

SELF-STRENGTHENING EMPATHY¹

The first edition The Origin of Species is the best version; it lays out Charles Darwin's vision in one grand sweep. Subsequent editions are weighed down with replies, qualifications, footnotes, and other scholarly digressions. Although the two modes of thinking are complementary, the speculative sort is needed to motivate the hard work of corroboration, elaboration, and qualification.

This paper is a piece of speculative Darwinism. It draws an outline of the mind. The hope is that the picture has enough holistic theoretical value to merit its pursuit in detail.

My thesis is that Mother Nature has made your mind isomorphic to mine. Ditto for all healthy human adults. Our psychic kinship is a corollary of a proof that the method of empathy (verstehen) is reliable and valid. Here is a preview of the theoretical consequences of the demonstration. Firstly and most philosophically, our hidden homogeneity answers one part of the other minds question: How do we know the nature of other minds? Cognitive monism also undermines the relativistic conclusions drawn from the study of human beings and reinforces Richard Grandy's principle of

humanity. On the psychological front, proof that we are alike shores up a key assumption of the simulation-theory of how we ascribe propositional attitudes. This theory promises to undermine the debate about folk psychology. Finally, evidence that empathy is a universal and potent mode of understanding rejuvenates the attempt to demarcate the social sciences with an appeal to verstehen.

I. TYPE SOLIPSISM

Stepping into the other guy's shoes works best when you resemble him. After all, the procedure is to use yourself as a model: in goes hypothetical beliefs and desires, out comes hypothetical actions and revised beliefs and desires. If you are structurally analogous to the empathee, then accurate inputs generate accurate outputs -- just as with any other simulation. The greater the isomorphism, the more dependable and precise the results. This sensitivity to degrees of resemblance suggests that the method of empathy works best for average people. The advantage of being a small but representative sample of the population will create a bootstrap effect. For as average people prosper, there will be more average descendants and so the degree of resemblance in subsequent generations will snowball. Each increment in like-mindedness further enhances the reliability and validity of mental simulation. With each circuit along the spiral, there is tighter and

¹Thanks to some of my favorite other minds: Jonathan Adler, John Carroll, Carsten Hansen, Roy Mash,

tighter bunching and hence further empowerment of empathy. The method is self-strengthening and eventually molds a population of hyper-similar individuals.

Why is there any mental diversity at all? If the averaging effect of empathy continued unchecked, type solipsism would be true. The token solipsist says that only he exists; the type solipsist says that only people of his type exist.

Actually, this is an overstatement. Natural selection only ensures that a group of interbreeding empathizers will become homogenous; reproductively isolated groups are likely to ratchet up to different equilibria. Since many astronomers now believe that there are intelligent extra-terrestrials, there may well be minds that are a black mystery to us. So even if inter-planetary messages are sent one day, the radically independent species may not be able to understand each other. The problem of other (non-human) minds would be as intractable as the lonely skeptics have opined.

Indeed, our distant ancestors may have faced the problem of other minds on earth. For some archaeologists assert that human beings were contemporaries of Neanderthals from 90,000 to 35,000 B.C. This extinct species had a bigger brain but feebler communication. Even modern homo sapiens have the enigma of animal minds. We do apply the method of

empathy to pets and pests and prey but on an attenuated scale. The nature of their mental lives leaves plenty of room for doubts -- the kind Thomas Nagel underscored in "What is it like to be a bat?".² We have comparable doubts about humans who appear unable to empathize. The mystery isn't traceable to intelligence differences. Many autistics have average IQs yet we have greater confidence about the mental life of those with Downs Syndrome (who pass perspective shift tests that autistics fail).³

Type solipsism solves the problem of other minds given a restriction to human beings. For if others are duplicates of me, then my mental states are excellent indicators of theirs. In principle, the evidentiary value of a bellwether mind could be as high as telepathy. Lock-step synchronization of consciousness may jeopardize one's sense of whose thoughts are whose -- but let's leave aside issues such as personal identity and collective consciousness. The classic argument from analogy is criticized for relying on a small sample. Would one infer that all of the marbles in an urn are yellow on the basis of inspecting just one marble? No, but one would make the inference if one already had the premise that all of the marbles are like-colored.

²The bat article appears in Nagel's Mortal Questions (New York: Oxford University Press, 1979) 165-180.

³Evidence that autism is an empathy deficit is presented in the final chapter of Paul Harris' Children and Emotion (Oxford: Basil Blackwell, 1989).

If people were identical to me, then the supervenience of the mental on the physical would furnish proof that other minds exist and that their minds are just like mine. However, the thesis of self-strengthening empathy begs the question of whether other minds exist by assuming an initial state consisting of diverse minds. At the close of this paper, I shall outline how self-strengthening empathy could be incorporated into a complete evolutionary solution to the problem of other minds. But for now I'll concentrate on the limited goal of proving that empathic species homogenize.

Population genetics demonstrates that only a slight advantage is needed for a trait to spread, so I need only assume that verstehen helped a little at the early stage. As the winnowing process gained momentum, empathy began to shape an answer to the question of what other minds are like. The answer gets better as minds narrow to the degree needed to support analogical reasoning. So although the 'type' in 'type solipsism' can be defined in different ways, the purpose ensures that the vagueness is benign.

Type solipsism may not be true -- at least not yet. Perhaps we still need to wait for natural selection to resolve the problem of other minds. The situation may be analogous to that of the first explorers trying to reach the South Pole. After much hardship, they calculated that if they remained in their outermost camp, the shifting South Pole would come to them.

(Unfortunately, they also calculated they would run out of food.) Maybe only our distant descendants will converge sufficiently to make other minds unproblematic. Impatient philosophers of mind might take this as fresh backing for eugenics!

However, the mind merge has probably been progressing long enough to approximate the solution offered by type solipsism. After all, 99% of human history has been spent as hunter-gatherers. This life-style favors those who can nimbly predict and understand behavior, hence the averaging tendency of verstehen has been long operative. Granted, the various races have been separated long enough to give rise to mild variations such as skin color. But these variations stem from a period of separation that is brief in comparison to our common lineage. And even these racial differences are being bred away by new mobility.

Multi-culturalists view diversity as enlightening and stable. But the melting pot is just bubbling more vigorously. Promoters of diversity may view the prospect of increasing homogenization as a kind of inbred heat death. But the lovers of unity will welcome the heightened psychic kinship. Consciousness is the master moral property. Therefore, the revelation that we are even more mentally than physically alike shortens the step from self-respect to other-respect. Our common humanity becomes morally relevant, not just self-congratulatory speciesism. The political consequences of self-strengthening empathy are as welcome as the moral ones.

At a generic level, this approximation of type solipsism provides a ready explanation of some mysterious human synchronicities such as the prevalence of multiple discovery. The coincidences and parallels that inspire appeals to zeitgists, collective consciousness, and telepathy might also be accountable in terms of extreme human uniformity. Similarly, the null hypothesis gains new support in psychology and the fields drawing on psychology.

The personal impression that acquaintances are very different is readily explained by the principle that differences carry more information than similarities and hence are more salient, memorable, and noteworthy. A father is impressed by the differences between his children even though he realizes that they are apt to be much more similar to each other than a random pair of children. A foreigner amongst an unfamiliar race initially complains that they all look alike but eventually can discriminate between them like a native. Even identical twins come to seem less and less identical.

II. VERSTEHEN USES SYMPATHY TO FURTHER BOOST SIMILARITY

"The method of empathy" is a misleading phrase because 'empathy' suggests sympathy with the empathee. Compassion is frequently absent. Sadists use the method to inflict greater pain on their empathee. Sociopaths go off-line and simulate adherence to values that they fail to internalize. Admirals and athletes use the method to vanquish adversaries.

Admittedly, empathy tends to precipitate emotional entanglement. The detective who inspired Silence of the Lambs claimed that the strain of simulating the thought processes of serial killers led him into several nervous breakdowns. One can readily see why the method tends to have the effect of decreasing hostility ("To understand is to excuse") and increasing sympathy for the empathee. Dwelling on how things look from another's perspective corrects mis-perceptions of motivations and increases awareness of goals. General well-wishing is then applied to the case at hand, and so there is some tendency to wish the empathee success. The causal lead of empathy accounts for some of the capriciousness of sympathy. If I happen to identify with one character in a conflict, then I will begin to root for him. If I happen to follow events from the perspective of his rival, then the opposition wins my sympathy. Intensive empathy can lead to fanatical over-sympathy. Sufferers of the Stockholm syndrome ally with their kidnappers. Yet, however powerful, sympathy with the empathee is not the means by which empathy predicts.

Although sympathy does not play a constitutive role in individual simulations, sympathy does amplify the general reliability and validity of simulation. Enculturation accentuates cognitive similarities. An individual's genes dispose him to take advantage of this extra boost, first as a child seeking synchronization with peers and then as a parent rearing offspring that will fit in. Sympathy builds on our similarities by motivating further

congruence. As David Hume observes, and as is richly and somewhat embarrassingly corroborated by classic social psychology experiments, we adopt the mood and ways of our company. Identification, motor mimicry, vicarious feelings, and emotional contagion sweep us into solidarity, making "the mind of men mirrors to one another".⁴ Sympathy rather than likeness of the soil and climate explain the remarkable uniformity of compatriots.

So close and intimate is the correspondence of human souls, that no sooner any person approaches me, than he diffuses on me all his opinions, and draws along my judgments in a greater or lesser degree. And tho', on many occasions, my sympathy with him goes not so far as entirely to change my sentiments, and way of thinking; yet it seldom is so weak as not to disturb the easy course of my thought, and give an authority to that opinion, which is recommended to me by his assent and approbation.⁵

Verstehen indirectly sets the stage for its own success by favoring forces that make us isomorphic. Whereas empathy exploits pre-existing similarities, sympathy forges new similarities. Fellow feeling motivates further alignment and fine tunes resemblances. Nature co-opts nurture.

⁴David Hume A Treatise of Human Nature ed. L. A. Selby-Bigge (Oxford: Clarendon Press, 1888) 365.

⁵Treatise 592.

III. LIMITS TO HOMOGENEITY?

There may be natural limits to how similar empathy can make us. For example, the failure of breeders to budge the sex ratio of cattle from 1:1 is evidence that the cows cannot produce uniformly female offspring. However, being cognitively average is not a trait controlled by a small number of genes. It is the central tendency of many traits controlled by many genes. Since human beings are pliable enough to cluster into races of similar physiognomies, their genes should let them cluster into groups with similar behaviors and mental patterns. And indeed, behavior is now a standard subject for population geneticists.

Being average is a trait of traits. The consequent involvement of many genes will swamp sources of diversity that are controlled by a small number of genes. For example, heterozygote superiority occurs when a mixture of a dominant and a recessive gene is the optimal combination. Having one recessive gene for sickle cell trait makes a child resistant to malaria. Having two recessive genes blights the child with sickle cell anemia. However, in malaria infested areas, the recessive gene is sustained by the net reproductive advantage of having half of one's offspring resistant. Could heterozygote superiority undermine cognitive monism? Suppose the dominant gene makes you average and the recessive makes you different, but the combination is best because it confers an advantage like resistance to emotional contagion. Then $3/4$ of the zygotes will be average and $1/4$ will

be different. However, the population is still stable because the advantage of having a high proportion of contagion resistant offspring offsets the disadvantage of having a low portion with weak empathy. One can also imagine a pleiotropic scenario in which a single gene was associated with both phenotypic effects or ones in which genetic drift eliminated the gene for being average. However, these diversity scenarios are implausible because they assume that a small number of genes make a human being cognitively average. Genetic diseases show that a single gene can make an otherwise average person disastrously atypical. But these spoilers don't alter the population's drive toward homogeneity.

A successful counterexample to the homogenizing theme must be a stable diversifier. A new advantageous trait, say the ability to add, tends to spread through the population and become average. Today's superlative is tomorrow's norm. So when is diversity qua diversity advantageous? Sexual selection offers answers. Peacocks put a premium on being distinctive. Females are more apt to choose a stand-out than a ho-hum male who blends in with the crowd. There is a risk that the deviation will only make the male look silly but it may be better to take the risk of clear rejection than accept the certainty of indifferent non-acceptance. If sexual selection does have the effect of diversifying male mental structure (not just looks or mental content), then the prediction would be that the method of empathy would work best between members of the same gender. And that females would

be better empathizers than males. Carol Gilligan's In a Different Voice (and her Victorian predecessors) would then have unanticipated biopsychological backing. Gender differences in empathy might also arise from role differentiation. Perhaps roles are played best by those who have mental structures dedicated to those roles.

The large body of research on gender and empathy has failed to substantiate any differences in empathic abilities.⁶ Perhaps the absence of results is due to methodological complexities. However, the evolutionary model suggests that the null hypothesis might be true because of the size of the advantage conferred by empathy. Empathy is a general and potent asset, a natural for the supreme generalist, homo sapiens. This versatility becomes evident when we detail the diversifier's own cases, exotic traits that seem worth a small sacrifice in empathic ability.

Go ahead, take sexual selection. On closer examination, we find that empathy provides leverage in competition for mates. Empathic men better calculate what women and their allies want. They change themselves and their circumstances to suit those desires. A socially astute man can more reliably appraise (and raise) the probability of his paternity and so can more efficiently dispense paternal support. Empathic men make better fathers, hence the reproductive advantage of sensitivity continues beyond mating.

⁶For an overview, see Empathy and Its Development (ed.) N.Eisenberg and J. Strayer (Cambridge: Cambridge University Press, 1987). Uniformity of ability is compatibility with variation in whether and how those abilities are exercised.

In addition to these advantages in sexual competition, add the advantages that accrue indirectly (coalition formation, conflict resolution, precise aid, pinpoint aggression). Empathy has the further advantage of being more distinctive than its novel mental competitor. Distinctiveness is important because of meta-level sexual attractiveness. In addition to the traits that we find directly attractive, there are those that are attractive because others find them attractive. A woman who is not intrinsically attracted to tallness might nevertheless prefer tall men because most women prefer tall men. Ditto for sexual aversion. This needn't be vanity. A mother has an interest in bearing handsome sons because sexually attractive progeny sire more grandchildren.

Go ahead, take role differentiation. The advantages of hard-wiring are sufficient to specialize termites into castes of workers and soldiers. However, an organism that can play roles and engage in role reversal wins little by emulating dedicated computers. A fluent empathizer can already figure out what is expected and predict what behavior will satisfy group-mates. Women prosper by pleasing men just as men prosper by pleasing women. A woman who cannot understand men is unlikely to be a good mother. At the very least, she will be unable to form a strong bond with the father of her children and will be alienated from her sons.

The psychological complexity of romance can be explained as a progressively onerous test of mate suitability. A woman who is aroused by a man's arousal displays empathic sophistication. She can think like a man.

A more impressive feat of role reversal is the woman who is aroused by the fact that her lover is aroused by her arousal. Of course, this presupposes that the man can keep up with woman's level of iteration, that he can think like a woman. If women were better empathizers than men, then men would not be able to embed the female perspective. But since women also find empathy attractive, males must have competed for higher and higher levels of sexual role reversal. Sexual competition has thus generated the type of Gricean iteration of attitudes that Thomas Nagel has used to demarcate natural sex from perversion.⁷ The reproductive supremacy of Nagelian sex makes it sexually attractive at the meta-level. An aversion to un-Nagelian sex discourages practices and alliances with poor procreative prospects. This lets Mother Nature take a carrot and stick approach to guiding human beings into the intercourse most conducive to commitment and effective child-rearing. Since hunter gatherer groups tend to have common genetic interests, these positive and negative sentiments about sex will tend to be generalized and culturally reinforced. Nagelian sex will seem natural, deviations will seem ugly, incomplete and misdirected. And indeed, the requirement of iterated arousal classifies as perverted solitary sexual practices (voyeurism), object oriented sex (fetishism), sex with unresponsive partners (bestiality), and unconsensual sex (exhibitionism).

⁷"Sexual Perversion" Mortal Questions 39-52. Nagel expresses a debt to Jean Paul Sartre's pessimism about love. H. P. Grice's analysis was presented in "Meaning" Philosophical Review 66/3 (July 1957) 377-88.

Interestingly, even these coarser forms of sex use pretended iteration as an erotic adjuvant. Peeping Toms often fantasize that the woman realizes she is being viewed.

My theory of how empathy sophisticates sex explains the successes of Nagel's surprisingly cerebral analysis. For the naturalized account shows how sexual selection would make iterated arousal germane to perversion judgments. At the same time, my thesis that iteration is only a mutual courtship display (like the parallel "sailing" of whitefish, the mutual preening of herons, and the display copying of gulls) predicts the failures of Nagel's analysis as a criterion of perversion. Sexual displays advertize our virtues by peak performances just as vacuum cleaner demonstrations show off the instrument's virtues by extraordinary feats of suction. This exhibition of maximal capacity need not be a representative sample of performance. The pre-copulatory displays of many birds are sporadic. They are most vigorous when mating is a challenge and tend to degrade with growing familiarity and waning ardor. Good sex between a human couple may involve subtle psychological toing and froing but not all of their sex will be marked by this psychological intensity. Lovers may drift into fantasies about other people without thereby becoming perverted. In addition to exaggerating flawed sex into perverted sex, Nagel's demarcation understates the relevance of other factors. Humans have other courtship displays such as mutual staring and synchronous breathing. More importantly, our sense

of perversion is responsive to sex's complex teleology. For example, courtship displays can be misdirected so it is hasty to infer that iterating homosexuals are not perverted.

Despite these qualifications, I am committed to the thesis that the Nagelian iteration of arousal is a human universal. All healthy human beings can engage in iterated arousal just as all healthy great crested grebes can rise up breast to breast and sway together in the "penguin dance". Nagel's iteration has been criticized for leading to an unrealistic infinite nesting of propositional attitudes. However, this is just an instance of the general problem of common knowledge. I think this problem can be solved by characterizing the structure as one in which the beliefs finitely but indefinitely iterate with no party clearly topping the other.⁸ In any case, the temporal primacy of sex suggests that the above scenario is the origin of the general ability to iterate propositional attitudes. This iteration is needed for common knowledge which is needed for convention. Convention is in turn needed for meaning. Meaning is constitutive of language. Ergo, language springs from sexual competition amongst empathizers.

The connection between empathy and language can be made less controversially. Just note that the widely respected Gricean analysis of meaning implies that all speakers are empathizers but not vice, versa. The corollary, that all language communities homogenize, is helpful to theorists

who need to show that the internal languages of individuals converge to a public language.⁹

Most biologists try to explain the evolution of sex by appealing to the value of diversity. According to the "red queen theory", organisms must keep changing just to keep up with the changes of their competitive world. A parent that diversifies its portfolio of progeny might gain genetic representation in a new niche while reducing the risk of a catastrophic loss. Diversity is a hedge against poisoning, famine, parasites, disease, the innovations of predators and prey, plus changes in habitat. Perhaps mental diversity would open the possibility of creative advances while guarding against the loss of all offspring from a lethal fallacy.

There are also scenarios in which diversity increases between groups while decreasing within groups. For example, Thomas Schelling has demonstrated that strong patterns of residential segregation can arise from weak racial preferences.¹⁰ If members of a race prefer to dwell in a neighborhood composed of at least 55% of their own race, then migration will yield large single race neighborhoods. If we now suppose the

⁸"The Vagueness of Knowledge" Canadian Journal of Philosophy 17/4 (December 1987) 767-804.

⁹Noam Chomsky discusses the internal/external distinction in the third chapter of Knowledge of Language (New York: Praeger, 1986). The power of Wittgenstein's private language argument is partly due to the commitment of mentalists to the primacy of an internal language.

¹⁰"Models of Segregation" American Economic Review 54 (May 1969): 488-93.

preference is for 55% like-minded people, then self-selection could Balkanize verstehen.

The homogeneity of the current population provides welcome a posteriori assurance against this lumpy sort of polymorphism. Empathy works between any two healthy human adults. Variation in its degree of success depends much more on cultural similarity than genetic similarity. Hence, Schelling's scenario gives little support to insular theses such as "Only blacks understand blacks" and "Only women understand women".

What about diversity over time? If people metamorphosized into different ways of thinking at different stages of their lives, they could form age ghettos. Although people tend to socialize with their cohorts, the differences are mild and age preferences are muted by kinship and social ties. The evolutionary model predicts that the pressure for homogeneity should persist as long as one's activities are reproductively relevant. For humans, this relevant portion continues well beyond one's child bearing years. Indeed, one explanation of menopause is that devoting oneself to rearing existing children is a better bet than producing more children at a lower standard of child care. Finally, the elders in a hunter-gatherer society are valued as repositories of wisdom. A cognitively estranged elder could not perform this service for younger kin.

Counter-forces and checks are the rule in population genetics. With an increase in the number of offspring comes a decrease in their viability. As

the size of the baby's brain increase, so does the chance of complications during labor. The mental uniformitarian should accept the inevitability of counterforces and use them to contour the overall trend towards homogeneity. The general expectation would be that homogeneity reigns except where the return on empathy is low enough to be topped by the diversifying alternative. Locating these crossover points would require considerable biological and psychological expertise, so a philosopher must resign himself to generalities. Nevertheless, I can diplomatically note that the model of self-strengthening empathy accommodates certain kinds of diversity. The broadest area for divergence between structurally similar people is variation in belief and desire. After all, the whole point of verstehen is to understand those who have disparate perspectives. Many apparent divergences in inference patterns can be explained in terms of hidden disagreements and unshared goals.

Latitude in content accommodates deception and privacy. People conceal their mental states by feigning different beliefs and desires. The effective liar uses verstehen to forecast the impact of alternative ruses. Structural eccentrics are weak deceivers. My two year old niece attempts to hide by covering her own eyes. She cannot yet reverse perspectives with the seeker and so attempts deception by constraining her own information. Prison populations are disproportionately represented by self-centered criminals who lapse into kindred immaturities. Empathic criminals, on the

other hand, are adroit calculators of appearances and so are less apt to be detected. Mental privacy is a mixed blessing. If you dwelt amongst Martians, then your cognitive dissimilarity would prevent them from penetrating your thoughts. But you would also be unable to penetrate theirs. You'd be mentally marooned. Could you become a one-way mirror by switching back and forth between two mental structures? No. Logical schizophrenia would only replicate the communication gap at the level of homunculi.

Pessimists about the power of human imagination will note that verstehen works better when the empathizer is also similar in his beliefs and desires, not just his belief-forming mechanisms. As actors say, the "stretch" to a character with alien convictions and goals is more formidable than playing the role of a chap with conventional opinions and aspirations. It is certainly common for the verstehen to fail because the empathizer has overlooked a key background belief or desire. There may have been evolutionary pressure for agreement where imagination is weak (and where the deficit was not more easily remedied by strengthening imagination). Happily, these extra patches of homogeneity would be compatible with striking areas of content-based eccentricity.

IV. THE INTERPLAY BETWEEN EMPATHY AND THEORY

The method of empathy is just a uniquely handy simulation technique. You always carry your mind with you, hence it is always available for hypothetical inputs. There is nothing special about the mental aspect. We also carry our bodies with us and so our bodies are also commonly used as simulators. If unsure whether a suit will fit a like-built friend, I try it on myself.

Nor is there anything special about the method applying to others. I re-enact my most recent exit to discover where I mislaid my sunglasses. Nor is there anything special about the method being deployed by an individual. Disaster planners simulate earthquake teamwork as a collective. Groupthink is best simulated by a group.

Knowledge of how one differs from the empathee is helpful in adjusting the simulation. In "The Adventure of the Musgrave Ritual", Sherlock Holmes locates a missing butler, Brunton, by reconstructing the clever bounder's crime:

You know my methods in such cases, Watson: I put myself in the man's place, and having first gauged his intelligence, I try to imagine how I should myself have proceeded under the same circumstances. In this case the matter was simplified by Brunton's intelligence being quite first rate, so that

it was unnecessary to make any allowance for the personal equation, as the astronomers have dubbed it.¹¹

Using information available to the butler, Holmes was able to discover a vertical vault that used to contain an old, mysterious family treasure.

However, the recently re-sealed hiding place now contained only the corpse of Brunton. Realizing that Brunton would have needed inside help to lift the heavy lid, Holmes supplemented his simulation with an earlier tip that Brunton was a lady's man (which Holmes was decidedly not). In particular, Holmes appeals to the principle that "a man always finds it hard to realize that he may have finally lost a woman's love, however badly he may have treated her". Holmes combined this principle with the fact that the butler's absence was first reported by a distraught maid who later vanished. Thus Holmes deduced that Brunton made the fatal error of relying on a jilted lover as an accomplice.

Simulation works best in conjunction with other forms of evidence. Hence, we should expect the empathizer to supplement his simulations with psychological generalizations (some from past simulations, some from observation, some from theory, some innate), actuarial data, information about physical constraints, and social principles. Since people vary in how well they exploit different kinds of data, there are differences in how well

¹¹From Conan Doyle's The Complete Sherlock Holmes Treasury (New York: Bramhall House)

and how often the method of empathy is employed. Some admirers of Rembrandt's painting have declared him an empathic genius. This is compatible with the corollary that Rembrandt was "average" in the sense of being representative of the population. Ancillary skills, background information, and shifting motivation may also allow employment of empathic skills to vary over a lifetime. Biologists speculate that hormonal changes may lead new parents to become more socially sensitive.¹² Clinical psychologists heighten empathy through sensitivity training. Followers of Martin Buber seek more I-Thou, less I-It.

V. THE NON-COGNITIVE CHARACTER OF EMPATHY

Could the predictive success of empathy be more simply explained by the natural selection of hypotheses? How is my evolutionary model different from the standard brands of Darwinian philosophy? Classic evolutionary epistemology states that our knowledge of our surroundings proceeds by the generation and elimination of ideas. Since people are part of the external world, psychological wisdom should also grow by trial and error.

Some psychology may accumulate in this Popperian fashion. However, self-strengthening empathy uses the person as the unit of selection, not hypotheses. An inappropriate unit of selection can render a

235-57; 244.

¹²Natalie Angier "What makes a parent put up with it all?" New York Times November 2, 1993; C1 and C14.

model biologically implausible. Consider Nicholas Rescher's argument for homogenous intelligence.¹³ If you realize that you are smarter, you are tempted to outwit others rather than cooperate. Both successful and foiled attempts to outsmart others foment resentment. Hence high variance in intelligence is socially disruptive. But, and here is the key objection to Rescher, the stabilizing advantage of equal intelligence does not explain why individuals will wind up having equal intelligence. It would be to the advantage of fish to form less compact schools; fewer would be taken by predators. However, those at the center of the school are less likely to be attacked, so each fish has inherited a disposition to gravitate to the center. Groups are not the relevant units of selection. The level of selection can only be as high as the individual because the fitness of genes is tested by the reproductive success of individuals.

This lesson undercuts attempts to refute cognitive monism by appeals to the group benefits of pluralism. For even if structural diversity is useful to the group, it will not follow that there is selective pressure in favor of diversity. My impression is that cognitive homogeneity, on average, helps groups. Innate, nearly conventionalized like-mindedness solves coordination problems, promotes sympathy, facilitates enculturation, and makes transactions simple, predictable, and profitable. However, the social

¹³A Useful Inheritance (Savage, MD: Rowman & Littlefield, 1990) 112-117.

advantages of proto-conventionality are as irrelevant as the social boons that are alleged to accrue from diversity.

The evolutionary epistemologist might re-cast his point more conservatively. He could say that instead of working on hypotheses directly, natural selection works on individuals who vary in their proclivities to adopt those hypotheses. This modification takes a pessimistic view of human pliability. But let's suppose that kinds of human beings correlate with kinds of hypotheses, so that erroneous psychology erodes, funeral by funeral. Surviving humans will then be innately disposed to folk psychology. In particular, the surviving human beings sense that they are very similar to each other and will apply this insight to apply the method of empathy.

Self-strengthening empathy is less cognitive than this. It is not a selection for an absolute trait, truth. The kind of explanation I offered for empathy is selection for a relational trait, average mentality, which is only indirectly associated with truth. It is like selection for synchronous breeding. A fertile species that bears its young simultaneously overwhelms the consumption capacity of predators. Offspring that arrive a few days off schedule are differentially eliminated by the unsatiated. Predatorial discipline leads to nearly supernatural punctuality. For example, millions of cicadas emerge from eggs every seventeen years. Sex also creates time pressure; a late breeding grunion does not breed. Competition enforces compatibility. A male who can fertilize only a few kinds of females will be

out-reproduced by a male who can breed with a wide variety. Likewise, an empathizer who can only get a feel for a few people will be out-reproduced by one who communes widely.

Human beings don't learn that they are cognitively akin. It is also overly intellectual to say that they have innate knowledge of the similarity. Rather, we are just disposed to make inferences that only work in a domain of hyper-similarity. When trying to anticipate a person, we automatically look for what he looking at and listen for what he hears. We emulate the posture, facial expressions, and gestures of fellow conversationalists. If we still fail to resonate, we repeat puzzling remarks and re-enact puzzling actions.

We know other people's states of mind because we are in an environment favorable to analogical reasoning. If we were in a psychologically diverse population, our penchant for single-case inference from our own case would be as fallacious as statisticians stereotype. But it is no coincidence that our reasoning patterns fit this world just as it is no accident that an automated teller works well in its limited domain. Mother Nature keeps us posted on a need to know basis. Instead of burdening us with all the premises needed for a classical syllogism, Mother Nature endows us with task-specific "quick and dirty" inference patterns. We default reasoners jump to conclusions because of time pressure. The inferences can only be metaphorically described as enthymemes because it is

pedantic to say that we know the missing premises. The knowledge is not implicit in us. Better to say that the knowledge of similarity is implicit in the whole system of cognizers and environment. Better still, abjure the artificiality and side with an aggressively externalist epistemology.

The epistemological importance of the environment has been established by reliabilists such as Alvin Goldman. Recall his scenario in which a father points out barns to his son as he is driving along the road. The father knows that the objects are barns even though he cannot differentiate them from clever imitations. If he were in the vicinity of some fakes, then the father would not know. Similarly, inferences about other minds have a high hit rate even though the knower would be unable to tell the difference between a real person having a toothache and a fancy robot imitating one.

The selection process behind the convergence of human minds differs from the convergence of human minds on a proposition. The failure to converge on the same hypotheses is a sufficient condition for omissive or commissive error. Mere diversity of minds does not entail error. Structurally diverse minds can agree on the same propositions and structural affinity is compatible with permanent disagreement.¹⁴ Hence, evolutionary processes that select for mental uniformity need not select the same hypotheses or give rise to science.

¹⁴I give an account of how in the third chapter of Blindspots (Oxford: Clarendon Press, 1988).

But let's not be overly concessive to the appearance of disagreement. Structural similarity does tend to foster similarity of content given similar surroundings. Differences in beliefs will need to be explained principally in terms of overlooked variation in data and interests. Just as our bias in favor of differences leads us overestimate variation in people, it will lead us to overestimate the ratio of disagreement to consensus.

Since knowledge delivers premises for further knowledge, the natural selection of hypotheses can set up a bootstrapping process. However, self-strengthening empathy exemplifies a different kind of bootstrapping process. Self-strengthening empathy does not build on information. It is not a matter of achieving a progressively more accurate match between representations and world. Empathy ascends by causing a closer and closer match between cognizers themselves, not just their opinions. Empathizers and empathees are the objects of similarity, not representations and facts. Since empathy strengthens without an accumulation of information, verstehen does not rely on memory, record-keeping, critical discussion and the other accoutrements of knowledge building. The process that makes us structurally similar is not a selection for true beliefs; it is a selection for standardization. Having a similar mind is like adherence to an industry-wide unit. Measurement systems are neither true nor false even though they differ in how easily they serve the task of getting truth and avoiding error.

When a feature is favored, there will be more things with that trait. Hence, any selection for a trait is trivially a selection of homogeneity. However, selection of a trait is only sometimes a selection for the trait of homogeneity.¹⁵ Selection for homogeneity is more powerful because the feedback mechanisms aim at the homogenous state. A boy who prefers blue marbles only gets uniformity as a side-effect. He will add a gift bag of mixed marbles to his collection without fear spoiling the uniformity. A boy who sets out to collect like-colored marbles begins with more options (all-red, all-blue, etc.) but must then be pickier about new additions. He aims at uniformity per se and so is more likely to get it.

VI. THE INTROSPECTIVE LINK

The classic conundrum of other minds proceeds with a contrast between the ease with which we know our own mental states and the difficulty of knowing others. However, recent psychology shows that this presentation of the problem is too generous to introspection. Although people do have greater access to many of their own mental states, introspection has proven unnervingly fallible and provocatively interpretive. As behaviorists foresaw, much self-assessment is just a special case of the reasoning the introspector applies to others. Experimenters exposed a kind of reverse empathy by administering epinephrine to subjects who were unfamiliar with

¹⁵For a lucid discussion of the distinction, see Elliott Sober's The Nature of Selection (Cambridge,

the resulting proprioceptive sensations.¹⁶ The naive subject would feel happy or sad depending on whether they perceived others (who ostensibly had also received epinephrine) as happy or sad. People use the emotional reactions of others to interpret their own sensations.

Introspection is theory-laden, hence we should expect the method of empathy to inherit this commitment to perceived science and common sense. Any simulation involves a description and interpretation of the process's results (as well as the input values). Hence, the inconspicuous theory-ladenness of introspection merely increases the degree of theory. It does not reduce simulation to theory.

Indeed, the method of empathy is importantly atheoretical in one respect. A simulation is a demonstration composed of an analogy and an indirect experiment.¹⁷ Instead of experimenting directly on the relationship between Fs and Gs, one experiments on the analogous relationship between Hs and Js. Experiments are cognitively impenetrable in the sense that they can give results independent of theory, and indeed, are valued for their ability to overturn theory. Happily, verstehen does generate surprises. Game theoretic reasoning predicts that participants in a prisoner's dilemma would never cooperate. But most people feel that they would cooperate and

Mass.: MIT Press, 1984) 97-102.

¹⁶S. Schachter and J. E. Singer "Cognitive, social and physiological determinates of emotional state" Psychological Review 69, 1962: 379-399.

an anomalously high level of cooperation has been subsequently documented in direct experiments. Many of the anomalies of decision theory (the iterated prisoner's dilemma, Ellsberg's paradox, Newcomb's problem) illustrate how simulation can be in robust, salient conflict with the empathizer's own theoretical expectations. This surprise value is similar to that of thought experiments. Thought experiments are experiments that are intended to answer or raise a question just by reflection on their design. Hence, thought experiments are normally unexecuted. An empathic simulation is normally composed of an executed mental experiment that is intended to answer or raise a question by analogy.

As with familiar experiments, simulation sometimes corrects theory and theory sometimes corrects simulation. Simulation has the same relationship with direct experiments. Many illustrations of the fallibility of verstehen can be drawn from experimental psychology. Stanley Milgram asked colleagues to predict the results of his obedience experiments and received answers, many based on empathy, that minimized the percentage of people willing to administer severe shocks. Thus verstehen did not anticipate the dramatically high rate of compliance. Stephen Stich and Shaun Nichols take this as evidence that the empathizers were really relying

¹⁷I define 'simulation' and contrast it with experiments and thought experiments in Thought Experiments (New York: Oxford University Press, 1992) 225-228.

on theory, not an off-line simulation.¹⁸ They have the same explanation of other dramatic mis-predictions by empathy. Stich and Nichols appeal to the cognitive penetrability of empathic simulation to support the theory theory which says that people attribute beliefs by making inferences from a body of common sense generalizations much as a physicist makes deductions from classical mechanics. Hence, theory theorists think that the method of empathy is just an application of heterogeneous elements of this folk psychology. In contrast, the simulation theorists say that verstehen sits on its own bottom. It is a modeling technique that allows us to bypass theory. Indeed, the method of empathy is the fundamental source of our belief attributions. Thus, the simulation theory has been presented as a dissolution of the debate over whether our ordinary concept of belief should be abandoned in favor of a neuropsychological vocabulary.¹⁹ For if ordinary people really rely on atheoretic empathy, then there is no folk psychology for the eliminativists to eliminate or for realists to vindicate.

The theory of self-strengthening empathy supports the simulation theory by shoring up the assumption that human beings are similar enough to make verstehen reliable and valid. I think the attempt to reduce all empathy to theory is a symptom of how wildly 'theory' has been over-

¹⁸Stephen Stich and Shaun Nichols "Folk Psychology: Simulation or Tacit Theory" Mind and Language vol. 7, nos. 1 and 2 (Spring/Summer 1992) 35-71; 66-69.

extended in contemporary philosophy. This quasi-metaphorical expansion is comparable to the nineteenth century bloating of 'organism' and 'dialectic'. Nevertheless, the theory theory illuminates some surprising connections between verstehen and theory. We should expect cognitive penetrability to come in degrees. As documented in the recent literature on experiment and as pre-saged by Duhem's thesis, experiment is frequently framed by theory. Expectations about the experiment affect the conduct and interpretation of the results. Thus inconclusive or even disconfirming experiments have been touted as corroborating. Complexities of formal, public experiments are aggravated by the privacy of casual mental experiments. Recent skepticism about the reliability of introspection can feed the doubt about whether one is really doing a simulation as opposed to an application of theory. I think we should also be wary of the apparent unity of empathy. Instead of putting our whole self into one full simulation, we may alternately put different mechanisms off-line and then aggregate the result or only pay attention to the one with strongest effect.

VII. EMPATHY AND SOCIAL SCIENCE

Empathy was cited as an objection to physicalism before it was deployed against eliminativism. The positivists gave pride of place to science, and

¹⁹Robert M. Gordon "Folk Psychology as Simulation" Mind and Language (1986) 1: 158-71; 170. Alvin I. Goldman "Interpretation Psychologized" Mind and Language (1989) 4: 161-85; 182.

gave physics pride of place within science. Social sciences were held to be reducible to physics and the methodology of physics was thought extendable to the social sciences. William Dilthey, Max Weber, R. G. Collingwood and other historians and social scientists rebelled against this intellectual imperialism. They reasoned that human actions can only be explained by someone who can describe what the agents were intending to do. Humans conceive of events as meaningful, not just a jumble of raw sensations and feelings. So knowledge of intentions requires the ability to see those events through the eyes of the agent himself. Thus verstehen is a necessary condition for human studies. However, empathy is not needed for physics. Hence, the method of empathy demarcates the social sciences and renders them autonomous.

The positivists' response, best known through Carl Hempel's classic articles on explanation, was to stress the distinction between the context of discovery and the context of justification.²⁰ Empathy may be a useful heuristic but it does not prove anything. It cannot be a necessary condition for understanding because the behavior of psychotics can be predicted by a psychologist unable to simulate psychosis. Hempel also notes that empathy

²⁰Hempel criticizes verstehen in Aspects of Scientific Explanation (New York: Macmillan, 1965) in various sections. Representative is 239-240. Similar criticisms appear on pages 473-485 of Ernest Nagel's The Structure of Science (New York: Harcourt, Brace & World, 1961) and Theodore Abel's "The Operation Called Verstehen" in Readings in the Philosophy of Science ed. Herbert Feigl and May Brodbeck (New York: Appleton-Century-Crofts, 1953) 677-687.

is not sufficient for understanding because even the strongest simulation sometimes leads to false predictions. Empathy even gives different results for different empathizers. Indeed, the same empathizer may vacillate between two results. Will a soldier pitted against robot warriors become demoralized or defiant? An empathizer may feel a tug in both directions.

The persuasiveness of the positivists' reply will depend on whether one believes there is a subjective kind of understanding. The reductionism current with positivism has waned under a subjectivist revival. In "What is it like to be a bat?", Thomas Nagel argued that physicalism cannot capture the subjective aspect of experience. I can predict much of a bat's behavior by biological study of bats but there will still be an important gap in understanding; I won't know what it is like from the inside. If we agree that this is a deficit of understanding, then empathy does provide an insight that cannot be reduced to physics. The evolutionary model of self-strengthening empathy would then rejuvenate the demarcation claim made on behalf of verstehen by assuring us that empathic understanding is universal and potent when applied between cognitively mature human beings.

VI. HUMANITY AND CHARITY

The thesis that empathy homogenizes empathizers also supports Richard Grandy's principle of humanity. Grandy's principle says that we should prefer the translation that makes us structurally similar to those we are

translating. The goal of translation is to enable the translator to formulate the best predictions and explanations of the translatee. Grandy allows that one could use alternative techniques such as mathematical decision theory. But given our limited resources, the only practical option is to use the method of empathy:

Whether our simulation of the other person is successful will depend heavily on the similarity of his belief-and-desire network to our own. It would be desirable to base our simulation on all of the other person's beliefs and desires, but this is not possible. Thus, it is of fundamental importance to make the interrelations between these attitudes as similar as possible to our own. If a translation tells us that the other person's beliefs and desires are connected in a way that is too bizarre for us to make sense of, then the translation is useless for our purposes. So we have, as a pragmatic constraint on translation, the condition that the imputed pattern of relations among beliefs, desires and the world be as similar to our own as possible.²¹

Grandy's justification does not imply that people actually are similar. His point is that the translator's only feasible strategy is to treat the translatee as if the translatee were similar -- be he human or Martian. My realist defence of the principle of humanity implies that the principle works because people

²¹"Reference, Meaning, and Belief" Journal of Philosophy 70 (1973) 442-43.

really are psychologically isomorphic. Grandy may welcome this realism since it volunteers an easy justification for his feasibility thesis. However, if Grandy wishes to apply the principle to cross-species translation, he will need to fall back on pragmatic considerations or perhaps even fictionalism.

Stephen Stich objects that Grandy's pragmatic justification of the principle of humanity underestimates its depth. An alternative to empathy, such as mathematical decision theory, still demands intentional characterization of the speaker's beliefs and desires. This characterization can only proceed if we can identify particular beliefs and desires and the connections between them. And this is only possible if they are similar to our own. So according to Stich, "If a subject's mental state does not interact with other mental states in a pattern which approximates the pattern exhibited by our own conditional beliefs, it does not count as a conditional belief".²² He holds that the principle of humanity is constitutive of intentional description.

Stich develops this conceptual connection by appealing to W. V. Quine's projective theory of indirect quotation. Quine says that the quoter imagines the speaker's state of mind and then utters what would be natural and relevant. Stich elaborates on this play-acting theme by analyzing 'S believes that p' as "S has a belief state similar to the one which would

²²Stephen Stich The Fragmentation of Reason (Cambridge, Mass.: MIT Press, 1990) 47.

underlie my own assertion of 'p' in earnest".²³ This analysis implies that intentional description starts to break down as the interpretees become less similar.

Stich has no reverence for the principle of humanity -- he suggests "the principle of intentional chauvinism" as a more descriptive label. The fact that we must assume similarity in order to ascribe intentional states does not prove that the similarity is real. And even where the similarity is real, we only get an observer-relative fact, not natural kinds or theoretically interesting entities. Stich dramatizes the relativity by envisioning a sequence of translators and translatees who are pair-wise similar but quite different at the extremes. It follows that intentional description can be conducted between close neighbors but not between distant individuals.

If one believes, with Stich, that there is much cognitive diversity, then one will entertain doubts about the general applicability of intentional description. However, a cognitive monist will view Stich's worries as other-worldly. Only non-humans could raise the problems that Stich formulates. Hence, anthropology cannot mount a case for deviant logics or pre-logical societies or alternative conceptual schemes. Nor can any of the human sciences or history or the humanities (if we take the name seriously). The only hope for the cognitive pluralism is zoology or extra-terrestrial studies. Given self-strengthening empathy, homo sapiens are more psychologically

²³The Fragmentation of Reason 49.

homogenous than any species. Since 'ought' implies 'can', cognitive monism also undermines normative pluralism such as Paul Feyerabend's epistemological anarchism.

The rejection of diversity has some optimistic consequences. Twentieth century thinkers have competed in characterizing disagreements in progressively deeper and more desperate ways. Anthropologists have promoted cultural relativism with a zeal that has made their doctrine renown even to the populace at large. Thomas Kuhn maintains that key scientific disagreements can be traced to allegiance to variegated paradigms and that these paradigms are the ultimate, substantive criteria of rational judgment. Consequently, cross paradigm debate is inevitably circular. Indeed, 'disagreement' may be too superficial a term. For 'disagreement' implies that the parties are addressing the same proposition. Kuhn undermines this assumption by giving a semantic twist to his history of science. He traces the meaning of theoretical terms to paradigms so that a failure to accept the same paradigms condemn the parties to an equivocal dispute. Having exhausted the ways of deepening disagreement between individuals, the gloomy contest has been taken inside the individual. Thinkers in this century of anomie, double-think, and cubism have fissured the self with internal conflicts ranging from warring homunculi to inner incommensurable perspectives. Division within is then used to explain division without.

The various faces of cognitive pluralism diminish the prospect of a rational resolution of a disagreement. Other philosophers have countered with transcendental arguments that make agreement a precondition for understanding. My cognitive monism is biological, not conceptual, hence it affords only contingent, local support for rational resolvability. It allows that a dispute between a human being and a Martian could be as deep as the gloom and doomers fear. But as long as we converse with healthy, cognitively mature human beings, there is a presumption of common premises and a common logic to common conclusions.

Every man a microcosm? Leibnizian harmony for local monads?
Alas Pangloss, the end of alienation from our fellow human beings will not end conflict. Residual sources of strife play off our affinities rather than our differences. Structurally similar people can have opposed desires. Romantic rivals are thrown against each other by their common fiddles and fancies, not incommensurable perspectives. Egoist clones in a prisoner's dilemma understand each other all too well. They are trapped by the very symmetry of their desires. Desires tend to create bias and selective attention that magnify the disagreement created by access differences.

VII. RATIONALITY AND LIKE-MINDEDNESS

Some interpretations of the principle of charity leave it equivalent to the principle of humanity. However, the principle of charity is more commonly

understood as a preference for interpretations that attribute more rationality than alternatives. The principles concern logically independent states.

People can be like-minded and irrational or rational and cognitively diverse.

One of the strengths of the method of empathy is that it supports attributions of rationality and attributions of irrationality. If I would be jealous or weak-willed or dogmatic in your circumstances, then our similarity becomes the basis for suspecting you of kindred irrationalities. Empathy overcomes differences in beliefs and desires by exploiting one's similar belief-forming and action-forming mechanism. These mechanisms need not be particularly rational. Indeed, the predictive power of my simulation is enhanced if I share your quirks and biases. The method of empathy is supposed to predict what the empathee will do, not prescribe what he ought to do. The method can be incorporated into a morality such as Adam Smith's brand of sympathy ethics. But the ethical work is being done by another principle or by the prescriptive use of empathic methodology. Smith was enjoining us to do what would be approved of by an informed impartial spectator.

Interpretation does carry commitments. The interpreter must credit himself with enough rationality to sustain a distinction between good and bad inferences. It is self-defeating for me to infer that none of my inferences are sound. Just as belief aims for truth, inference aims for validity. The attempt to think fallaciously is reminiscent of the attempt to assert G. E.

Moore's "It is raining but I don't believe it". Whereas Moore's sentence is absurd at the level of belief, witting but fallacious reasoning is absurd at the level of inference. I can cultivate fallacious thinking by, say, getting drunk, but I can no more wittingly commit a fallacy than can I wittingly believe something false. Insofar as I attribute rationality to myself, I attribute rationality to those like me. Hence, the belief that others are similar to me commits me to a lower bound of rationality attribution; I must believe that others are fairly rational. This commitment is restricted to conspecifics. There would be no guarantee that evolutionarily independent beings are similar to me. Thus this argument for rationality has less scope and less modal depth than ones that deem rationality constitutive of belief attribution.

VIII. WHY THIS SOLVES 1/8 OF THE PROBLEM OF OTHER MINDS

Type solipsism restrains curiosity in some ways, encourages it in others. If people are like-minded, then to know one is to know them all. Psychology's burden is then lighter than anthropologists have suggested. The evolutionary model is compatible with non-functional variation amongst human beings. For instance, some people could have inverted qualia or some other systematic difference that did not affect their empathy. I think this biologically unlikely because the mutation would have to produce an

exact and complete inversion over multiple parameters.²⁴ But qualia inversion is biologically possible and a solution to the problem of other minds shouldn't preclude it a priori.

Remember that the evolutionary model is only intended to solve part of the other minds problem. I'm not trying to solve the half that concerns whether other minds exist. The thesis that empathy is self-strengthening assumes an initial state of cognitively diverse minds and demonstrates how empathy would make them converge. So the model does not refute the possibility that other people are only automata that can be predicted by empathy. It only addresses the problem of what other minds are like -- and it only solves half of that half. For the solution only works within a species, not cross-species. Finally, this quarter of the problem must itself be divided because self-strengthening empathy has historical limits. The mind merge takes time. So it does not work well until homogenization. Furthermore, the equilibrium point of a homogenized population can gradually change just as language gradually changes. Since human beings are slow breeders, there probably has been no significant change in recorded history. But our distant ancestors may have had different mind-sets.

These alternative equilibria have common features. Just as the pressures of economic exchange create abstract desiderata for the formation of money units (initial independent value, portability, divisibility,

²⁴C. L. Hardin has a sobering discussion of spectral inversion in Color for Philosophers

durability), the pressures of role reversal will impress empathy-friendly features on popular mind-sets. The features congenial to empathy are reminiscent of the desiderata for conventions. Modes of thinking are more likely to gain sharers when they are simple, componential, distinctive, verifiable, and easily disseminated. Communal consciousness will flow with spontaneous, individual human nature and minimize demands that go against the grain. Mixed with these general tendencies will be founder effects in which large populations retain the quirks of their pioneer ancestors.

The limits of sympathy give rise to a second wave of unification. People are pre-occupied with their own affairs and so only sympathize over short distances. A calm person can be readily moved to mild emotion. But it is difficult to stir even a sympathetic listener to a passion equal to the person principally concerned. The principle of short distances also applies when measured in terms of hypothetical reactions. A man who mourns the death of his goldfish will only alienate you. You would not have reacted nearly so strongly. So if he seeks commiseration, he must tailor his emotional expression to the short distance you can be moved with respect to your actual state and with respect to your hypothetical state. Adam Smith draws the consequence that the sympathy seeker must flatten the natural tone of his passion

in order to reduce it to harmony and concord with emotions of those who are about him. What they feel, will, indeed, always be, in some respects, different from what he feels and compassion can never be exactly the same with original sorrow; because the secret consciousness that the change of situations, from which the sympathetic sentiment arises, is but imaginary, not only lowers it in degree, but, in some measure, varies it in kind, and gives it a quite different modification. These two sentiments, however, may, it is evident, have such a correspondence with one another, as is sufficient for the harmony of society. Though they will never be unisons, they may be concord, and this is all that is wanted or required.²⁵

Different audiences call for different degrees of adjustment. However, the great distance between an emotion felt first-hand and one experienced vicariously ensures that the mutual role reversal will cool the sympathy seeker more than it warms the spectators. Since we gravitate toward the demeanor of our group, commiseration is a tranquillizer. The sympathy-seeker's moderated expression of emotion may be initially artificial but group dynamics will draw the principal's sentiments into greater accord with what he says. This explains why conversation calms a troubled person and rouses an apathetic soul. Indeed, the social habit of anticipating the

reaction of spectators often has a restorative effect even without actual contact. The discomfort of negative emotions leads many people to exploit the phenomenon by picturing the reactions of disinterested strangers. Sympathy inter-subjectivizes sentiments and gives rise to a common point of view. Thus verstehen leads to a second kind of psychological standard, another central tendency that can ease the predictive and explanatory burden of empathy.

The thesis of self-strengthening empathy might be incorporated into a full evolutionary solution to the other minds problem. The key is to specify functions for different kinds of mentation. (There probably is a function because consciousness has arisen independently on several separate branches of the tree of life.) One could then start with pre-sentient stage of life and explain how a mutant sentient being would have a selective advantage. This first mind would not have the hardware needed to believe in solipsism. (The very complexity of belief in solipsism is evolutionary grounds against it.) But the first mind would have a reproductive advantage. Sentience then sweeps through the population setting the stage for a more sophisticated level of consciousness. Each new development requires the specification of a functional advance. Thus the evolution of consciousness must be explained in the same incremental fashion as biologists explain the development of complex organs such as the eye.

²⁵Adam Smith The Theory of Moral Sentiments ed. D. D. Raphael and A. L. MacFie (Oxford:

When we reach the mutant empathisizer, we appeal to the predictive advantage of being able to switch perspectives. Once we establish that empathy goes to fixation, we can finally appeal to the principle that I have sought to establish in this a paper: Empathic species homogenize. And at that point, the whole problem of other minds is solved.