

CHILDREN DON'T DO THINGS HALF WAY A Conversation with Judith Rich Harris

[June 1999]

I'm prone to making statements like this one: how the parents rear the child has no long-term effects on the child's personality, intelligence, or mental health. I guess you could call that an extreme statement. But I prefer to think of myself as a defender of the null hypothesis.



Photo: Nomi L. Harris

Introduction

It was in the 1990s that I received a phone call from Steven Pinker who wanted to make the world aware of the work of Judith Rich Harris, an unheralded psychologist who was advocating a revolutionary idea which she discussed in her 1999 *Edge* interview, "Children don't do things half way: children don't compromise," in which she said, "how the parents rear the child has no long-term effects on the child's personality, intelligence, or mental health."

From the very early days of *Edge*, Harris was the gift that kept giving. Beginning in 1998, with her response to "What Questions Are You Asking Yourself?" through "The Last Question" in 2016, she exemplified the role of the Third Culture intellectual: "those scientists and other thinkers in the empirical world who, through their work and expository writing, are taking the place of the traditional intellectual in rendering visible the deeper meanings of our lives, redefining who and what we are."

Her subsequent *Edge* essays over the years focused on subjects as varied as natural selection, parenting styles, the effect of genes on human behavior, twin studies, the survival of friendship, beauty as truth, among others are evidence of a keen intellect and a fearless thinker determined to advance science-based thinking as well as her own controversial ideas.

Over the years, she was accused of being an extremist. Is she an extremist?

"Well, I'm prone to making statements like this one," she says, "how the parents rear the child has no long-term effects on the child's personality, intelligence, or mental health. I guess you could call that an extreme statement. But I prefer to think of myself as a defender of the null hypothesis.

"The null hypothesis is the hypothesis that a putative 'cause' has no effect, and it's supposed to be the starting point for scientific inquiry. For instance, when a new drug is being tested, the researchers are expected to start out with the hypothesis that the drug is no better than a placebo. If they find that the patients who received the drug are more likely to recover than the ones who got the placebo, then they can reject the null hypothesis at some level of confidence, some probability level.

"This comes as a surprise to most people, but psychologists have still not managed to collect evidence of a sort that would enable them to reject the null hypothesis of zero parental influence. In the absence of such evidence, the only scientifically sound position is the one I've taken."

—JB

JUDITH RICH HARRIS (1938–2018) was a writer and developmental psychologist. Winner of the 1997 George A. Miller Award for an outstanding article in general psychology, she is the author of *The Nurture Assumption: Why Children Turn Out The Way They Do* and co-author (with Robert M. Liebert) of *The Child: A Contemporary View Of Development*.

CHILDREN DON'T DO THINGS HALF WAY

EDGE: You are frequently accused of being an extremist. Are you an extremist?

JUDITH RICH HARRIS: Well, I'm prone to making statements like this one: how the parents rear the child has no long-term effects on the child's personality, intelligence, or mental health. I guess you could call that an extreme statement. But I prefer to think of myself as a defender of the null hypothesis.

The null hypothesis is the hypothesis that a putative "cause" has no effect, and it's supposed to be the starting point for scientific inquiry. For instance, when a new drug is being tested, the researchers are expected to start out with the hypothesis that the drug is no better than a placebo. If they find that the patients who received the drug are more likely to recover than the ones who got the placebo, then they can reject the null hypothesis at some level of confidence, some probability level.

This comes as a surprise to most people, but psychologists have still not managed to collect evidence of a sort that would enable them to reject the null hypothesis of zero parental influence. In the absence of such evidence, the only scientifically sound position is the one I've taken.

EDGE: But you can't prove that parents have zero influence, can you?

HARRIS: No. But why should I have to? Shouldn't the burden of proof be on the people who claim that parents do have an effect? Shouldn't the burden of proof be on the people who claim that their treatment—the style of child-rearing they recommend—works the way they say it will?

The problem is that the null hypothesis of zero parental influence hasn't been treated as the starting point, due to a pervasive pattern of thought I call "the nurture assumption." To say, "We will assume that parents do have an effect until

you prove that they don't" is a demonstration of the nurture assumption in action. It's an a priori bias based on faith rather than evidence.

EDGE: But some people are saying that there *is* evidence—plenty of evidence of parental influence, and that for some reason you have chosen to ignore it.

HARRIS: On the contrary, I haven't ignored it at all. I've looked at it closely and found it to be worthless. The evidence they're talking about is hopelessly confounded and is contradicted by other evidence.

Let me give you an example. Many studies have shown that verbal, literate parents tend to have verbal, literate kids. Parents who talk to their kids a lot tend to have kids with an above-average vocabulary. Parents who read to their kids tend to have kids who become good readers. This evidence comes packaged with a moral: If you want your kid to get into Harvard, you'd better start drilling him 18 years before his application is due.

The trouble is, the evidence is ambiguous. It's clear that children resemble their biological parents; what isn't clear is *why*. Is it the environment the parents provided, or is it the genes they provided? Just knowing there's a correlation isn't enough—we have to tease apart the effects of the genes from the effects of the home environment. One way to do it is by looking at adopted kids. And what we find is that the correlation disappears. The adopted child reared in a let's-read-a book-together home ends up no smarter, on the average, than the one reared in a don't-bother-me-I'm-watching-TV home. As far as Harvard is concerned, it doesn't make a dime's worth of difference whether the kid grew up listening to Mozart or Muzak.

In general, studies that provide a way of controlling for the effects of the genes by looking at twins, siblings, or adopted children show that the home environment has little or no effect on intelligence or personality. They show that the similarities between parents and their biological children, or between two biological siblings reared in the same home, are almost entirely a function of their shared genes. Eliminate the effect of the shared genes and you've eliminated all, or nearly all, of the similarity.

EDGE: You mean all that matters is having the right genes?

HARRIS: No, it's not just genes. The environment definitely matters too. In fact, for personality (which is what I'm mainly interested in), only about half the

variation from one person to another can be attributed to the genes. More precisely, about half the reliable variance in measured personality characteristics—the variance that remains after measurement error is subtracted—can be attributed to differences in genes.

EDGE: What do developmental psychologists have to say about the power of the genes?

HARRIS: That's a curious thing, actually. Nowadays most of them are quite willing to admit that children are born with predispositions to develop in a certain way, and they're even willing to admit that these predispositions have a genetic basis. But it doesn't seem to have dawned on them that children *get their genes from their parents*. They still haven't acknowledged the fact that whatever genetic predispositions the children have, there's a good chance the parents have them too. A child who was born timid has a better-than-average chance of being reared by a timid parent. A child who was born aggressive has a better-than-average chance of being reared by an aggressive parent. And the parents' genes are going to influence how they rear their kids. Timid parents are likely to be wimpier in their child-rearing methods; aggressive parents will be quicker to punish; affable parents will dole out more affection and praise. So everything's correlated: the parents' characteristics, the children's characteristics, and the parents' style of child-rearing. We haven't a hope of untangling this mess unless we have some way of factoring out genetic effects.

EDGE: How-by studying twins or adopted children?

HARRIS: That's one way—using the methods of behavioral genetics. And when the behavioral geneticists used these methods, they found something very surprising and puzzling, and it didn't have to do with genes, it had to do with the environment. What they found, in study after study, was that the environment shared by two kids reared in the same home could account for no more than 5 percent of the variance in personality characteristics. Heredity accounts for about half, so the other half must be due to the environment. But it isn't the *home* environment—at least, it isn't the environment shared by siblings who grow up in the same home.

The reason this is surprising is that the environment shared by siblings includes most of the things that are generally thought to have important effects on a child's development. The parents may have a happy or unhappy marriage or no marriage at all; the mother may stay home or go to work; the parents may spend their free time reading books or watching TV or going to a gambling casino. All these things are part of the shared environment: all the children in the family experience them in common, and if they're twins they experience them at the same age. But once we control for heredity by looking at twins or adopted children, we find that the shared environment has little or no effect.

EDGE: But most kids aren't twins and aren't adopted.

HARRIS: The problem is that if you don't use these methods, any environmental factor that you look at is likely to reflect genetic variation too. The parents who spend their time reading books are likely to differ in personality from the ones who opt for the gambling casino, and personality is partly genetic. So if their kids turn out differently, you can't tell if it's because of the environment the parents provided or the genes they provided.

One thing we can do, though, is to look at environmental factors that are less likely to reflect genetic variations in personality. For example, the home environment of the only child is very different from that of the child with siblings. All the affection, all the criticism, all the hopes and dreams that would normally be divided among two or three kids gets piled on this one poor kid. And yet researchers have been unable to find any consistent differences between only children and children with siblings. They've spent a lot of time looking for them, and published studies often do report minor differences—it's hard to get something published if there are no significant effects—but it's a different difference in each study. There's no overall tendency for the only child to be more neurotic or selfish, or less friendly or popular, than the child with siblings.

EDGE: Aren't you giving me proof that parents have zero influence?

HARRIS: I'm giving you proof that, in the ways parents are usually thought to have influence, they have little or no influence on the outcomes that have been measured so far. But I can't prove that they have *zero* influence.

For one thing, there's that 5 percent I mentioned. A typical behavioral genetic study shows that about 5 percent of the variation in adult personality can be attributed to the environment shared by siblings who grew up in the same home. But one of the weaknesses of the behavioral genetic method is that it can't distinguish between the shared home environment and the environment that siblings share *outside* the home. Siblings who grow up in the same home also live in the same neighborhood and go to the same schools. If they're twins they

probably belong to the same peer group. I attribute the 5 percent to experiences shared by siblings outside the home, and, with the methods currently available, there's no way to prove that I'm wrong. On the other hand, I have no way to rule out the possibility that some or all of that 5 percent is due to shared experiences at home.

Second, researchers haven't looked at all the possible ways that parents could conceivably influence their kids. Perhaps there are subtle effects that their measuring instruments have missed. I must say, though, that they've been looking for them for an awfully long time.

Third, the data we have don't cover the entire range of families. They cover a wide range, but the same kinds of families that slip through the net of the census takers are also likely to missed by researchers. I can't rule out the possibility that a home environment could be bad enough to inflict permanent damage on a child's personality or mental health.

And fourth, it's possible that parents influence their children in ways that are completely unsystematic and unpredictable. What the behavioral genetic results show is that children raised in the same family don't turn out alike, except to the degree that they share genes. But why should they turn out alike when everybody knows that parents don't treat their children alike? Maybe parents treat their children differently in a completely random fashion—eeny, meeny, miney, mo—and maybe these random differences have important effects.

EDGE: Why random?

HARRIS: Random in the sense that the parents aren't just reacting to pre-existing differences in the children themselves—differences the children were born with. We know that parents do react to genetic differences between their children—for example, that a child with a troublesome disposition will be treated more harshly than one who was born agreeable. The problem is that these differences in parental behavior can't explain what we're trying to explain: the differences in personality, not caused by differences in genes, between two people who grew up in the same household. These unexplained differences turn up in adoptive siblings, in ordinary biological siblings, and in identical twins reared together, and we need an explanation that will work for all three kinds of sibling pairs. We need an explanation for the personality differences between identical twins reared in the same household, and we can't blame them on the parents' response to genetic differences between the twins, because there *aren't* any genetic

differences between the twins. The vague but popular idea that it must be an "interaction" between heredity and environment won't work either. If there isn't any genetic difference, an interaction between heredity and environment can't produce a difference. It has to be a difference in environment, which puts us back to where we started.

EDGE: Maybe the parents are reacting to differences between the twins that *aren't* genetic. Identical twins aren't necessarily exactly alike when they're born. One can be larger or healthier than the other.

HARRIS: Sure. And there's no question that parents act differently toward a healthy child and a sick one, or to a larger child and a smaller one. But if these differences in parental behavior had long-term effects, we would have known about them a long time ago, because they would have turned up in birth order studies. There's no question that parents treat older children differently from younger ones, and firstborns differently from laterborns. These are systematic differences in parental behavior, not random ones, so if they had important effects it would be easy to detect them.

EDGE: You mean, because parents tend to favor firstborns?

HARRIS: No, I mean parents are more demanding with firstborns. Firstborns are given more responsibility; more is expected of them; they tend to be punished more harshly for mistakes. Parents are more tolerant of laterborns.

EDGE: But doesn't the firstborn get more attention?

HARRIS: Only till the second child arrives. Once another baby is born and the parents are taking care of both children at the same time, it's the younger one who gets the lion's share of attention and affection. This is true the world around: parents pay more attention and are more indulgent towards the youngest and smallest of their offspring. The firstborn may end up with the title or the farm, but it's the laterborn who gets the kisses.

Of course, this is going to vary from one family to another—an adorable 3-year old might get more affection than a whiny or unattractive baby. But the trend is clear. In the studies I cited in my book, at least half of the parents questioned admitted that they gave more affection to one child than the other, and more than 80 percent of these parents favored the younger child. You'd expect favoritism of this magnitude to lead to sizable birth order effects, if differences in parental treatment had important effects on children's personalities. You'd expect birth order to account for a noticeable amount of the unexplained variation in personality. But it doesn't. If birth order effects on personality exist at all, they must be very small and fragile, because big, well-done studies more often than not fail to find them.

However, there's an interesting exception to that rule. Significant birth order effects usually do turn up when personality is judged in a family context—for example, when parents are asked to judge the personalities of their children, or people are asked to compare themselves to their siblings.

EDGE: What's wrong with that method?

HARRIS: Nothing, if you want to know how people behave in the presence of their parents and their siblings. The trouble is, it doesn't tell you how they function in the world they inhabit as adults, which is what we would like to explain.

EDGE: But isn't there a carryover from one to the other?

HARRIS: That's what most people believe: that what you learn at home in the early years forms a template for your future. That your early relationships set a pattern you are constrained to follow, at least to some extent, for the rest of your life.

EDGE: And you don't think it's true?

HARRIS: No. I believe that children learn separately how to behave in each of their environments and with each of the important people in their lives. The learning device that humans come equipped with doesn't operate on the principle that what worked in one context will work equally well in another. The baby who learns that his mother will pick him up and feed him when he cries can't assume that his cries will have the same effect on his father or his sister or the kids at the day-care center. It would be foolish of him to make that assumption, and he doesn't. The human mind is very good at making fine distinctions and at storing things in separate bins.

EDGE: What kind of evidence do you have for that?

HARRIS: There's quite a lot of evidence. Researchers have looked to see whether children who are dominated by older siblings at home are more likely to be dominated by their peers at school, and the answer is no, they aren't. Similarly, children who fight all the time with their siblings are not more likely to have stormy relationships with their peers. A baby who behaves in a somber, subdued fashion with his depressed mother will behave normally with a caregiver who is not depressed. A baby who has learned to kick her left foot in order to jiggle a mobile hanging over her crib will stare up at the mobile cluelessly if the crib is moved to another room. A child who is a troublemaker at home may be well-behaved in school, or vice versa.

EDGE: On the other hand, there are children who are troublemakers wherever they go.

HARRIS: Yes, that's true. I'm not saying that an individual's behavior in one situation is uncorrelated with that individual's behavior in a different situation: I'm saying that what the individual *learned* in one situation doesn't carry over to a different situation. Learning isn't the only thing that determines behavior: behavior is influenced by genetic factors as well, and our genome goes with us wherever we go. What we learned at home we can leave at home, but what we were born with we always have with us. The timid child tends to behave in a timid fashion in every environment. It was recently demonstrated that this consistency of behavior is due almost entirely to the genetic component of timidity.

The other reason why there is sometimes a correlation between behavior in different environments is that there is a good deal of similarity in the environments themselves. Many of the behaviors children learn at home—speaking English, saying please and thank you, not taking things that don't belong to them—work equally well outside the home. Most of the attitudes and values that people think they got from their parents—"Be honest," "Trust in God," "Work hard," whatever—are the values of the society as a whole, or of the subculture they grew up in. You might have learned these things at home to begin with, but the reason you took them with you, the reason you kept them, is that they agreed with what you encountered outside the home.

EDGE: Fair enough. But you were telling me what was wrong with some kinds of birth order studies.

HARRIS: Right. We were talking about what happens when you have people make personality judgments of their siblings, or of themselves relative to their

siblings. What you get when you use these methods is a picture of how people behave with, or how they feel about, the members of the family they grew up in.

I don't doubt that birth order influences how siblings think and feel about each other and about their parents, and how they behave in the family setting. What I doubt is that people drag these effects along with them wherever they go. The kid who's bossed around by his older sister at home might find that he's the largest and strongest kid in his nursery school classroom. It wouldn't make sense for him to behave the same way with his classmates as he does with his sister, and he *doesn't* behave the same way. This is true even at nursery-school age.

The idea that learned behavior is specific to the situation in which it is learned may be the most important idea in my book, because it resolves so many discrepancies in the research data, and so many discrepancies between the data and people's everyday observations. It explains why you do find birth order effects if you ask people to compare themselves to their siblings, but you don't find them if you give people a neutral kind of test—a test free of family associations.

It also explains why most people believe in birth order effects. You aren't likely to know someone's birth order unless you've seen them in the context of their family. When people think about birth order, they think about the families they know well: their own brothers and sisters, other relatives, the kids next door. But these are people they've seen mainly in a family context, behaving the way they behave with their siblings and parents. Try guessing the birth order of people you know fairly well but *haven't* seen in a family setting. I'll bet you do no better than chance!

The idea of context-specific learning can also explain why people believe so strongly in parental influence. After all, when you see a parent and a child together you can see that the parent is influencing the child! You can see the child responding to the parent's praise or criticism or method of discipline or lack thereof. What you're less likely to see is that this child will behave differently in environments that aren't associated with the parent. Or, if you do notice that the child behaves differently, the nurture assumption causes you to believe that the way the child behaves with the parent must somehow be more important or more lasting.

EDGE: Whereas just the opposite is the case?

HARRIS: Well, the way children behave outside their parents' home is certainly more lasting, because that's where they're going to spend their adult lives. But I'm not saying that the way they behave at home is unimportant. This is one of the ways that parents do have an influence: they can determine, to a large extent, how their children will behave at home. But they can't determine how their children will behave when they're not at home. It may *look* as though they can, but I believe the correlations that we notice are due mainly to genetic effects. Children carry their genes along with them wherever they go, and they got their genes from their parents. If an aggressive parent has an aggressive child, you can't conclude that the child *learned* to be aggressive from the parent until you've eliminated genetic effects.

EDGE: How does this idea resolve discrepancies in the research data?

HARRIS: A couple of years ago, two articles appeared in the same issue of *Archives of Pediatrics and Adolescent Medicine*. The first got into all the newspapers: the researchers reported that children who were spanked by their parents became more aggressive. The second went unnoticed: the researchers reported that children who were spanked by their parents did *not* become more aggressive. It turned out that the two groups of researchers were measuring different things: the first group looked at how the children behaved at home, the second at how they behaved at school. Spanking at home apparently makes kids act up more at home (or maybe kids who act up at home get more spankings), but it doesn't make the child more aggressive outside the home. The widely quoted conclusion of the first group of researchers—that if parents stopped hitting their kids it could "reduce the level of violence in American society"—was nothing but hot air.

EDGE: I take it you don't think spanking makes kids more violent?

HARRIS: I used to but I don't anymore. Look, in the early part of this century, American parents routinely spanked their kids. They considered it their *duty* to spank a kid if the kid did something wrong. That's where we got the expression, "This is going to hurt me more than it's going to hurt you." What the parent meant by this bizarre statement was, "I don't really want to spank you, but the experts tell me I'm supposed to." In those days, the advice-givers didn't warn parents against damaging their child's self-esteem—they warned against "spoiling" the child. Too much attention and affection were thought to be bad for kids. The know-it-all tone of voice hasn't changed a bit, but the current crop of advice givers are giving advice that is almost the exact opposite of what parents were being told two or three generations ago. Since a large number of parents actually listen to the advice, kids today are being raised very differently from the way their grandparents were raised. They're getting more praise and kisses, fewer smacks and scoldings. Now ask yourself this: Are children today less aggressive than they were two or three generations ago? Are they nicer? Are they happier? The answer is no. Rates of violence, of depression, and of suicide have gone up, not down.

EDGE: So why haven't the advice-givers noticed that their advice is not having the predicted effects?

HARRIS: Good question. I suppose they'd say, if pressed, either that parents aren't following their recommendations carefully enough, or that changes in the culture as a whole have outweighed the changes in parenting styles. But shouldn't the culture as a whole have become more benevolent if parenting styles have become more benevolent?

Another example of a change that hasn't had the expected effect is the switch to androgynous child-rearing. Middle-class parents are giving their children unisex names and dressing them in unisex clothing. They're giving dolls to their sons and construction sets to their daughters. But the children are as sexist as ever. Grade-school kids still prefer to play with others of their own sex. They still get a kick out of insulting the opposite sex. Boys are still boyish and girls are still girlish, especially in places where there are lots of kids, such as school playgrounds.

EDGE: Do you think these differences are innate?

HARRIS: Only in part. There's undoubtedly an innate component—the same sex differences are found in every culture. But a lot of the behavioral differences between girls and boys are the result of group socialization. Group socialization is my theory of how kids learn how to behave when they're not at home. How they learn how to behave in public.

EDGE: How do they learn how to behave?

HARRIS: It's a very complex task—as complex as learning the language. Here are some of the problems kids have to deal with. First, they find out pretty early

that behaviors that were acceptable at home, such as displays of emotion, are not acceptable outside the home. Second, the *consequences* of behaving correctly or incorrectly are also different inside the home and outside. Children don't get patted on the head when they do the right thing in school or on the playground: the usual result of doing the right thing is that nothing at all happens. On the other hand, if they do the wrong thing, the consequences can be much more serious outside the home. At home, children can cry or wet their pants or say something dumb, and nothing terrible is likely to happen, whereas if they do these things at school they might be laughed at or picked on or given an unflattering label that could stick to them for years.

So children know that they have to learn how to behave in public, and they want to avoid making mistakes. The safest way is to observe how others behave, but now there's another problem: which others do you observe? In every society, proper behavior depends on what sort of person you are—whether you're a kid or a grownup, a male or a female, a landowner or a peasant. These are called "social categories," and before children can figure out how to behave, they have to figure out what social categories are available in their society and which one they belong in.

This turns out to be surprisingly easy for them—as easy as learning the language. The fact that people (like most things in the natural world) come in continua rather than convenient clumps doesn't faze them: they don't hesitate to draw the lines, even though they might have trouble deciding where to put a particular individual. I once saw a 6-year-old go up to a 14-year-old and ask him, "Are you a kid or a grownup?"

It's a kind of concept formation and it starts early. By the time they're 2, children have acquired mental categories for grownups and kids, men and women, girls and boys. They know which ones they belong in, and they're already showing a preference for their own social category. Kids are attracted to other children, even at an age when they're wary of strange adults. When they have a choice, most little girls prefer to play with girls, most little boys prefer boys. (If they don't have a choice, they'll choose a child of the other sex over an adult, because the age category usually takes precedence over the gender category.) By kindergarten age, girls and boys are splitting up into sex-segregated groups whenever they have the chance—whenever there are enough kids to form separate groups and whenever there isn't an adult insisting that they play together.

One of the things that happen when people split up into groups is that the different groups develop contrasting behaviors and attitudes. You can see this happening in the sex-segregated groups of grade-school kids. It's on the playground where boys act most boyish and girls act most girlish. Boys act tough—they hide their weaknesses and vie with each other for dominance. Girls don't have to hide their weaknesses—they use them as tokens of good faith. You show me yours and I'll show you mine and we'll be friends forever . . . or at least until Wednesday.

Timid girls often remain timid, but timid boys tend to become less timid as they get older—a change that is usually attributed to socialization by the parents. Our culture frowns on timid boys, the story goes, so parents teach their sons not to be timid. But the idea that it's the parents is contradicted by the evidence from behavioral genetics. It's not the parents: it's the peer group! A timid boy has a rough time of it in the boys' peer group. He's going to be picked on until he learns to master his timidity.

EDGE: So it's "peer pressure"?

HARRIS: In this case, yes. But I don't like to use that term because in most cases it's misleading. Pressure isn't usually necessary, and the impetus comes from the child doing the conforming, not from the group. Tailoring your behavior to that of the other members of your group is something that people of all ages do automatically, usually without even realizing that they're doing it.

EDGE: One of the criticisms I've heard of your theory is that kids generally associate with other kids who are similar to themselves—for example, good students hang around with other good students. So the kids who belong to the same group were already similar—it's not that they're conforming to the group.

HARRIS: Yes, it's true: kids who belong to the same group were similar to each other to begin with. That's not a valid criticism of my theory—it's one of the *premises* of my theory. Children identify with a group because they see that it consists of people like themselves. But once they've identified with it, three things happen. They become even more like their groupmates in some ways, less like them in other ways, and the differences between groups get wider.

The first effect is called assimilation. It's how socialization occurs—how children acquire the behaviors and attitudes of their culture. It's how the children of immigrants end up with the language and accent of their peers, not the language or accent of their parents.

The second is differentiation within the group. I think this is where most of the nongenetic variation in personality comes from. The members of a group don't act as a group all the time—sometimes they act as individuals. They vie with each other for dominance. They choose or are chosen for various roles and niches within the group—"group clown," for instance. These roles can be very stable—the dominant members tend to remain on top and those on the bottom tend to remain at the bottom—and I believe they have permanent effects on the personality.

The third thing that happens is called the group contrast effect. When kids split up into two groups—girls versus boys, jocks versus nerds—the differences between groups become exaggerated. The girls become more girlish. The nerds become nerdier. The kids who pride themselves on being weird or bad (these are often kids who were rejected by other groups) become weirder and badder. There's also likely to be hostility between groups, especially at times when group identification is salient, even though individual members of different groups might be friends with each other at other times.

EDGE: Do you have evidence that these things have an effect on personality?

HARRIS: Not as much as I'd like to have. In fact, my theory of personality development is still largely untested. I said at the beginning of *The Nurture Assumption* that I had two purposes in writing the book: to dissuade my readers of the notion that a child's personality is shaped or modified by the child's parents, and to present an alternative view of how the child's personality is shaped. But I should have said something about the scientific status of these two purposes. In regard to the first, the evidence is abundant and solid and I'm not saying anything original. I've just put all the evidence together and stated the conclusions more forcefully. The evidence indicates that children are socialized, and their personalities are shaped, by their experiences outside their parents' home. So now the challenge is to specify how this happens, and that's my second purpose. What I've done is to propose a new theory of how children are socialized and how their personalities are shaped. But I don't claim to have proved this theory, because the right kind of research hasn't yet been done. I've had to hunt around for bits and pieces of evidence, some of it anecdotal. I think

the theory is promising and I hope it's going to be proven right, but it's early days yet.

EDGE: How does your theory account for the personality differences between identical twins raised together?

HARRIS: Within-group differentiation. Identical twins raised together usually belong to the same peer group, and a group that contains a pair of identical twins is going to find some way of distinguishing between them. They might be typecast in different ways: one might be regarded as the cautious one, the other as the one who'll do anything on a dare. Or they might differ in social status: questions and suggestions from the other members of the group will be addressed to one twin rather than the other.

EDGE: But doesn't the same sort of thing happen at home?

HARRIS: Yes. People find their own niches within their group and also within their family, and in both cases it affects the way they behave in that context. But the behaviors children acquire in the family don't have lasting effects, whereas the behaviors they acquire outside the home do.

EDGE: Why do you think that is?

HARRIS: It seems to be a built-in bias. It starts very early—by nursery-school age. Kids start dropping the accent they acquired at home and picking up the accent of their peers at an age when they're still spending more time with their parents than with their peers. It's not simply that they adapt readily to their two different language environments—it's that they favor one over the other, right from the beginning. They bring the language or accent of the nursery school home with them, they don't bring the language or accent of the home to school (unless, of course, it's being used there, too).

Simon Baron-Cohen made an interesting observation about accents in his review of my book in the journal *Nature*. He said that my theory had helped make sense of a study he did years ago, involving children with autism and their non-autistic siblings. These were the children of immigrants—one or both of the parents spoke a language other than English. Baron-Cohen found that the non-autistic children rapidly acquired the accent of their peers, but the autistic children generally retained the accent of one of the parents (the mother, in most cases). Children with autism have something wrong with the part of the brain responsible for social development. Studying these children has helped us appreciate aspects of normal development that might otherwise have gone unnoticed.

EDGE: Why do you think normal children are biased toward what they learn outside the home?

HARRIS: I think it's an evolved adaptation. Humans were designed by evolution to become members of a group, and to strive to become valued members of their group, because that's what it took to make a go of it during most of our evolutionary history. As Robert Trivers has pointed out, in the long run it would be counterproductive for children to allow themselves to be molded by their parents, because parents have their own agenda and it doesn't necessarily coincide with the child's. Anyway, if nature wanted to turn children into little replicas of their parents, there's a much easier way to do it. It's called heredity.

EDGE: What does your theory say about the transmission of culture?

HARRIS: That the usual view of cultural transmission—that the culture is passed down from the parents to the child—is inadequate and misleading.

Let me show you how it really works, using language as an example of a social behavior that is part of a culture. I like to use language because it's free of the genetic complications that plague other sorts of social behavior. If a person behaves in a cold or affectionate or aggressive manner, her behavior could be partly genetic, but we know that she didn't inherit her language or accent from her parents.

In the usual situation, the parents speak the same language as their neighbors. Let's say we're talking about an American family and their language is English. The child learns English at home and when she gets to nursery school she finds that everyone there speaks English too. No problem. She may be tentative about using it at first—she has to make sure it's going to work—but there's no need for her to acquire a new language or accent because her peers are using the same language and accent. She simply goes on speaking the way she learned to speak at home.

That's the usual situation, and it's the one that psychologists and anthropologists have in mind when they construct their theories. But if the child's parents are immigrants who speak English poorly or not at all, the child who grows up in a neighborhood where everyone speaks English will nonetheless become an English speaker, even if English was not the first language she learned and even if she goes on speaking her parents' language at home. She'll learn English from her peers, and she'll speak it the same way they do—without the foreign accent of her parents—and quite soon it will begin to supplant her parents' language. It will become her primary language, the language she'll think in as an adult.

EDGE: But sometimes the children of immigrants do end up with an accent.

HARRIS: That happens either because they were too old when their parents made the move—puberty generally puts an end to the ability to learn a new language without an accent—or because they grew up in a neighborhood where there were a lot of immigrants from the same country. A child who grows up in a Mexican-American neighborhood, for instance, will learn to speak English but she may always speak it with a Mexican accent, because that's how everyone in the neighborhood speaks it. That's how her peers speak it.

EDGE: How do you know that it's the way the peers speak it that matters? How do you know it's not the grownups?

HARRIS: There's an interesting story that Derek Bickerton tells, of the children of people who immigrated to Hawaii around the turn of the 19th century. The parents came to work on the sugar plantations and they came from all over the world—the Philippines, Puerto Rico, China, and so on. They had no language in common, so a pidgin language developed among them—a sort of skeletal language that permits people to communicate the bare essentials but that is inadequate for complicated ideas.

The children of these people got together and found that they too had no language in common—nothing but the pidgin, and that wasn't good enough. So they *created* a language! Out of the mouths of babes came a full-fledged language called a creole! This was a language they couldn't have learned from any of the adults they knew, because none of the adults could speak it. And it became their "native language," the language they brought with them to adulthood. Bickerton studied these people when they were middle-aged or older, and he found that an immigrant's child of a given age used the same version of creole as the others of the same age—it was the language they had used in their childhood peer groups. The language evolved over time, but the people who learned a certain version of it in childhood continued to speak that version all their lives. No trace of the language of their parents was detectable in their speech—the language of their parents was forgotten. EDGE: So what do your observations of language tell us about the transmission of culture?

HARRIS: I think other aspects of a culture are transmitted the same way as language. In developed societies the parents start the process at home, so the kids come out of the house already knowing something. But whether they keep what they learned at home will depend on what they find when they get outside. And they don't have to learn *anything* at home, and they'll still be okay. There are many societies where the parents hardly talk to their babies at all, and the babies don't learn the language until they graduate from their mothers' arms into the local play group. They learn the language, and they learn how to behave, from the older children in the play group.

EDGE: So memes spread from one child to another, rather than from parent to child?

HARRIS: Not entirely, because anything that has an effect on the majority of kids in the peer group can affect the entire group. Even though parents may not have much influence as individuals, they can have a great deal of power if they get together. Hebrew used to be a dead language—a language used only for ceremonial purposes. A bunch of grownups got together and decided to make Hebrew the language of their new country, and they taught their kids to speak Hebrew. The kids found that their peers spoke Hebrew too, and Hebrew became their "native language," even though it wasn't the native language of their parents. It worked because the parents who decided to do it lived in one place and their children played together and went to school together. It wouldn't work if only one family in a neighborhood decided to do it. So parents who want to have an influence on their kids should get together with other like-minded parents and send their kids to the same school. That's the way the Amish do it, and the Hasidic Jews. In fact, it's what middle-class parents do when they move to "nice" neighborhoods so their kids can go to "nice" schools.

EDGE: Does this tell us anything about memes?

HARRIS: The idea of memes is that bits of culture tend to reproduce themselves like genes. Successful bits of culture are passed on, unsuccessful ones die out. The trouble with this theory is that it doesn't take account of the human tendency to split up into separate groups that become culturally distinct. Memes spread freely *within* a group, but *between* groups there's a motivation to reject the memes of the other group and do something different. A meme can give rise to a

similar meme, but under slightly different circumstances it can engender an antimeme. I don't think the meme theory can account for that.

EDGE: Give me an example.

HARRIS: *They* worship many gods, so *we* will worship only one. *They* say, an eye for an eye; *we* say, turn the other cheek. *They* eat cows, *we* don't. *They* hold their forks that way, *we* hold our forks this way. *They* say "tomahto," *we* say "tomato."

When Europeans got to the interior of New Guinea, they found the people split up into groups that each spoke a different language—almost a thousand different languages, most of them mutually unintelligible. That's not just the accumulation of random variations: something was driving these languages apart and keeping them apart. It was the fact that the people didn't *want* to speak the same language as their enemies! A village would split up into two smaller villages, they would go to war against each other, and then the inhabitants of Village A would find ways of distinguishing themselves from the inhabitants of Village B. Different hairstyles, different designs on the pots, different words.

You can see the same thing happening between contrasting groups within a single society. Developed societies have a special age group for people who are no longer children but are not yet adults, and this group becomes a source of social change. In societies that have only two age groups, children and adults, a culture can go along virtually unchanged for generation after generation, but as soon as there's a special age group for teenagers, things start to happen. The teenagers look for ways of demonstrating their fealty to their own age group—ways of showing that they're *different* from adults. They use weird forms of adornment that adults find unacceptable, and they invent new words or use old words in new ways. If people didn't keep graduating out of the teenage group and taking their vocabulary with them, eventually they would create a whole new language and the adults wouldn't be able to understand them. Which, of course, is just what they're after!

EDGE: What makes you think that what's true of language is true of culture in general? Doesn't language have its own module in the brain?

HARRIS: Lots of things have their own module. Language is just one of the many things that babies need to learn in order to become acceptable members of their society. It's complicated, yes, but so are the other things they have to learn. I don't see any essential difference between learning a custom that is called "language" and learning the other behaviors and skills of the culture.

Let me end this discussion by coming back to the question you asked me at the beginning: am I an extremist? The children of immigrants who speak English with a heavy accent, if they grow up in a neighborhood of native-born Americans, end up speaking English with no foreign accent at all. They don't end up with something in between what they learned from their parents and what they learned from their parents and what they learned from their parents who speak their peers. That's why I am an extremist: because children don't do things half way. Children don't compromise.

Edge.org is a nonprofit private operating foundation under Section 501(c)(3) of the Internal Revenue Code. Copyright © 2021 By Edge Foundation, Inc All Rights Reserved.

##