PSI AND THE NATURE OF ABILITIES

BY STEPHEN E. BRAUDE

Lately I've been giving a great deal of thought to the nature of human (and other organic) abilities. In part, this is connected to my recent research into multiple personality and the need to explain, not only the partitioning of abilities and skills among alternate personalities, but also the enhanced levels of functioning that some of them exhibit (and for that matter, the exceptional performances of "nonmultiples" in hypnotic and other sorts of dissociative states). My interest in this topic is also connected to my ongoing study of savants and prodigies, who apparently have much to teach us about the limits (and perhaps also the latency) of human abilities. At bottom, I suppose, it connects with my general and long-standing concern with problems of psychological explanation, particularly in light of the gross inadequacies of trendy computational theories of the mind.

I have also begun to consider how understanding human abilities is vital to our assessment of the evidence for survival, and that has prompted me to review the relevance of this topic to the data of parapsychology generally. Before launching into my talk, however, I must emphasize that my thinking about much of this is quite preliminary; so what I shall present to you now is by no means a comprehensive and systematic philosophic program. Instead, it is a kind of conceptual stew, a mere progress report of loosely connected thoughts about the nature of human abilities and parapsychology. I shall begin with some relatively straightforward (if not downright simple-minded) observations, and then move on to issues of increasing complexity and importance.

Is Psi an Ability?

The term "ability," like most ordinary language expressions, has no single and preferred—much less clear and unambiguous—

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meaning. In one quite appropriate and also quite general use of the term, it can stand for almost any kind of organic capacity or disposition. For example, we can speak of someone's ability to laugh, experience fear, or merely breathe, blink, or move the muscles in one's arm. In this sense of the term, "ability" does not imply the manifestation of any sort of proficiency or skill. At other times, however, "ability" is nearly synonymous with "skill." Thus, we might speak of a person's ability to play tennis or write poetry, and we would not attribute that ability to just any person capable of swinging a tennis racquet or taking pen or computer in hand. In this sense of the term, abilities are neither identical with nor merely a function of some set of initial organic endowments, that is, the dis-

ing a tennis racquet or taking pen or computer in hand. In this sense of the term, abilities are neither identical with nor merely a function of some set of initial organic endowments, that is, the dispositions, capacities, or other properties one has at birth. Indeed, otherwise functionally impeccable organisms may not possess them. That is because abilities in this sense involve a mastery or conscious development of some set of more rudimentary attributes. These might be familiar sorts of capacities, such as being able to move one's limbs or being able to track moving objects; but they could also be unique or exceptional endowments. For example, the possession of a third arm or extra fingers might lead one to develop a novel and extraordinary skill at playing musical instruments.

There seems also to be a third relevant sense of "ability," falling between the two already mentioned. It is in this sense of the term that we usually speak, say, of musical or athletic abilities. Compared to the sense of the term in which eyesight and a sense of smell count as abilities, in this sense of "ability" we tend to pick out somewhat higher-order traits. Virtually every functionally intact human organism has a similar range of quite rudimentary capacities, such as being able to breathe, utter sounds, digest food, and eliminate waste products. But even persons with a reasonably full complement of lower-order capacities may lack higher-order musical, athletic, literary, or mathematical abilities (to name but a few). In that respect, this sense of "ability" is similar to that in which it is roughly synonymous with "skill." There is a difference nevertheless. We often speak of people with musical or athletic abilities who have not yet harnessed those abilities in developing musical or athletic skills. For example, people who are musically gifted sometimes develop those gifts only relatively late in life (a good example is the composer Albert Roussel). More generally, those with artistic talents do not exhibit them upon emergin

if those talents are to be manifested fully. Hence, we could say that such people had artistic abilities—but not artistic skills—throughout their life. These higher-order attributes, then, are dispositions in a sense similar to what Plato in the *Republic* meant by "natural gift." In this intermediate sense of the term, a person with an ability to χ is one who is able to acquire the skill(s) of χ ing. (Similarly, one with a talent or natural gift for χ is one who can acquire those skills with considerable ease.) And clearly, one can have an ability or natural gift without having yet learned or acquired the associated skill(s).

I must emphasize that these different meanings of the term "ability" are not sharp. They merely identify useful points on a continuum of human capacities. In fact, it is relatively easy to find human attributes that seem to fall at various points in between. For example, the ability to stand on one leg is not as elementary a capacity as the ability to swallow or the ability to smile. We should perhaps view it as intermediate between those capacities and athletic ability. Similarly, the ability to discriminate changes in pitch may be intermediate between musical ability and simply being able to hear. Likewise, some human abilities seem to fall between skills, on the one hand, and, on the other, higher-order endowments such as Likewise, some human abilities seem to fall between skills, on the one hand, and, on the other, higher-order endowments such as musical, mathematical, and athletic abilities. They are not merely dispositions, however complex; rather, they involve the development of some relatively simple subsidiary skills and a certain amount of self-control. But they need not involve the degree of specific goal-directed self-mastery usually associated with such skills as playing the violin or playing tennis. Into this category we might place, say, the ability to hold a job, cook dinner, and make people feel comfortable. (It should be clear that each of these *can* be cultivated thoroughly enough to qualify as a skill.)

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Despite these subtleties and complications, for present purposes it will be sufficient to distinguish only the three principal senses of "ability" I have roughly delineated. And to help keep them distinct, let us resort to a bit of terminological artificiality and agree to use certain normally fuzzy and elastic expressions as rather specific technical terms. Let us henceforth use the term "capacity" to refer to rudimentary and more or less universal human (or organic) endowments, such as the capacity to hear, or to digest food. Let us use the term "ability" to stand for the higher-level traits or dispositions discussed earlier. And finally, let us reserve "skill" for a fairly specific kind of proficiency—namely, a mastery over certain of one's other organic endowments (abilities or capacities). Hence, skills are exhibited, not only by those who juggle, sculpt, play the French

horn, repair automobiles, and solve quadratic equations, but also by yogis who can control their heart rate or body temperature, and by more ordinary folk who have learned to control pain through selfhypnosis.

Armed (or perhaps saddled) with these terminological conventions, we may now make several observations bearing on the data of parapsychology. I have often complained that laboratory research in parapsychology is almost ludicrously premature, because researchers have no idea what sort of organic function they are trying to investigate. Not only are we ignorant of psi's finer-grained features, we do not even know its overall purpose, if any, or its natural history. We do not know whether psychic functioning is an ability (like musical ability) or whether it is a brute endowment such as the capacity to see or to move one's limbs. Obviously, then, we do not know what *sort* of ability or capacity psi is, and what its function might be outside the lab. But in the absence of such rudimentary knowledge about psi, we can have no idea whether (or to what extent) our experimental procedures are appropriate to the phenomena. After all, we would not examine a person's mechanical aptitude the same way we would investigate his ability to produce witty remarks. Generally speaking, different abilities must be studied in different ways. Similarly, techniques appropriate to studying those abilities will differ from those suitable to examining mere capacities, such as the capacity to blink, swallow, utter sounds, or dream. And, of course, different capacities likewise tend to require distinct modes of investigation.

Not knowing whether psi is an ability or a capacity poses another kind of problem. Consider, for example, some conspicuous features of athletic abilities. First, they are not uniformly distributed throughout members of the human race. Second, those having athletic abilities have them to varying degrees; that is, some may be athletic enough to excel at college-level competitions but not be gifted enough to turn professional. Third, such abilities come in various sub-varieties (e.g., the ability to play tennis, golf, football, or snooker). And fourth, a person may have one such sub-ability but not another (e.g., a gifted baseball player may be inept at track and field events). Obviously, similar observations apply to musical, mathematical, philosophical, and many other abilities. Now if psychic functioning is analogous to these sorts of organic endowments, as many apparently think, then it would be the case that not everyone is psychic, that some are more psychic than others, and that not all psychics are psychic in the same way.

But what if psychic functioning is analogous to elementary sorts of capacities? In that case, it may be as uniformly distributed among humans as pulmonary or reproductive functioning, or as reflexive and involuntary as nursing behavior or fear responses. Moreover, although some persons lack these familiar capacities or possess them only in attenuated forms, most people have no such limitations. Analogously, the capacity to function psychically might be robust in all but a few persons. It may also be the sort of thing we do all or much of the time, and the processes involved may be as removed from conscious awareness and control as those involved in digestion or breathing. or breathing.

from conscious awareness and control as those involved in digestion or breathing.

Now one might think that the general orientation of our research depends critically on which of these two pictures is correct, even if we are interested only in obtaining evidence for the mere existence of psi. In fact, at one time I thought this was an issue of some importance (Braude, 1979). Now, however, I am not so sure; indeed, it seems to me that the situation is more complex than I appreciated initially. My earlier concern was that if psi is unevenly distributed throughout the population, like musical and athletic ability, then it would be unwise to seek quantitatively impressive evidence for the existence of psi by testing randomly selected subjects. But in fact this is not much of a problem because most experimenters screen subjects and conduct pilot studies. Hence, no matter whether psi is a capacity or an ability, experimental procedures may help to identify promising test subjects.

In that case, however, it may be that what experimenters are actually screening out are those who simply lack the skill of functioning psychically in specific, and not necessarily all, test situations. Pragmatically, then, it may matter little whether psychic functioning is a capacity or an ability. We do not know pre-theoretically or pre-experimentally which it is. And, of course, our crude investigative practices, cushioned by this ignorance, cannot help us figure it out—much less enable us to test appropriately for one rather than the other (Braude, 1986). Hence, given the primitiveness of our experiments and the background of ignorance against which they are conducted, whether psi is a capacity or an ability is an issue that matters only with regard to how we understand the nature of the skill apparently displayed by successful subjects. Is it more like that of the yogi, who controls common processes which for the rest of us are largely involuntary? Or is it like that of the musical virtuoso or athletic superstar, who has exquisite con only some people enjoy?

Moving to another matter, it has often been observed that psi is probably situation-sensitive. But notice: that claim is plausible whether psi is a capacity, ability, or skill. After all, in the absence of indications to the contrary, it is reasonable to suppose that psychic functioning will be continuous in its broad outlines with more familiar sorts of human or organic endowments. And clearly, our normal capacities, abilities, and skills are situation-sensitive. For example, capacities represented by heart rate, insulin level, blood pressure, and REM sleep vary (sometimes dramatically) from one context to another. The reason for those changes may be ordinary alterations either in one's physical environment or in one's mental states. That is why penile erection in the human male (as Arthur Koestler noted) is not a capacity that can be exercised (for most men, at any rate) no matter what the conditions happen to be. Similarly, the demonstration of our abilities and skills can be inhibited or suppressed by a wide variety of circumstances, physical and psychological. Hence, no matter what sort of attribute psi is, it is reasonable to suppose that its manifestations will likewise vary from one context to the next.

Another familiar and plausible suggestion is that psychic functioning is need-determined. Of course, that hypothesis can be interpreted in various ways and those options are worth examining on another occasion; but they are all variations on the claim that psychic functioning stands in some sort of lawlike relation to the real or perceived needs of a psi agent. For now, we need only observe that the presumed relation between psychic functioning and needs (whatever exactly it is) seems compatible with taking psi to be either an ability or a capacity. Many of our normal capacities and abilities are likewise related in a more or less lawlike way to the real or perceived needs of an agent. Hence, if psi is need-determined, it abilities are likewise related in a more or less lawlike way to the real or perceived needs of an agent. Hence, if psi is need-determined, it might be analogous either to the capacity to increase adrenalin flow or the ability to be courageous. Similarly, it might be analogous either to the capacity to produce endorphins or the ability to be cheerful in the face of adversity. However, there is little reason to regard *skills* or the use of one's skills as generally need-determined; too often, both the development and exercise of one's skills are psychologically optional and relatively trival. Nevertheless, the *ability* to exercise certain skills might be related in a lawlike way to one's real or perceived needs (say, in the way certain athletes perform optimally only under the pressure of a real game). Hence, the view that psi is need-determined does not favor interpreting psychic functioning as a skill. ing as a skill.

Psi, Savantism, and Memory

Within the past year I have begun to study the literature on prodigies and what have traditionally been called idiot-savants (the current trend is to drop the apparently pejorative first term). Initially, my intention was to explore the relevance of the data to the topic of survival, and I'll say something about all that shortly. But I soon realized that the study of savants and prodigies might connect in intriguing ways to other issues in parapsychology. The data are particularly significant for our understanding of human abilities rather than capacities or skills. What is undoubtedly most striking about savants and prodigies is that, despite their handicaps or immaturity, they display unexpected and occasionally astounding sets of musical, calculating, artistic, and other sorts of abilities—that is, higher-order dispositions which (when properly nurtured and cultivated) manifest as skills of various sorts.

One impressive feature of the data is that the abilities (and skills) of savants are often highly circumscribed and quite idiosyncratic. Those limitations or boundaries are of two sorts. First, savants may Those limitations or boundaries are of two sorts. First, savants may be profoundly dysfunctional except for their musical, mathematical, artistic, or mnemonic abilities. One well-known musical savant suffers from cerebral palsy, but his almost constant spasticity disappears when he plays the piano. Another savant can read or write nothing except his name and is just barely able to care for himself; but he is able to repair virtually any mechanical device presented to him. Others are similarly or more severely retarded or handicapped, yet they are able to draw, paint, or sculpt works of considerable sophistication and beauty. The second sort of limitation found in savants exists within their special area of expertise. For example, calendar calculators tend to be accurate only within spefound in savants exists within their special area of expertise. For example, calendar calculators tend to be accurate only within specific ranges of years, and those ranges differ from one individual to the next. Moreover, although calculators might be able to perform rapid and complex operations concerning dates, or remember extremely long numbers, they might be unable to do simple addition or change a dollar bill. The famous calculating twins, George and Charles, amused themselves by exchanging 20-digit prime numbers, and they could factor nearly any number presented to them; but they could not count to 30 (Sacks, 1985). Another arithmetical prodigy's calculating speed increased if the number 27 was featured in the problem. Still another could rapidly solve complex algebraic problems in his head; but he seemed unable to comprehend even simple principles of geometry (Treffert, 1989). Of course, everybody's abilities are idiosyncratically circumscribed to some extent, both as compared to their other abilities and also within their particular areas of specialization or competence. For example, musicians may be able to play some instruments but not others, conduct but not compose, exhibit a command of Baroque but not late Romantic musical idioms, or sing Verdi and Mozart but not Rossini, Wagner, or Wolf. Similarly, athletes may be able to play some sports but not others, or some positions but not others within a particular sport. (To take an extreme case, in American football a defensive end may be adept at playing from the right—but not the left—side of the line.) The performances of savants bring this familiar phenomenon into sharper relief. More importantly, they help remind us that if psi is likewise an ability, it too may appear in extremely circumscribed and idiosyncratic forms, even if psi is the sort of ability that, as in cases of savantism, is highly developed as compared to one's other abilities.

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I realize that this observation is not new, but I think it is important not to forget that even gifted psychics may have some psychic abilities but not others, and that such limitations would hardly be unprecedented. An all too familiar, and exasperatingly glib, skeptical argument is that if a subject has one psi ability, he should have another; but since he is unable to demonstrate the latter, it is unreasonable to claim that he possesses the former. For example, an old argument against physical mediumship is that if superstars like Home and Palladino could move tables and make objects materialize, why could they not also, say, cure disease or control roulette wheels and slot machines? The implication is that since they did not (or could not) do the latter, they had no psychokinetic abilities at all. This fallacious argument is common enough to observe a name; let us call it the all-purpose-psi argument.

I have discussed this particular skeptical maneuver at length elsewhere (Braude, 1986). For now, we need only observe that, among other things, it rests on a very superficial (if not thoroughly moronic) assumption concerning the distribution of and connections between human abilities. Actually, we know too little about psi (or even just PK) to have a competent opinion about what a person's repertoire of phenomena or psychic abilities ought to be. In fact, it takes only a minimum of humility and common sense to admit that we have no idea how or if having a certain psychic ability affects the probability of having another. Nevertheless, despite our current state of ignorance, it is reasonable to expect psychic abilities to be as variable and individualistic as every other human ability. Under the

circumstances, then, claiming that a medium who can levitate tables should also be able to heal the sick is as foolish as saying that a gifted athlete should also have a talent for medicine, or that someone who can play the trombone should also be able to pole vault, repair automobiles, or design and build a house. Moreover, this familiar version of the all-purpose-psi argument shows little appreciation of the psychology of mediumship and why the control of roulette wheels and other activities would have been an inappropriate and particularly intimidating manifestation of psi.

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C.E.M. Hansel has favored another skeptical gambit similar to the all-purpose-psi argument, namely, the inexcusably thick-headed contention that if people have ESP, they ought to be able to demonstrate it on the spot by telling Hansel what he is thinking. That challenge also commits the double-barrelled offense of, first, ignoring the obvious fact that human abilities generally are idiosyncratically circumscribed, and second, overlooking the psychology of psi—in this case, the likelihood that psi is as situation-sensitive as virtually every human capacity, ability, or skill.

We should also remember that a person's abilities may remain latent and undeveloped, and that the resulting apparent limitations in our abilities may sometimes be self-imposed or determined by various features of our overall psychology. For example, a person's fear of math may forever impede the development of mathematical abilities which he or she actually possesses. Those abilities might also remain undeveloped as a result of the mere belief that women cannot excel at math, or the normative belief that they should not excel not excel at math, or the normative belief that they should not excel at math. Another person's musical abilities may remain untapped or undeveloped because of a fear of failure or a fear of criticism. Similarly, it is reasonable to think that one's psychic functioning might likewise be curtailed in quite specific ways, in response to various fears and inhibitions, or one's overall world view. Indeed, there are good reasons for thinking that the great physical mediums demonstrated this phenomenon in several ways (Braude, 1986).

For example, Eusapia Palladino had numerous unsophisticated beliefs about the nature of mediumship and survival, including beliefs about which conditions were favorable to the production of phenomena (such as the presence of a curtain or "cabinet" behind the medium and a general preference for darkness or dim light). In fact, those were the conditions under which her most impressive phenomena were produced. D. D. Home was less fussy than Eusapia

¹ See, for example, the Nova/Horizon film, "The Case of ESP."

was about séance conditions, but even he had firm beliefs about the nature of his mediumship. For example, Home believed that his phenomena were particularly strong beneath the séance table, and perhaps for him they were. Not surprisingly, the most successful and resourceful investigators in both cases took those beliefs seriously; they simply imposed reasonable controls within the general sorts of conditions preferred by the medium.

Moreover, the phenomena of Home and Palladino were idiosyncratic in other respects. For example, Home, who had some modest normal musical ability (particularly on keyboard instruments), was apparently able to produce musical performances either on untouched instruments or on accordions held at the end of the instrument away from the keys. Palladino, however, had no apparent musical ability normally, and although she often seemed to produce sounds on untouched instruments, she produced no music. Similarly, in Home's case, witnesses often reported the production of written messages (frequently by disembodied hands). Eusapia, however, was illiterate, and although witnesses frequently reported touches, pinches, and so forth by ostensible limbs even while Eusapia was under the control of her investigators, I am aware of no reports suggesting that she was able to read or write mediumistically. In both cases, it seems, the mediums' normal range of abilities was mirrored in their mediumistic phenomena.

In fact (although this may be pushing things a bit), when Home and Palladino produced the same kinds of phenomena, those of Home apparently showed a degree of development and refinement in keeping with his overall character, whereas Eusapia's tended to be as crude or graceless as she normally was. For example, Home's disembodied hands were reportedly quite detailed and lifelike, and sometimes they were described as being beautiful or elegant. Moreover, their deformations and other distinctive features reportedly corresponded on occasion to those of the deceased communicator. By contrast, when Eusapia apparently produced visible limbs or appendages, they were usually described as knobby, ill-defined, and generally lacking in distinctive or clearly identifiable features. Similarly, Home's musical phenomena were frequently described in superlatives and were praised for their beauty and exquisite execution. By contrast, no phenomenon of Eusapia's was ever described in this way.

Similar observations hold for other cases of physical mediumship. For example, it may be that the ectoplasmic manifestations of Kathleen Goligher and Eva C. reflect the different ways their investigators influenced their beliefs and actions. Miss Goligher was studied primarily by an engineer, W. J. Crawford, and her extruding ectoplasm apparently raised tables in a way Crawford could well appreciate, namely, in the manner of a cantilever. By contrast, Eva C., under the scrutiny of biological scientists such as Richet and Geley, produced more organic sorts of manifestations (e.g., on one occasion Eva's ectoplasm reportedly grew into a miniature hand) (see Braude, 1986, for details of these cases). Although we cannot rule out the possibility of paranormal experimenter effects in these cases, it would not be unreasonable to suggest instead that the differences in the two mediums' phenomena parallel a more familiar and pedestrian situation, namely, the way in which the presence of others influences our behavior. We all know that different people and different situations elicit different sides of our personalities. That is why we tend to adapt our sexuality or style of humor to the company of different persons. In fact, the process of selectively revealing different aspects of ourselves to different persons is virtually automatic, and usually more instinctive than conscious.

Let me turn, now, to some issues concerning memory. The amazing mnemonic displays of savants and some others raise various questions about the nature and function of memory generally, and they suggest additional parallels with psychic functioning. First, however, we should consider whether to speak of memory as an ability or a capacity. I would suggest that memory can plausibly be regarded as both. Most organisms have some mnemonic capacity, however rudimentary; but in addition, there are specific mnemonic abilities not shared by all who have the capacity to remember—for example, the ability to remember very long digits, or nonsense syllables, or even the more mundane ability to remember telephone numbers. Because nothing in what follows seems to hang on whether we regard memory as a capacity or an ability, I shall temporarily use thes

ably.

When we examine the lives of so-called mnemonists, it is tempting to describe their mnemonic ability, not as a gift or marvelous endowment, but as an affliction or a handicap. In the most dramatic of such cases—for example, Luria's famous study of the subject he called "S" (Luria, 1968/1987)—exceptional memory seems to be incapacitating. Indeed, rather than describe mnemonists as people with superb mnemonic abilities or capacities, it is tempting to describe them as people *lacking* a certain useful ability, namely, the ability to forget. In that respect, the mnemonic abilities of most per-

sons benefit from what we could describe somewhat paradoxically as liberating constraints. Without the ability to forget, life would become virtually unmanageable. Hence, the normal constraints on our memories make a great deal of sense adaptationally.

Moreover, most if not all of what we forget seems to be dissociated from conscious awareness. Nevertheless, under the right circumstances (e.g., hypnosis and other altered states) we can remember what we had previously forgotten. In fact, that sort of retrievability is an essential feature of dissociative phenomena (Braude, 1991). Now it is not clear whether all people have (at least latently) the ability to recall consciously virtually everything that has happened to them, as Luria's subject was apparently able to do. But it is clear that most of us remember subconsciously many things that we do not remember consciously. Hence, the familiar and adaptationally appropriate constraints on normal memory seem primarily to be constraints on our ability to remember consciously.

Similar points have sometimes been made about ESP. If people were always and consciously gaining psychic access to every recognizable state of affairs, even those within a reasonable distance, their mental lives would presumably be hopelessly cluttered. In fact, our cognitive psi abilities would make little sense adaptationally if they were not constrained in the way our memory seems to be. Hence, the inability of even good psychics to use their ESP on demand and without limit may parallel the inability of normal persons with good memories to remember everything. Moreover, we may be psychically active on a subconscious level even though there may be no conscious indication or awareness of that activity. For all we know, then, the apparently liberating constraints on our psychic functioning may apply primarily to our ability to be psychic in ways that are consciously detectable.

Before leaving the topic of memory, I should mention that our normal mnemonic abilities are as idiosyncratically circumscribed as our other abilities. Some people are good at remembering numbers but not names, whereas others can remember names but not numbers. Some can easily recall song lyrics but not lecture notes, or things that they have read but not things they have heard. Musicians are usually able to remember many long pieces of music in every detail, but they might have difficulty remembering directions, birthdays, or visual information generally. Once again, therefore, it would be surprising, if not totally unpredecented, if psi abilities were not similarly subject-specific. In fact, in the absence of clear evidence to the contrary, it is outrageous simply to assume otherwise.

Survival and the Nature of Skills

These reflections bring me to a different, and much more thorny, set of issues, having to do with the literature on survival. Even the best and most sophisticated writings in defense of the survival hypothesis rely on questionable assumptions about human abilities and skills; but when those assumptions are replaced by more cautious (or obviously true) alternatives, the case for survival weakens considerably. (To avoid misunderstanding, I should emphasize that I am not resolutely opposed to the survival hypothesis, although I have various philosophical difficulties with it. In fact, I think it would be tremendously exciting and clearly momentous if we could make a good case for survival. I simply think we have a very long way to go, and the arguments that follow illustrate some reasons why.)

As most of you probably know, survivalist interpretations of the evidence compete with so-called "super-psi" explanations, framed in terms of high-level psychic functioning on the part of living persons (Braude, 1989). This is not the place to explore the extensive and tangled snarl of issues involved in that debate. Rather, I want to examine what many have found to be an unusually compelling argument for survival, partly in virtue of its alleged resistance to super-psi or other nonsurvivalist alternatives. The argument concerns cases apparently demonstrating the persistence of a deceased person's skills or abilities.

Generally speaking, a case is suggestive of survival when one or more living persons display knowledge closely (if not uniquely) associated with a deceased individual, and which we have good reason to believe could not have been obtained by ordinary means. That knowledge tends to fall into two broad categories: "knowledge-that" (propositional knowledge) and "knowledge-how" (abilities or skills). The most impressive cases, according to many, are those of the latter sort. Suppose, for example, that a living person, say, a professional medium or a child, displays an ability or skill he or she never manifested before (e.g., the ability to speak German, or write music), or perhaps an ability or skill uniquely associated with a deceased person (e.g., a distinctive style of humor or musical composition). Many writers believe that nonsurvivalist explanations, including super-psi explanations, fail for the best of these cases, even when they admit that super-psi explanations are always live options for cases of other sorts (in particular, those suggesting apparently paranormal knowledge-that). The ostensible persistence of

skills, they argue, is especially difficult to explain away along nonsurvivalist lines.

The general line of reasoning behind this position is as follows. Mere information or propositional knowledge is the sort of thing that can be acquired simply through a process of communication, normal or paranormal, but skills, such as playing a musical instrument or speaking a language, cannot be accounted for so easily. Granted, obtaining information is often a necessary part of skill development; but it is hardly sufficient. That is because skills are the sorts of things that persons develop only after a period of *practice*. And since the subjects in survival cases who display anomalous skills have had no opportunity to practice them first, it is reasonable to reject explanations in terms of super-ESP and to resort to survivalist explanations instead.

This familiar argument is superficially appealing; but it is defective nevertheless. To see why, consider first how the argument has been applied to the evidence for responsive xenoglossy. Many have felt that if a person can carry on a conversation in a language never learned through normal means, and if that is the language of an ostensible communicator expressing himself through that person, then this would constitute good prima facie evidence for survival (see Gauld, 1982; Stevenson, 1974, 1984). Now as Stevenson has observed, this bit of reasoning rests on a crucial and usually tacit principle—namely, that "if skills are incommunicable normally, it follows that they are also incommunicable paranormally" (1984, p. 160). According to Stevenson, it was Ducasse (1962) who first applied this principle to the evidence for survival, and Stevenson apparently considers it to be self-evident, or at least not worthy of a defense. But in fact, Ducasse's principle is not nearly as obvious as Stevenson suggests.

Consider: if Ducasse's principle is true, that is not because it is an instance of the more general principle "if any bit of knowledge χ is incommunicable normally, then χ is incommunicable paranormally." That general principle, in fact, seems to be clearly false. Indeed, if we accepted it, we could conclude a priori that ESP is impossible. It is reasonable to assume, then, that Stevenson (and others) do not accept this more general principle.

others) do not accept this more general principle.

Hence, if Ducasse's principle is true, it would presumably be true only of skills. But why? Every time we learn a new skill we must do a considerable bit of unlearning, if only of acquired motor and cognitive habits that would infere with manifesting that skill. Moreover, learning of any kind (whether of skills or information) is often heav-

ily resistance-laden. It can be hampered by an endless number of interfering beliefs, insecurities, and other fears. But these sorts of physical, cognitive, and emotional obstacles are often overcome relatively easily in hypnotic or other profoundly altered states. In that case, learning a skill might even be *facilitated* if the process bypasses the normal states in which our resistances to learning are strongest.

Actually, there are two crucial sets of issues here. The first concerns the possibility of expressing and acquiring skills by side-step-ping our customary resistance-laden modes of cognition. The second concerns the difficulty in generalizing about skills or abilities, including the ability to speak a language. These two sets of issues overlap somewhat, but I will try to keep them distinct.

To begin with, in order to decide whether skills can be communicated or acquired paranormally, one must first evaluate the rich and suggestive literature on dissociation.² For example, cases of and suggestive literature on dissociation. For example, cases of multiple personality suggest that dissociation facilitates the development or acquisition of personality traits and skills that might never be developed or displayed under normal conditions. Alternate personalities exhibit wide varieties of behavioral and cognitive styles that are not explainable simply in terms of propositional knowledge. Those cognitive styles encompass various sorts of abilities and skills, such as artistic and literary ability, and the skills of drawing, sculpting, and writing poetry. Differences also manifest commonly as changes in handedness and handwriting. (Of course these abilities and skills, like those of a normal person, might occur in quite distinctive or idiosyncratic forms.) But since alternate personalities appear quite suddenly and sometimes evolve quickly, their distinctive traits might emerge without any practice. (I realize we are very close here to the second set of issues—namely, whether Ducasse's principle applies to every skill, or just certain kinds of skills, and whether there are, accordingly, relevant differences between kinds of skills. I shall return to these issues shortly.)

Moreover, until one decides what to make of the case of Patience Worth (Braude, 1980; Cory, 1919; Litvag, 1972; Prince, 1927/1964), it is premature to dismiss super-psi—or simply nonsurvivalist—ex-planations of responsive xenoglossy. The medium in this case, Pearl Curran, with only an eighth-grade education, no apparent literary ability, and no apparent interest either in literature or in arcane

² Both Stevenson (1974) and Gauld (1982) do this to some extent, but both authors are saddled with an impoverished picture of multiple personality disorder (see Braude, 1991). Moreover, they both fail to discuss some of the more impressive cases of dissociation, such as Patience Worth.

areas of scholarship, suddenly began producing a steady stream of poetry, novels, and remarkably pithy and witty conversation through a ouija board. The material purportedly came from a personality named Patience Worth, who claimed to be a seventeenth-century Englishwoman. But there is little reason to think that the evidence supports the hypothesis of survival. Although Patience offered various clues about her origin and identity, subsequent investigation revealed nothing to indicate that a Patience Worth ever existed.

A more reasonable interpretation of the case is that it demonstrates, even more dramatically than the usual good cases of hypnosis, the power of dissociation to liberate otherwise hidden or latent abilities. Although all the Patience Worth communications exhibit a distinctive and consistent personality, as well as common verbal traits, Patience expressed herself in several different linguistic styles. In fact, one of her works was a Victorian novel, despite the fact that (as the book's dust jacket wryly noted) Patience was a pre-Victorian author. Most of the time, however, Patience communicated in a quite unprecedented style rooted in archaic Anglo-Saxon idioms. Much of her vocabulary was appropriate to the seventeenth century, but some seemed to belong to a period several centuries earlier; and some of the words she used on those occasions were tracked down by scholars only after they appeared in the Patience Worth scripts.

Many view these literary works as being of exceptional quality, probably the best literature ever produced in a case of mediumship. But we needn't plunge into the murky waters of literary criticism. What matters here is that Patience Worth's poems and novels—and, indeed, her entire vivid personality—betray an intelligence and psychological style profoundly different from that of Mrs. Curran. Furthermore, Patience's abilities and skills go well beyond anything Mrs. Curran (and, arguably, anyone else) ever exhibited. Patience was able to compose often exquisite poems on the spot in response to requests to write poems on particular topics. She could compose several works, sometimes in distinct literary styles, on the same occasion, alternating passages of one with those of another. She could write part of a novel for a while, leave off in mid-sentence to converse or work on something else, and then return to the novel the next day exactly where she had left off. More impressively still, with the exception of a beautiful child's prayer written haltingly and with a few revisions, Patience produced her entire corpus of thousands of poems and several novels without ever making a correction. She

also performed astonishing compositional stunts. On one occasion she was asked to compose a poem, each line of which would begin with a different letter of the alphabet, from A to Z (omitting X). After a pause of a few seconds, the poem came through the ouija board as fast as the scribe could take it down.

The literature on dissociation, then, indicates that a person may apparently acquire, develop, or manifest novel abilities and skills under various kinds of abnormal, but not necessarily paranormal, circumstances. We are hardly in a position, then, to assert that the sudden appearance of new abilities and skills is impossible under even more extraordinary (i.e., paranormal) conditions. In fact, we have no choice but to admit our ignorance. We simply do not know what human beings are capable of under conditions we can scarcely com-

prehend.

Another, possibly deeper, set of problems concerns the way even sophisticated writers on survival (such as Stevenson and Gauld) generalize about skills. For example, Stevenson asserts: "Practice does not just make perfect; it is indispensable for the acquisition of any skill" (1984, p. 160). There are at least two problems related to that claim. The first is that skills can differ dramatically from one another in many respects, one of which is the importance of practice in skill development. I shall return to this point shortly. The second problem is that the acquisition of skills is not clearly the issue. All one is entitled to discuss, strictly speaking, is the manifestation of skills. We have no idea whether or to what extent new skills have been acquired by mediums or by the subjects of reincarnation investigations. This is not a trivial distinction, because practice is clearly not always needed to manifest skills for the first time.

To see this, one needs only to consider child prodigies and cases of savantism. In fact, typical musical prodigies such as Mozart, Mendelssohn, and Schubert, and mathematical prodigies such as Gauss, manifest exceptional skills *prior* to their being perfected or developed through practice. Moreover, it is of no use to protest that those prodigious skills were rudimentary when they first appeared and that they simply evolved with amazing rapidity. For one thing, that seems simply to be false. For example, Mozart was able to write down a complex piece of music while composing another one in his head; but to my knowledge there is no evidence that he first had to practice that skill. More importantly, we have no reason to think that the subjects in survival cases demonstrate levels of expertise more impressive than, say, Mendelssohn's initial displays of musicianship. Quite the contrary; the suddenly emerging skills of child

prodigies often far exceed anything displayed by the subjects investigated in xenoglossy cases or other cases suggesting survival. How, then, do we know to what extent certain conditions (e.g., dissociation) may unleash prodigious capacities latent in many (or all) of us? Of course we do not need to consider prodigies and savants to appreciate this point. Ordinary folk demonstrate it all the time.

Of course we do not need to consider prodigies and savants to appreciate this point. Ordinary folk demonstrate it all the time. Consider, for example, the skill of playing tennis. Many people are naturally athletic, even though they may not be prodigiously gifted; and to the occasional consternation of those who are less precocious athletically, natural athletes can, on their first try, play a game of tennis reasonably well—at least without looking hopelessly foolish. In fact, on their first try they might even play as well as or better than others who have played for years, taken lessons, and so forth. More importantly, however, the initial tennis-playing skills of natural athletes would, at the very least, match the unimpressive linguistic skills displayed in the best cases of responsive xenoglossy. (There is even an interesting parallel between conversing in a language and playing tennis. Responsive xenoglossy involves more than the ability to form sentences in a new language; it also involves understanding and responding appropriately to sentences in that language. Similarly, the skill of playing tennis goes beyond being able to get the ball over the net and in bounds. It also requires being able to return shots.)

To complicate matters further, when Stevenson argues that skills cannot be communicated or manifested without practice, he mentions riding a bicycle, dancing, and speaking a foreign language as examples. Similarly, Gauld writes: "The ability to play bridge well is not simply a matter of learning (whether normally or by ESP) the rules (considered as a set of facts together with the precepts given in some manual). It can only be acquired by practising intelligently until things fall into place. And it is the same with learning a language," (1982, p. 102). It appears, however, that there may be serious disanalogies between linguistic competence and these other skills. In fact, it is unclear whether one can even generalize about how difficult it is to learn a new language.

Let us take second things first and consider some aspects of language learning. To begin with, learning a second language may be a significantly different process from learning a first language. And if the new language is not radically different from one's own, the sort of minimal linguistic competence displayed in cases of xenoglossy may require little more than some knowledge (knowledgethat) of vocabulary and grammar, possibly paranormally acquired. After all, once one already speaks a language, a major part of learning a new language is exposure to it, whether that is through listening to actual conversations, or by watching movies or listening to audio tapes in one's sleep (or while falling asleep). And, since we are entertaining paranormal hypotheses, we cannot rule out the possibility that subjects might have had the requisite exposure unconsciously and psychically. Sharada's mastery of Bengali, Jensen's command of Swedish (or Norwegian), and certainly Gretchen's German (Stevenson, 1974, 1984) do not seem outlandish for an adult who might have been exposed to those languages extensively, but unconsciously (and even psychically), especially if we leave open the possibility that one's linguistic skills may be enhanced under dissociative or other unusual conditions. Moreover, the linguistic competence of Sharada, Jensen, and Gretchen is not as much of a feat as demonstrating a similar competence in a language radically different from one's own.

(I should note that there are cases in which mediums speak in languages [e.g., Hungarian, Chinese] that are very different from their own and to which they presumably had no normal exposure. But apart from serious questions about the reliability of the data in those cases, in every case I'm familiar with some sitter present knew the language, and either they or someone else benefitted in rather obvious ways from receiving communications in those languages. At best, then, the possibility of sitter-influence [including sitter-PK] and unconscious sitter-collaboration in these cases would be so strong that we are not justified in making much of the medium's appar-

ently surprising linguistic competence.)

At any rate, if my earlier suggestions about language use are on the right track, linguistic competence may differ significantly from other sorts of skills, for example, riding a bicycle, dancing, or playing the piano, expertise in which may be relatively independent of one's other abilities and skills. Of course, if one who can already dance performs a kind of dance he never learned before, that is considerably less impressive than a dance performed by someone previously lacking in muscular coordination and rhythmic finesse. That is why the musical compositions of Rosemary Brown are less than compelling. They are clearly continuous with musical abilities she had already displayed, just as Sharada's command of Bengali is clearly continuous with her already well-developed linguistic skills in another Indian dialect.

Apparently, then, what would be impressive prima facie evidence for survival is not merely the manifestation of a novel ability or skill, but rather an ability or skill substantially different from and discontinuous with those one has already displayed. But in that case, it is irrelevant to point out how difficult it might be to acquire (or manifest) such skills as playing the piano or dancing without practice (ignoring, for the moment, the problem posed by child prodigies). The evidence for the persistence of skills suggesting survival contains nothing better than the evidence for responsive xenoglossy, and the best of those cases do not demonstrate the manifestation of skills radically discontinuous from the subject's other abilities. Hence, until someone does something comparable to playing the piano, never before having played a musical instrument or exhibited any musical ability, I think we must conclude that this portion of the evidence for survival is considerably less impressive than its proponents have claimed.

Anti-Mechanistic Postscript

I suppose this address would seem uncharacteristically tame and sweet-tempered if I failed to berate my colleagues in the PA about something or other. So, without further ado, let me offer you my reprimand du jour. This, too, concerns the nature of abilities, and in particular the strategies appropriate to studying them.

Although exceptions are not hard to find, parapsychologists tend to be rather pretentious scientifically. In part, that is because they suffer from various misconceptions about what it is to be scientific and clear-headed; and in part, it is because they are often below.

Although exceptions are not hard to find, parapsychologists tend to be rather pretentious scientifically. In part, that is because they suffer from various misconceptions about what it is to be scientific and clear-headed; and, in part, it is because they are often beleaguered by stupid, incompetent, or dishonest attacks, usually from critics who know less than they about psi research. It is hardly surprising, then, that parapsychologists tend to be defensive about their activities. They take pains to demonstrate that they follow recognizably careful procedures and methods endorsed by other branches of science. They want to appear as if the only difference between their work and that of other reputable scientists is the domain of phenomena under investigation.

However understandable this position may be, it is nevertheless rationally indefensible. Sometimes it even borders on the pathetic, as when it betrays a cowardly refusal to acknowledge points that should be obvious to all but the foolishly obstinant. One of those points, noted at least as long ago as Aristotle, is that different domains require different methodologies (i.e., different investigative procedures and modes of explanation). Parapsychologists are squan-

dering an opportunity to be on the cutting edge of scientific inquiry. They could be genuine trailblazers with respect to their data and methods. But in fact, parapsychologists do not really operate on the frontiers of science; they are not the pioneers they often fancy themselves to be (and others expect them to be). Instead, they tend to be disappointingly unimaginative, shortsighted, and conventional. They follow meekly in the already misguided footsteps of traditional experimental psychology by slavishly conforming to methods canonized in physics. They are also too easily impressed and intimidated by the physicist's apparently virtuosic command of imposing formalisms, just as legions of philosophers have been unjustifiably awed by colleagues who couch their discussions in the language of logic. They strive to make their work technically crisp and fail to notice that it remains conceptually crude. I find this profoundly disheartening. It is preposterous to suppose that the behavioral sciences are analogous to the physical sciences in all but the phenomena. It is naïve and professionally chauvinistic to think that the principles and methods of physics are inherently deeper than those of other sciences, especially the behavioral sciences. And, it is simply foolish to assume that psi phenomena will conform neatly to the few rigorous experimental procedures that have proven useful in psychology. chology.

One symptom of parapsychology's obsessive and parochial allegiance to the methods of physics is the tacit acceptance of what I have called the "small-is-beautiful assumption" (Braude, 1986), according to which there are no primitive or unanalyzable observable phenomena or lawlike regularities; primitive phenomena appear only at the level of the very small, for example, the subatomic, neurological, or biochemical level, and never, say, at the level of behavior. I shall not now review the complex and lengthy arguments leading to the rejection of that assumption; they have been rather painstakingly laid out in my previous writings (Braude, 1979, 1986). So, for now, cloaked in the temporary impunity of the PA presidency, I shall simply give you a brief blast of Braude-dogma.

Many, if not most, human capacities and abilities cannot be analyzed in terms of lower-level processes and mechanisms. Memory is one of them (Braude, 1979; Bursen, 1978; Heil, 1978). That does not mean that no explanations of memory are possible, just that ver-

Many, if not most, human capacities and abilities cannot be analyzed in terms of lower-level processes and mechanisms. Memory is one of them (Braude, 1979; Bursen, 1978; Heil, 1978). That does not mean that no explanations of memory are possible, just that vertical explanations (i.e., explanations by *analysis*) cannot work. That is no more cause for alarm than in other branches of science where unanalyzable phenomena are countenanced as a matter of course. In fact, in most branches of science, it would be considered a victory

of understanding to determine which phenomena and regularities should be treated as primitive.

The reasons for believing that psychic abilities and capacities are unanalyzable parallel those for regarding memory and volition as unanalyzable. In a nutshell, mechanistic analyses of those phenomena rest on deeply nonsensical presuppositions concerning the nature of properties generally and mental states in particular (Braude, 1979, 1986). Hence, just as putative memory mechanisms will never explain how memory works, appeals to lower-level mechanisms will not reveal the nature and structure of PK. In fact, because these phenomena are unanalyzable, there is no answer to the question how they work. That they exist and work, and that certain regularities obtain, are brute facts of nature. Granted, various mechanisms may be employed in the process, just as human vocal and auditory mechanisms play a role in verbal communication, and neural and muscular mechanisms are utilized in volition. But communication and volition cannot be analyzed in terms of, or reduced to, these mechanisms, and the same is true of ESP and PK.

The real trailblazers of psi research, then, will be those investigators who break from the rigid and fruitless tradition of looking for analyses of psi abilities and capacities in terms of lower-level processes and mechanisms. Probably the most valuable attributes a psi researcher can have are those that are equally (and ironically) in short supply in psychology, namely, perceptivity and sensitivity. Parapsychologists need to be good observers; they must perform a role similar to that of the biological naturalist who can record and systematize the subtleties of broad ranges of organic behavior. For one thing, as I mentioned earlier, that sort of work is a vital preliminary to doing anything with psi in a laboratory setting. Until we have some sort of empirically justified idea of what psi is doing in the world (and it is no more than a conceit to think we have it now), we do not even know what it is we are looking at in the lab. But equally important, playing the psychic naturalist is about all we can ever do with psi phenomena. There is no way, in principle, to apply conventional experimental controls in the study of psychic functioning (Braude, 1986; Eisenbud, 1982, 1983). Like it or not, psi demands a different mode of investigation.

If the PA is to be an organization of conceptual pioneers, it must boldly take an anti-mechanistic and pluralistic stand on the nature

If the PA is to be an organization of conceptual pioneers, it must boldly take an anti-mechanistic and pluralistic stand on the nature of science. It must repudiate the idea that only the methods of physics yield genuine scientific understanding. It must recognize that there are different legitimate forms of understanding and explanation, and different ways of systematizing a domain of phenomena, no one of which is inherently preferred over the others. For example, experimentation is not essential to the scientific enterprise; indeed, its success and utility vary greatly from one domain to the next. Experimentation is appropriate and useful in physics, chemistry, and microbiology, less so in astronomy, geology, and meteorology, and still less so in the behavioral sciences. What we need from science is systematicity, some way of converting an otherwise motley and disorganized collection of observations into an orderly and intelligible whole. But ultimately the domain guides and limits our attempts to systematize and understand it. It is almost comically arrogant to think that Nature should conform to our favorite modes of investigation, or that we should dictate to Nature the forms in which we are willing to accept its secrets.

But parapsychologists do that all too often. Rather than concede that psychic abilities, like most human abilities, may be best studied in real-life contexts where those abilities have genuine dynamic relevance, they attempt to study psi in artificial settings that, at best, are deeply significant only to the experimenter. Rather than accept the limitations of vertical explanations in the case of human abilities, they stubbornly theorize about their subjects as if they were biocomputers analyzable in mechanistic terms. And rather than recognize that some parapsychological laws and regularities may not translate without residue into the language of another science, they assume that only physics can uncover the deepest facts about psi. That is why parapsychology is so often boring and unilluminating; and that is why parapsychologists, despite their protestations to the contrary, have no greater understanding now of psychic abilities than they did when Rhine arrived at Duke.

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