken toward others, tactics used to promote self-gain, and by a capacity "not to feel" for others.

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4

Theory of Mind, Machiavellianism, and Social Functioning in Childhood

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An issue of central interest to developmental psychologists has been whether and how children's social understanding is related to their social functioning. That is, how does children's knowledge about self and other as social beings reflect or affect different aspects of their social lives? Do children who have a good understanding of the social world also demonstrate high levels of social functioning, or are social knowledge and social functioning relatively distinct? It makes intuitive sense that children who know more about the social world should be best equipped to function in that world. However, it is also evident that social knowledge and social functioning are both complex constructs (Bosacki & Astington, 1999), and therefore the links between them are likely to be quite intricate.

SOCIAL FUNCTIONING

The quality of children's social functioning is reflected in various aspects of their social lives, including their behavior (e.g., socially skilled/unskilled