

FIRST SIGHT: PART TWO, ELABORATION OF A MODEL OF PSI AND THE MIND

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ABSTRACT: The *First Sight* model presented earlier (Carpenter, 2004) is developed further here. The essential elements of the model are summarized and the place of psi functioning within the context of other preconscious psychological processes is emphasized. In particular, the hypothesized posture of unconscious focus toward or away-from extrasensory content is discussed in the context of the constructs of assimilation and accommodation as they are understood to function in the formation of perceptions and judgments. Three areas of experience are picked as being especially pertinent to seeing the interplay of psi processes with other preconscious processes: subliminal or suboptimal sensory perception, memory, and acts of creativity. Pertinent research in each area is summarized with some syntheses offered. The model's utility is evaluated in terms of three criteria: its congruence with some major findings in parapsychology, its ability to shed light on the apparent disparity between parapsychological phenomena and everyday experience and common sense, and its capacity to harmonize the findings of parapsychology with our larger scientific understanding of reality. Some directions for future research that are implied by the model are outlined.

This is the second of two articles introducing a model of psi and the mind, called *First Sight*. Basic aspects of the model are spelled out in the prior paper (Carpenter, 2004). The current paper further develops some features of the model primarily in terms of its implications for preconscious psychological processes in general. It also examines the ability of the model to account for past research findings and guide future research, and then focuses on the utility of the model for communicating parapsychological issues to others who do not immediately share an interest in them.

First, some major elements of the model as given in the first paper are summarized here to provide a context for the material to follow.

OVERVIEW OF A MODEL OF PSI AND THE MIND

The model holds that psi processes are an ordinary and continuous part of the psychological functioning of all organisms. In fact, they are the leading edge of the formation of all experience and all volition. Preconscious psychological processes that are intrinsically unconscious precede and condition the development of all experience. Cognitive psychologists speak of these as providing the *context* of consciousness (Baars, 1997, pp. 115-129). These processes typically function rapidly and transiently. Studies of perception without awareness demonstrate that unattended stimuli serve

to arouse nexi of meaning and feeling that channel the development of perceptual experience. The model assumes that the development of all other forms of experience in addition to perceptual, as well as all volitional action, are similarly preceded by preconscious orienting processes. Psi processes initiate these series of activity. Prior to the action of a subliminal stimulus, an extrasensory apprehension of its significance serves to orient the mind toward the development of the meaning to come.¹ Prior to the commencement of any deliberate action, psychokinetic influence acts to begin the physical processes in the body that will enact the decision and may begin to exert some influence on the object of intention beyond the body as well.

For this conception to be sensible, we need to assume that each organism exists, by its nature, beyond its own physical boundaries, in some sort of commerce with the larger surround of space and time. A phenomenological/existential model of the nature of conscious being is employed. One implication of this is that even preconscious processes are best understood in terms of personal meaning and choice rather than impersonal biological mechanism.

The intrinsic ambiguity of psi information is a function of the fact that with it alone there is no sensory information available, and sensory information is required to clarify a psi impression into a perception that can be construed.

The initial psi stage of the formation of experience involves an access to potential knowledge that is indefinite in extent. We cannot know its boundaries or anything else about it directly because it is thoroughly unconscious.

Psi in its normal, everyday functioning is presumed to be continuous and extremely efficient. Like the effects of subliminal stimulations, extrasensory apprehensions can be inferred by examining nondeliberate expressions of the orienting nexi of meaning and feeling that they arouse. Psi processes are neither knowing nor acting, as we ordinarily use the terms, because these phenomena belong to the province of consciousness. Rather, in their normal functioning, psi processes serve as bridges toward the efficient development of these phenomena.

Psi functioning is presumed to be bimodal. In terms of extrasensory perception, the mind elects to orient either toward the object of potential awareness or away from it. This capacity of the mind to preconsciously orient toward or away-from as befits the needs of the organism is referred to in the prior paper as the *Hypothesis of Directional Intention*, as it is proposed that the primary determinant of the direction of orientation is conscious and unconscious intention. These bimodal tendencies may be relatively stable in regard to some meaning, or they may be relatively unstable, switching

¹ While a given extrasensory apprehension may or may not reach forward in time, all are presumed to function as "pre-cognitions" in the sense of being "prior to knowing" and are presumed to serve the function of anticipation.

rapidly. Switching directional tendencies is presumed to be a function of mixed or shifting intentions in regard to the potential meaning. This is referred to as the *Hypothesis of Intentional Stability*. A stable tendency toward knowing the potential meaning facilitates our rapid and accurate experience of it. On the other hand, a stable orientation away from the meaning will facilitate the development of some alternative experience and behavior instead. Because (as we assume) the mind always strives to experience the one most useful thing at any given moment in terms of a shifting fabric of needs and situations, the movement away from many potential experiences is very functional. A stable orientation away-from some meaning also may serve to avoid preconsciously apprehended danger in an efficient manner, as, for example, by the inadvertent behavioral avoidance of a predator or a potential accident. In general, a stable orientation serves to assure that the behavior of the organism will reflect some response to the potential meaning, whereas rapidly shifting orientations will act to assure that no apparent response at all will be reflected in behavior.

SOME ELABORATIONS OF THE MODEL

An Undeveloped Experience

When anticipational networks have been aroused by some extrasensory or suboptimal-sensory information, and validating sensory experience is *not forthcoming* because the potential event does not develop within the sensory ken, then the mind ordinarily adjusts to this situation by turning away from the original concern in favor of something else that may be more importantly incipient to another experience now to come. This turning away initially causes a subtractive effect (the intimation of the potential event is very unlikely to enter into a response or perception) and then may be followed by a rapidly shifting oscillation of directions, which acts to "bind" the concern safely out of awareness. In the preconconscious part of our mind we wish to form and understand meaningful experience and will ordinarily move on to where it is actually developing. Rapidly shifting intention should serve to assure that the potential meaning now felt to be not-salient will evoke no distracting behavioral or cognitive response at all.

Determined Meaning and the Rejected Alternatives

We may speak of cognitive closure as a situation in which one is committed to some construction of experience. This is presumed to trigger first psi-missing and then unconscious tendential switching in regard to alternative meanings or potential experiences. At such a moment, I know what I am concerned with experiencing, and I am engaged with understanding it or working with it ("I have an apple before me. What shall I do with it?"). In favor of this concern, other potential issues are held in

abeyance. Persistent reference to contrary elements of potential experience would dilute one's focus, but persistent counter-reference would similarly serve to distract cognitive resources. Tendency switching is proposed to be the process employed toward the objective of effectively excluding all distractors. Cognitive closure may be contrasted to more open-ended or uncertain states in which one is not yet committed to any clear construction of an experience. In the more open state, tendency stability is expected in order to draw upon allusions to the potential meaning for any help they may offer in constructing a useful experience.

Assimilation and Accommodation

Thus far, in tune with the teleological character of this model, the direction of preconscious psi orientation has been said to be determined by intention. One way to imagine in more detail how this process might work is suggested by the literature that addresses the question of the participation of preconscious or incidental elements of context into the formation of percepts and social judgments. Both lines of work use the concepts of assimilation (additive participation) and contrast (subtractive participation). For a contextual element to be assimilated, it must be preconsciously judged to be similar to the developing experience or to important elements of the task or to important persistent concerns or desires (and hence, in the language used earlier, pertinent to the overarching task of bringing forth the most useful experience or response in the moment). If the element seems to be too different, it is likely to be subject to the phenomenon of contrast and definitively excluded from the forming experience. In the formation of a visual perception, when a visual gestalt is formed, elements that are contrary to the gestalt tend to be dropped from awareness (Kohler, 1947). Similarly, in the formation of a judgment of a person (and presumably many other sorts of judgments as well), a subliminal prime is assimilated when it apparently is judged preconsciously to be relevant to a target, and it then biases perception of the target in the direction of the prime. A subliminal prime shows the phenomenon of contrast when it is preconsciously judged to be irrelevant to the target, and this is expressed by a lowered probability that the prime will be expressed in the perception (Fazio, Powell, & Herr, 1983; Higgins, 1996; Srull & Wyer, 1980; for a meta-analytic review, see DeCoster & Claypool, 2004). Schwarz and Bless (1992) proposed an *inclusion-exclusion* model, arguing that the influence of a prime depends on the ease with which it can be incorporated in a target impression. A prime that can be easily included with the target becomes assimilated, biasing the impression toward its suggestion. A prime that cannot be included may be expected to have the opposite effect, causing contrast and biasing the result away from the prime. I propose that the same process at an extrasensory level results in psi-missing (or extrasensory contrast).

Research has shown that if a percept or judgment or task is highly defined and specific, the criterion for "similar enough" becomes stringent, and most peripheral elements are excluded (rendered into contrast). On the other hand, if a developing experience is relatively undefined, the criterion is looser, and more elements of context may be seen as usefully similar, and assimilated. I assume that the same thing happens with extrasensory apprehensions. When experience is clearly construed or otherwise highly defined, reference to extrasensory material will tend to express as psi-missing, whereas when it is less well defined, the probability of assimilation (psi-hitting) is increased.

States of sustained uncertainty and absence of clear cognitive work have been found to be psi-conducive as well as conducive to the expression of subliminal stimulation. Persons who are more prone than most to psi-expressive behavior are likely to be able to sustain cognitive uncertainty or for some reason to be relatively unable to achieve clear closure.

What Do ESP Scores Express?

A participant's score on an ESP test is not presumed primarily to reflect some stable individual characteristic. Rather, in terms of the *First Sight* model, such a number reflects a momentary posture of a certain sort toward the target and other aspects of the task.

A correct guess is presumed to indicate the action of an unconscious intention to approach the potential experience and possibly to become aware of it. The guesser is preconsciously judging the extrasensory content to be sufficiently congruent with the demands of the task and one's desires involving it that the content is assimilated into the response (impulse, image, association, or whatever) and is then used to guide a correct choice. Significantly positive scoring across a period of effort suggests a consistent unconscious intention to approach.

A miss reflects an unconscious intention to avoid the incipient material. The material is being judged to be sufficiently incongruent with one's wishes involving the situation (for whatever reason) to evoke a contrast response that has led toward a choice in some alternative direction. Significant missing across a period of effort indicates the action of a consistent unconscious intention to avoid the potential experience and knowledge of it.

A chance-level score across a period of effort is not taken as an absence of psi process but as an implication of switching intention and direction of approach such that neither an additive nor a subtractive reference to the material is evident overall.

Considering aggregate performance across runs, when no overall directional trend is present in a subject's performance but the scores show an extra-chance extremity of scoring (large variance), this is taken to express the action of a persistent, unconscious sense that the potential experience is

salient across runs of guessing but also to express the switching of intention to approach or avoid across runs. That is, the direction of intention is stable within runs but switching between runs.

When significantly consistent chance-level performance is observed across runs (small variance), it expresses a consistent intention both within and across runs for the participant not to be distracted by the potential experience and move either toward or away from it.

Further elaborations of these ideas will be discussed in later sections, particularly those focusing on the decline effect and the sheep-goat effect.

THE COMMINGLING OF PSI AND OTHER PRECONSCIOUS PROCESSES

This model implies that preconsciously the mind draws from all its potential sources to find the most adaptive response to a situation or bring the most important issue to the stage of consciousness. In the previous paper this was referred to as the *Hypothesis of Functional Equivalence*. Psi apprehensions are expected to be used along with all other material available, such as that from ongoing sensations or from memory or from the imaginative resources of the creative process. However, it is only when uncertainty is sustained for a time and the solution is not readily at hand that we would expect to see the traces of the psi process. If something is clearly seen or readily remembered, or some problem is easily solved, the issue will be quickly closed and we will see only the clear working of consciousness. Therefore, it is when something is uncertainly remembered or unclearly perceived, or when some creative production is not quite within reach, that preconscious processes, including psi, may be visible,² even though they are implicitly active in the development of all consciousness. In such cases, this model predicts that extrasensory information will be combined with information from other sources, frequently additively but sometimes subtractively.

Extrasensory information is presumed to combine additively with sensory information when it is preconsciously understood to be contextually useful in the interpretation of the sensory information. When it is preconsciously judged to be irrelevant to the sensory material or otherwise contrary to the task of most fruitfully understanding it, the effect of the extrasensory material will initially be subtractive (i.e., it will tend to be expressed by some sort of behavioral reference less often than we would expect by chance) and subsequently, through the mechanism of rapid directional switching, it will come to have no apparent behavioral reference at all.

² In the context of normal sensory psychology, this is congruent with the Zeigarnik (1927, 1967) effect, in which the failure to cognitively complete a task leads to prolonged motivation that in turn leads to an enhancement of memory of the uncompleted problem (Lewin, 1935; Martin, Tesser, & McIntosh, 1993; Rothermund, 2003).

Three major areas of experience that may involve a sustained lack of cognitive closure are the interpretation of subliminal or unattended sensory information, the retrieval of memory, and the achievement of some creative production. All of these would seem to be fruitful areas in which to study the confluence of psi information with other preconscious information. The next sections summarize some findings that bear upon this question.

Psi and Ambiguous or Subliminal Sensory Information

When sensory information is clear and unambiguous, conscious perceptions spring quickly to mind, and the influence of psi processes are not expected to be visible. However, when sensory information is so attenuated that it is difficult to perceive, one must struggle to understand it, "guessing around" the cues until a perception is formed. If the stimulation is so attenuated or unnoticed that it is subliminal and unconscious, then there can be no effort to construe ambiguous cues and any effects of the stimulation may be experienced only as inadvertency or misattributed to something else. It is in this situation of subliminal or "suboptimal priming" (Murphy & Zajonc, 1993) that an interaction between suboptimal-sensory and extrasensory processes may be seen. The expectation that effects frequently will be additive when they are acting together is supported by the fact that subliminal stimuli themselves often have been found to show additive effects (Bargh & Tota, 1988; Fulcher & Hammeri, 2002; Jaskowski & Skalska, 2003; Murphy, Monahan, & Zajonc, 1995).

Extrasensory Perception and Subliminal Perception as Correlated Capacities

A number of researchers have obtained scores from both extrasensory and subliminal-sensory paradigms with the same participants. Schmeidler (1986, 1988) has carried out an analysis of 24 reported experimental series of this type, dividing them into two groups: weak subliminal or suboptimal stimulation (well below the conscious threshold) and strong stimulation (near the threshold). In accordance with her expectations, she found that of the 22 series with weak stimulation, 17 showed a positive relation between subliminal and ESP scores. Nine of those were statistically significant. There were no significant relationships in the opposite direction. The 2 series with stronger subliminal stimulation produced significant negative relationships. Schmeidler concluded from this that truly subliminal stimulation functions in a way very similar to ESP but that stronger stimuli are processed differently.

In another series of studies, a high-scoring special subject was found to process information similarly in subliminal and extrasensory responding, relying on cues of visual similarity in both cases (Kanthamani & Kelly, 1974; Kelly, Kanthamani, Child, & Young, 1975). These findings support the

idea that when persons are producing responses based upon preconscious apprehensions, extrasensory and subliminal-sensory information is accessed (or not) in generally similar ways. Persons who are prone to successfully consult pure inadvertency when uncertain may demonstrate this tendency whether the inadvertencies imply extrasensory or subliminal material, whereas persons who are prone to focus more exclusively on tangible sources of information may be more successful when such information is at hand, like the participants in Schmeidler's review who were better at interpreting marginally subliminal stimulations. In terms of the *First Sight* model, one would say that a person's tendency to make positive use of preconscious information for whatever reason will be expressed with extrasensory and subliminal-sensory information alike, whereas a tendency to avoid such material and express it subtractively will tend to be shown with both types of preconscious information as well.

This line of thought is congruent with the finding of Watt & Morris (1995) that people's affective style (defensive or vigilant) in regard to subliminal stimuli predicted their analogous tendency to hit or miss extrasensory material. However, a later study failed to replicate the effect (Watt & Ravenscroft, 1997), and an earlier study (Miller & York, 1976) found only an insignificant trend ($p = .07$, one-tailed) in the direction of the hypothesis.

I could find no studies in which response to deeply subliminal material was significantly inversely related to the parallel manner of responding to extrasensory material.

Subliminal Effects on a Psi Task

When extrasensory and subliminal-sensory information are both controlled in an experiment, the *First Sight* model predicts that they should interact meaningfully with one another in influencing behavior. Palmer and his colleagues have carried out a relevant series of studies in which they attempted to affect the mood of the percipient with a subliminal stimulus and thereby influence the effort at guessing an extrasensory target (the correct element among several in a visual field). The studies were exploratory and the results sometimes surprised them. An attempt to control high and low scoring by accompanying targets with subliminal primes intended to be either reassuring or threatening resulted instead in overall tight variance of scores (Palmer & Johnson, 1991) a finding that was successfully replicated in one study (Palmer, 1992) and in one series of another (Palmer 1996). Subsequent attempts to heighten the reassurance effect with different messages or a combination of incidental and subliminal cues resulted in overall psi-missing (Palmer, 1995, 1998). A more complex study (Palmer, 1994) examined the effect of a reassuring prime (a suggestion of merger) that was sometimes presented immediately before another subliminal prime involving a threatening face. The condition considered most propitious

for psi-hitting (subliminal merger/no threat) did yield psi hitting in the first series in which the participants were tested, but not in the second. None of these studies employed manipulation checks for mood, so one cannot say whether the subliminal primes had the desired effects upon the participants' state.

All of these findings suggest that the effects of affectively charged subliminal stimuli do enter into the preconscious processing that leads to the ESP response but that more precise conceptualization is needed to anticipate the nature of the effects. The repetitive presentation of subliminal faces may evoke a vigilant state in which the ESP test feels irrelevant or distracting to participants, resulting in tendential switching and small variance. It may also be that primes intended to evoke a mood of safety had the opposite effect in some cases, resulting in psi missing or tight variance. This possibility is suggested by the finding of Sohlberg and her colleagues (Sohlberg, Billinghamurst, & Nylen, 1998; Sohlberg, Samuelberg, Siden, & Thorn, 1998) in which they report a tendency of subjects to experience a change in mood in a negative direction when a stimulus ordinarily found to elicit positive mood is shown too many times. More generally, Miller (1976) had found that the tendency of subliminal exposure to produce a positive response to almost any sort of material reversed with too many exposures. This sort of negative "over-dosage" might have been present in some of Palmer's studies, in which the stimulus intended to be reassuring was presented over and over. This negative effect may have been less marked in the first series of the study, in which psi hitting was observed, as in that series fewer exposures had accumulated.

Another line of work by Daryl Bem and others has explored a more direct effect of subliminal stimulation upon the extrasensory process. This involves exposing participants subliminally to some material immediately after they have made an affective judgment of the material, thus making the affective judgment an unwitting precognitive response. This began as a parapsychological elaboration of work that has been reported on the "mere exposure" effect, in which it has been found that subliminal exposure to material tends to enhance one's liking of it (e.g., Kunst-Wilson & Zajonc, 1980; Zajonc, 1968). In what he called "precognitive habituation," Bem (2003) found that post-judgment subliminal stimulation was linked with an increase in liking for aversive material (relative to other equally aversive material) and with a decrease in liking for erotic material (relative to other erotic material). All of the effect came from participants who were self-rated as high in responsiveness in the aversive or erotic domains. The effect on aversive stimuli for sensitive participants (photos of spiders for spider-phobics) was replicated by Savva, Child, and Smith (2004). A further attempt to replicate using supraliminal stimuli was not successful (Savva, Roe, & Smith, 2005), suggesting that the subliminality of the stimulus may be as important in parapsychological studies as it is in sensation-perception studies. In an elaboration of this work reminiscent of the "overdosage"

phenomenon described above, Bem (2005) has reported that when mildly arousing material was used, post-judgment exposure that was much more extensive (10 supraliminal repetitions) was linked to a *decrease* in preference for the stimulus. Although subliminal exposure was not involved, this finding is pertinent here because it implies that excessive future exposure of a stimulus tends to result in the phenomenon of precognitive contrast, that is, to the likelihood that participants will express negative reactions to the content in terms of preference, just as in real-time perceptual experiments, excessive exposure leads to consequent contrast.

In a study examining the cognitive rather than the affective consequences of a subliminal stimulus, Johnson and Lubke (1975) asked participants to "solve" a conceptual problem that had been presented to them earlier by using ESP to pick from among several envelopes the one containing the solution. Half of the participants were exposed subliminally to material pertinent to the solution, the other half were not. This subliminal treatment had no effect on the ESP performance.

Although these lines of work are in their infancy, what has been reported seems largely to be congruent with the general expectation that subliminal stimulation may be expected to enter into extrasensory response in meaningful ways.

Psi Effects on a Subliminal Task

Very little work has been done on the question of whether psi affects performance of subliminal tasks. Kreidler and Kreidler (1972) exposed their subjects to letters projected on a screen at an intensity and duration that had been found in pretesting to permit correct identification 40% of the time. They were asked to identify the letters, and no extrasensory element was mentioned. In half the cases, however, an agent added an "extrasensory stimulus" to the situation by telepathically trying to transmit the correct letter to the participants as they were viewing the exposure whereas in the other half, the agent looked at an irrelevant picture. The extrasensory "transmission" was effective in boosting the rate of identification, as shown by a significant difference between the conditions. Another series involved an examination of the influence of both subliminal and extrasensory material upon the perception of ambiguous optical illusions. There was no overall evidence of an extrasensory influence, but an interaction was observed: when the ESP "prime" was contrary to that of the subliminal exposure surrounding the supraliminal optical illusion, the participants' judgments showed more influence of the ESP information than they did when no subliminal information was present. The authors interpret this finding as suggesting that extrasensory information may be especially salient when it contradicts other low-intensity (e.g., subliminal) stimulation. Other interpretations that the authors make of these and two other series appear to be vitiated by problems of design (Child, 1977).

These findings suggest that psi may interact with subliminal information sometimes in an additive way and sometimes in a competing manner (i.e., sometimes with assimilation and sometimes with contrast). More work is needed to elucidate these processes.

PSI AND REMEMBERED INFORMATION

Important preconscious processes contribute to the act of remembering, and these have been studied extensively by cognitive psychologists (Schacter, 1997). The *First Sight* model would predict that the preconscious processes of memory and psi processes should often interact.

Memory and Psi as Parallel Processes

Theories of psi offered by Roll (1966) and H.J. Irwin (1979b) have emphasized the importance of memory traces as the vehicles for psi expression. Partly because of these ideas, a number of studies have explored the relationship between memory ability and psi scores. Many different procedures have been employed, and results of both lines of work have been complex and generally mixed. As Palmer has said (1978, 1982), the many significant relationships reported make this appear to be a potentially important area of research but difficult to synthesize. It seems to me that since then two researchers have provided some promise of greater clarity. The ideas of both seem sensible in light of the *First Sight* model.

H.J. Irwin (1979a) found in a review that studies in this area had not attended to the distinction between primary and secondary memory (or short-term and long-term memory). Some studies used tests of one and some the other, and some used procedures that allowed participants to use either memorial strategy depending upon their personal proclivities. He found that short-term memory measures tended to correlate negatively with ESP performance whereas long-term memory measures tended to correlate positively, and studies permitting both strategies tended to give null or mixed results. Irwin was unsure how best to interpret this pattern, but in terms of the present model, it seems pertinent that short-term memory requires the deployment of conscious attention, and cognitive work of the sort that I assume will render extrasensory material irrelevant and lead to an unconscious posture away from it. Persons doing well in terms of short-term memory are successfully employing active rehearsal of the material, a strategy assumed to be disconducive to responding to extrasensory material, while persons doing poorly in the memory test may not be so cognitively occupied and should be more likely to be open to implicit (including extrasensory) material. Hence we would expect an inverse correlation between short-term memory performance and ESP performance in the same situation. The recognition of items from long-

term memory, on the other hand, is rather automatic and effortless, and success at it requires a pattern of responding much like that proposed to be most effective for positive access to extrasensory information. Therefore a positive correlation would be expected. Irwin suggested that research should employ memory tasks that clearly discriminate these two different processes. However, except for an insignificant trend in the direction of his hypothesis reported by C.P. Irwin (1982) little work on the question has been reported since his review.

Rammohan (1990) offered further clarity in one of the lines of work using a long-term memory paradigm, an academic test procedure mixing real and ESP questions (e.g., Rao & O'Brien, 1977). She noticed that a positive correlation was consistently found when the ESP aspect of the test was explicitly identified by the tester whereas a negative relationship was likely when the ESP aspect was unrevealed. She confirmed this pattern in two later series. My model would suggest that extrasensory information would more likely be sensed to be relevant in the situation if it is explicitly primed by an understanding that ESP is being tested whereas such information would be sensed to be irrelevant and subject to contrast and psi-missing if the test is understood to be one of memory only (degree of relevance to the task is one determinant of assimilation versus contrast). In the latter situation, someone doing well at the memory test would be expected to effectively turn away from other potentially distracting information, whereas someone doing poorly at it might unconsciously refer to ESP information in a compensatory manner, all resulting in another inverse relationship. Although this may be generally true, a study by Stanford (1970) found a significantly positive ESP/memory relationship in a memory test when the psi aspect of the situation was not revealed, suggesting that the conscious prime is not always necessary for assimilation of extrasensory content.

Another way of asking whether psi and memory are similar processes is to see if similar patterns of responding are found in each. A series of studies carried out by Kanthamani and colleagues is pertinent (Kanthamani & Rao, 1974, 1975). They employed paired-associates memory tests in which the memory response had a secondary aspect that participants understood to be an ESP response (e.g., which one of two adjacent lines to write the response upon). Across several series they found a strong tendency for similar processing between memory and psi in that correct memory responses tended to be accompanied by correct ESP responses and incorrect memory tended to be linked to incorrect ESP. Some of their series distinguished between two levels of association strength, and they found that the correlation was contributed entirely by the low-association pairs. The effect with low-association material was replicated by O'Brien (1976), and partial replications were reported by Parker (1975) and Lieberman (1976), whereas failures to replicate were reported by Gambale (1976), Gambale, Margolois, and Cruci (1976), and Harary (1976) although some of these did not treat the variable of association strength, and in many cases it would

appear to be high. If this general effect is reliable, it fits the expectation that memorial and extrasensory information should be treated similarly when an open, inwardly searching set is employed, as would generally be the case with weakly associated material. Strongly associated material, on the other hand, should often lead to quick cognitive closure and the exclusion of other sources of information.

Another line of work investigating similarity of processing has examined the subject's tendency to use close associates or not when generating incorrect responses in both memory and ESP tests. A positive correlation has been found (Rao, 1978; Rao, Morrison, & Davis, 1977; Rao, Morrison, Davis, & Freeman, 1977), and the finding was partially confirmed by Rao, Kanthamani, and Palmer (1990). Still other evidence suggesting similar processing is provided by a study of Stanford (1970). Unknown to his participants, he assigned ESP targets to the different potential responses to a memory test and included some items in which no information had actually been provided to memorize. He found significant psi-hitting in the memory test on the items in which no information had been given. The positive deviation was contributed entirely by participants who scored highly on an independent test of incidental memory. This suggests that persons who are responsive to subtle cues experienced incidentally and then available to tacit memory will also respond to extrasensory cues whereas persons unresponsive to one will tend to be unresponsive to the other. I could find no studies reporting contrary patterns to these indications of similar processing.³ If these various relationships are reliable, they are congruent with the *Hypothesis of Functional Equivalence*, which holds that extrasensory and other sorts of preconscious information should tend to be accessed in similar ways.

Psi as a Factor Influencing Memory Tests

Several studies have been carried out on psi as a factor influencing memory. Some tests of memory were administered in which a "psi stimulus" was also present somewhere in the experimental context. In some studies, participants were told of the extrasensory dimension of the task, in others they were not. In general terms the *First Sight* model would predict that the psi information should function additively with the memory information in cases in which memory is uncertain but might show no effect or perhaps a contrary effect when memory is strong and precise cognitive closure is close at hand.

Johnson (1973) tested the power of an extrasensory "stimulus" to enhance memory performance by attaching hidden answers to some questions to the answer sheets given to students in an academic exam. Half of the hidden answers were correct and half were incorrect. He

³ A study by Sheargold (1972) was described as an attempt to replicate but did not include a test of incidental memory.

found that when memory was "primed" by the hidden answers, memory performance was significantly better than on unprimed responses when the hidden answers were correct and was significantly poorer when the hidden answers were wrong. Some confirmations of this effect have been reported by Braud (1975) and Schechter (1977). A related finding was reported by Stanford (1970). His participants heard material which they were asked to memorize and about which they were later tested in a multiple-choice questionnaire. Unbeknownst to the participants, all questionnaire items were also randomly assigned ESP targets. In the *First Sight* context, the important finding of this complex study was that when the ESP target was contrary to actual information that had been given, participants were much more likely to give incorrect memory answers to the items than they were when the content was congruent, that is, the "presence" of the discrepant ESP target acted to "pull away" the response from the true information. More than that, the incorrect answers thus given were significantly likely to conform to the ESP target and not the other alternative responses.

Kreiman (1978) tested the intrusion of ESP information into memory retrieval by giving participants a short time to memorize a list of words, then asking them to write down all they could remember. Twenty of the 50 words were randomly picked as ESP targets. He reasoned that subjects should write down their most strongly remembered words first, and the ones remembered with more difficulty should be listed last. Thinking that psi-intrusion should be strongest when memory is less certain, he divided each subject's response list in half, and predicted psi-missing in the first halves and psi-hitting in the second. His predictions were confirmed. Nonsignificant trends toward confirming this effect were reported by Weiner and Haight (1980) and Schmeidler (1980, 1981), but Schmeidler also found that when she carried out a study with subjects most like Kreiman's (persons who believed that ESP was not impossible in the task and who found it interesting) the effect was confirmed significantly. She later refined the hypothesis a bit more and found the effect in three series in which ESP belief was moderate, mood was good, and the psi-hitting prediction was reserved for the bottom quarter of the list (Schmeidler, 1983). The effect was strongest in her two series in which the ESP testing was made explicit and only nonsignificantly in one in which that was not revealed, suggesting again that priming ESP information by defining the situation as an ESP test is likely to make that sort of information more subject to assimilation. Lieberman (1976) tested what might be taken as the generalization from this effect, that hitting should be poorer when the associations to be remembered are strong and should be better when associations are weaker. His finding supported the hypothesis. I could find no studies significantly reversing this pattern.

Taken together, these studies suggest that psi effects may enter into the act of remembering, particularly when relatively poorly learned but still

relevant material is involved. In terms of the *First Sight* model, very strongly learned material would be expected to quickly evoke a clear response and cognitive closure whereas unclearly learned material should often lead to sustained openness and a greater likelihood that the ESP material would be assimilable.

Memory as a Factor Influencing the Expression of Psi

This model agrees with the assertion of Roll (1966) and Stanford (1974, 1975) that previously learned or familiar extrasensory material should be more available to an individual than unfamiliar or meaningless material. More meaningful material should be more salient, evoking a stable direction of interest and a tendency toward large scoring deviations. If other factors make the material seem pertinent to the experiential task at hand, this deviation would be expected to be positive. Some findings support this idea (Kanthamani, 1965; Kanthamani & Rao, 1975; Nash & Nash, 1968; Rao, 1963; 1964, 1965; Rao, Kanthamani, & Palmer, 1990; Sailaja & Rao, 1979), and I could find no significant contrary instances.

The model would also predict that when response patterns with remembered material are so well learned as to produce clear conscious construal and stereotyped patterns of response, null scoring and tight variance would be expected, whereas somewhat less familiar material permitting more impulsive or spontaneous responding and more open searching of marginal experience should yield more extreme scoring deviations (in situations otherwise conducive to psi-hitting, expressed as stronger hitting). Some studies have tended to support these ideas as well (Cadoret, 1952; Stanford, 1973; Stanford & Stio, 1976), but I could find none in the opposite direction.

PSI AND CREATIVE ACTS

Psi Ability in Creative People

Several writers have pointed out many similarities that appear to exist between psi processes and creativity (e.g., Murphy, 1963; Myers, 1903/1961). The *First Sight* model emphasizes this as well (Carpenter, 2004) and predicts a relationship between a capacity to work creatively and ESP performance (primarily extreme scores and secondarily hitting scores, although analyses have generally been carried out only in terms of hitting). Several studies have reported generally positive but somewhat mixed results. It seems likely that some of the unreliability in results has to do with operations used for assessing creativity. There are hundreds of measures of creativity in use (Houtz & Krug, 1995), many of which have minimal or no intercorrelation (Barron, 1995; Treffinger, 1985). Cognitive measures thought to be relevant to creativity generally have little validity in terms of

a person's capacity to produce demonstrably creative works (MacKinnon, 1965, 1978; Nicholls, 1972). Positive relationships have been reported several times between ESP performance (hitting) and what many people consider the most valid indicator of creativity, comparisons of persons who are successfully engaged in a creative pursuit compared to others who are not (Dalton, 1997; Morris, Cunningham, McAlpine, & Taylor, 1998; Morris, Summers, & Yim, 2003; Moss, 1969; Moss & Gengerelli, 1968; Schlitz & Honorton, 1992), and between ESP and persons who were objectively assessed to have produced creative work (Anderson, 1966; Moriarty & Murphy, 1967). Moss, Paulson, Chang, and Levitt (1970) reported a partial confirmation. Gelade & Harvie (1975) found significantly more hits in agent-perceiver pairs in which both were artists than in other pairs. I could find no reports of significant contrary results, although a study using a less-demanding criterion for creativity (being a music major) reported null results (Jackson, Franzoi, & Schmeidler, 1977).

Measures of cognitive styles intended to be creativity tests have had much more mixed results, with one study reporting a negative relationship with hitting (Schmeidler, 1963), one a mixture of null and negative relations (Schmeidler, 1964b), one an insignificant positive trend (McGuire, Percy, & Carpenter, 1974), and one a null relationship in which different subgroups of participants showed different patterns (Dalton, 1997). Honorton (1967) found a predicted positive relationship between a cognitive creativity test and ESP scores, but the difference in scoring was contributed by the negative scoring of the less-creative group in contrast to the chance-level performance of the high-creatives. One significant positive relationship in which creatives scored significantly above chance was reported by Braud and Loewenstern (1982) in a procedure in which a creative set was induced in subjects before the ESP test by various "right brain" activities, suggesting that such a set might make some of these cognitive measures better predictors of ESP performance. Another positive relationship was reported by Roe, McKenzie, and Anowarun (2001) with a measure of figural but not verbal creativity, as they predicted. Because verbal creativity scores are highly correlated with other measures of verbal intelligence and represent a tendency to employ analytical thinking in solving tasks, the *First Sight* model would predict that persons scoring high on them might tend toward chance-level scoring, and show negative overall deviations as often as positive. On the other hand, figural creativity does not tap this verbal-analytical mode of functioning and would be expected to be associated with extreme and positive scores.

In general, this model holds that an unconscious wish to realize the meaning of extrasensory material coupled with an invariant attention to inadvertent phenomena should make the expression of such material more likely. Creative persons who are engaged in a psi task would be expected to display these things. At least two factors may be at work. First, demonstrably creative persons tend to be highly motivated and successful

at producing effective performances when called upon to do so. Because of that, we may assume that their conscious motivation to perform is generally matched as well by an unconscious intention to do well. This unconscious wish to succeed should result in a tendency to construct allusions toward the potential meaning at the psi level. Another requirement of successful artistic work is that one suspend rational analysis at times and consult an inner field of sensed preferences, impulses, and incipient understandings. How does the poet find the next image, or the cellist sense the right emotional interpretation of a solo, or the actor's body find the right posture for a character? They must "feel their way," suspending clear decisions and cognitive analysis long enough for an implicit sense to emerge and declare itself. This sustained openness to the "felt sense" (Gendlin, 1997) and suspension of premature cognitive closure should allow a relatively stable directional tendency at the psi level of engagement and show itself as extreme scoring deviations, generally positive.

The Contribution of Psi to Creative Acts

The *First Sight* model predicts that extrasensory factors participate with other preconscious processes in the construction of creative acts. I could locate no studies in which there was an attempt to influence the outcome of some creative act by serious artists, such as writing a poem or interpreting a piece of music, by some extrasensory intention. There are a number of studies, however, that examine responses that are somewhat like a creative act. The free-association task of the ganzfeld study elicits an uncensored flow of ideas, and it has generally produced significant evidence of psi influence (usually high scoring but sometimes extreme scoring as well) although null and even negative results have been reported (Bem & Honorton, 1994; Milton & Wiseman, 1999; Palmer, 2003). Ganzfeld studies are discussed further below. Other studies have examined more restrictive forms of free-association (Stanford, 1973; Stanford & Schroeter, 1978). Dreaming may be thought of as a generically "creative" act in which almost everyone engages, and dreams have often been found to express extrasensory intrusion (e.g., Child, 1985; Dunne 1927; Kanthamani & Broughton, 1992; Kanthamani & Khilji, 1990; Sherwood & Roe, 2003). Other creative-like activities that have been shown to express such intrusion include producing hypnotic dreams (Honorton, 1969, 1972; Honorton & Stump, 1969; Krippner, 1968), freely drawing (Bevan, 1947; Humphrey, 1946; Shrager, 1978; Targ, 2004), engaging in spontaneous social interaction in a congenial, unstructured group (Carpenter, 2002), moving a Ouija board planchette (Palmer, 2001; Sargent, 1977), freely completing sentence stems (Kreitler & Kreitler, 1982), free playing on the part of children (Anderson, 1966; Anderson & Gregory, 1959; Tornatore, 1984), and making up stories in response to cards from the Thematic Apperception Test (Barron, Mordkoff, & Arnold, 1968; Kreitler & Kreitler, 1972). Such "creative expression" tasks have often shown either

relatively high or relatively extreme ESP scoring although null performance has been reported as well. The effect has often been moderated by other variables. For example, the effectiveness of drawn responses has been found to depend upon how expansive the drawings are and whether an agent is involved in the test (Palmer, 1978, p. 166); spontaneous group interaction was more psi-expressive when sessions were rated as less emotionally intense (Carpenter, 2002), and Ouija board movements showed psi-hitting more effectively when the participants reported that they felt externally caused. Apparently, providing a situation or task that permits creative expression is one step toward evoking either extreme or positive scoring, but the manner in which the individual responds to the task is also critically important.

The Effect of More Creative Approaches to the Psi Task

In terms of the *First Sight* model, subjects who respond to an ESP task in a more creative way should produce more extreme and/or higher scores than persons responding less creatively. By "more creative," I mean an approach that permits the generation of relatively more inadvertent, preconscious material and that also displays the act of consulting that inadvertency. Many studies have generally confirmed this expectation.

Some studies have attempted to evoke a creative or spontaneous or playful set in participants and have reported significant above-chance psi performance in the more creative condition (Anderson, 1966; Anderson & Gregory, 1959; Braud, Smith, Andrew, & Willis, 1976; Louwerens, 1960). Similarly, Kreidler and Kreidler (1982) evoked what they called a "personal-subjective" set in some participants by engaging them in production of communication involving metaphors and symbols, as opposed to more literal ways of thinking, and found that this significantly enhanced sensitivity to the emotional arousal being "sent" to them by an agent whose involvement was unknown to them. I could find no reports of significant contrary results.

A number of other studies have examined aspects of participants' performance in terms of qualities assumed here to reflect the degree of creativeness being expressed. In ganzfeld studies, post-session reports have often found that participants who experienced a state with more "altered" imagery, body-experience, and mood during their sessions scored more strongly than others reporting less of these qualities (Harley & Sargent, 1980; Palmer, Khamashta, & Israelson, 1979; Parker, 1975; Sargent, Bartlet, & Moss, 1982). Stanford and colleagues (Stanford, Frank, Kass, & Skoll, 1989) have examined actual session transcripts and found that the variability of the length of time making up discrete blocks of speech or utterances related positively to hitting. He interpreted this variability as reflecting the fluidity or spontaneity of the response. Another approach to the analysis of session transcripts was taken by Carpenter (2001, 2005), who analyzed data from several laboratories and found that when persons

expressed a more active involvement in their own imagery and more emotional openness toward it, they scored highly. On the other hand, those whose imagery showed signs of intellectualization and cognitive analysis scored below chance. A measure of creativity modeled after Holt's (1970) Rorschach score (involving primary process material and tolerance for irrational content) found that this measure successfully predicted hitting when high creativity scores were not accompanied by many signs of anxiety. In these same data, the following unreported relationships were found: that scores on the measures of intellectualization and cognitive analysis were associated with tight variance, whereas profiles indicating emotional openness successfully predicted large deviation scores. In still other ganzfeld studies, Sondow (1979) found that asking participants to free-associate to the various target alternatives after they had gone through the ganzfeld session improved their hitting rate relative to other participants who did not carry out the free association; and she (Sondow, 1987) also found that participants who reported making a slight effort in producing their material scored more positively than those who described their imagery as completely uncontrolled. Free association is a technique that would be expected to facilitate consulting the implications of imagery in a creative way, and making a bit of effort in generating the material would seem likely to show that the participant was creatively engaged in the task and not simply being a passive self-observer. In a related study Braud, Shafer, and Mulgrew (1983) asked participants to project meanings onto a looping audio tape of the word "cogitate" and found that those who drew upon larger numbers of independent associations showed more positive intrusion of the ESP targets. A greater number of associations seems plausibly related to the aggressiveness and facility with which the participants searched their inner material. In the behavior of an unstructured group, as mentioned above, Carpenter (2002) found significant evidence of implicit, behavioral reference to the ESP target when sessions were relatively light-hearted and spontaneous and found psi-missing when the group was extremely serious and focused on difficult emotional material. Kreidler and Kreidler (1982) found that their participants who succeeded more in immersing themselves in personal material (maintaining an internal focus and using metaphoric/symbolic language) were much more responsive to the ESP target than were those less personally engaged. Palmer (1994) found that participants scored most highly when they reported having "felt drawn" to their choices as opposed to when they chose them more rationally. This failed to replicate in a different ESP test (Palmer, 1995).

Even forced-choice ESP guessing tends to show more psi-hitting when the task is carried out more "creatively," in the sense of being more spontaneous or more free of rigid, intellectualized patterns (Cadoret, 1952; Glidden, 1974; Ross, Murphy, & Schmeidler, 1952; Scherer, 1948; Stanford, 1966a, 1966b, 1968; Tart, 1976). Finally, some reports have indicated that very high ESP scores may be found when persons with special facility for

creatively consulting inner inadvertencies (such as professional artists or trained meditators) are observed to be approaching their task in measurably more creative ways (Carpenter, 2001, 2005; Watt, 1996).

The general trend of these findings supports the idea that psi processes and creative processes are indeed related. Although there are some failures to replicate relationships, I could not locate any reports of significant reversals of the expected effects in this section. Psi may influence the outcome of creative efforts, and psi tasks may be especially likely to express the intrusion of the target material when the subjects engage in them in more creative ways. Generally the greater psi effect is shown as hitting, and sometimes as extreme scoring in both directions (although extremity of scoring has been much less frequently analyzed). The more general effect of creative inner searching may be a tendency toward greater scoring extremity, which tends to be expressed as high scoring if other conditions are propitious for the intentional pertinence of the target content.

THE UTILITY OF THE MODEL

To be useful, a model for parapsychological phenomena must address issues on at least three fronts. First, it must be useful to working parapsychologists by coherently organizing current findings and suggesting fruitful new directions for research. Second, for the many people not knowledgeable about this field and not prone themselves to paranormal experiences, it must help make the phenomena described by parapsychologists seem sensible and congruent with everyday experience. Third, for scientists in other disciplines who may suspect that antiscientific motives may hide behind the well-scrubbed methods of parapsychologists, the model must help show that psi phenomena may be understood as part of nature, cogently connected to other areas of knowledge.

CONGRUENCE OF THE MODEL WITH SOME MAJOR PARAPSYCHOLOGICAL FINDINGS

The Sheep-Goat Effect

Using Schmeidler's (Schmeidler & McConnell, 1958) basic definition that "goats" are persons who believe that ESP is not possible under the conditions of the experiment and "sheep" are all the others, it appears that this criterion is a rough operationalization of the participant's unconscious motivation in the study. One who declares that the task is impossible probably has an unconscious intention to not-know the target even though this is belied consciously by taking the test and apparently trying to succeed at it. On the contrary, declaring that the ability in the test conditions is at least possible suggests an unconscious intention to express the material accurately. Unconscious intention to know or not-know

(or to approach or avoid) the material is presumed to be an important determinant of scoring direction.

Psi-missing for goats may be further understood in terms of the phenomenon of contrast. As stated above, a subliminal prime shows the phenomenon of contrast when it is preconsciously judged to be irrelevant to the target, and this is expressed by a lowered probability that the prime will be expressed in the perception. It has also been found that contrast effects may be a result of more conscious processing, in which participants are aware that they may be influenced by a prime (perhaps some potentially guiding word that they are shown) and try to correct for this bias by avoiding the use of the prime, often overcorrecting in the process. On a conscious level, persons may form "naïve theories" in which they believe themselves to be biased by some information, and then they will tend not to use that information and to use alternatives instead (Wegener & Petty, 1995). In the ESP experiment, sheep, who are comfortable with the idea that emerging ideas and images may express ESP target material, would be expected to consult that imagery directly and use it trustingly; goats, on the other hand, might consider such inner material to be only a source of error and tend to overcorrect by answering in directions different than their naïve impressions. This might happen both at preconscious and more conscious levels of processing.⁴

Since attitude about ESP is not likely to be a highly salient, highly stable characteristic for most people, we should probably assume that it is made more active by the prime of the sheep-goat question itself in the context of the study. Testing that quickly follows the administration of the question would thus be expected to more strongly express the action of this prime than would testing carried out later. Some evidence for this has been found by Carpenter (1991), who found a strong correlation between attitude and performance for testing at the sitting in which the response was elicited, only a marginal trend in the next sitting, and zero correlations in two later sittings of effort. I could find no other studies that examined this problem.

The Effect of Anxiety

As discussed earlier, more-anxious people tend to score below chance expectation (Palmer, 1977). The *First Sight* model leads one to expect that more-fearful people would be more likely to find the potential event in some way dangerous and have an unconscious intention of avoiding

⁴ A similar use of naïve theory may explain a phenomenon that is typically found in the forced-choice guessing patterns of participants in ESP tests, or by persons asked to produce a string of responses "randomly"—the tendency to avoid repeating the same call sequentially to a nonrandom degree. The last number one has generated comes readily to mind in the course of both tasks, and the participant may think something like "I am thinking this because I just called it, so it cannot be due to ESP (or cannot be truly random)," and then systematically reject that option in favor of some other that is brought to mind.

it. Again, unconscious intention and sensed relevance determine scoring direction. Put in terms of the constructs of assimilation and contrast, it is relevant that research on the debilitating effects of anxiety on perception and memory (e.g., Eysenck, 1991; Hedl & Bartlett, 1989) has shown that more-anxious people encode information more narrowly (Mueller, 1979) and suffer cognitive interference from intrusive thoughts (Saranson, 1984). Narrow encoding of the meaning of a task or a developing experience would be expected to subject more contextual elements to contrast, resulting in psi-missing on an ESP test; and the extra cognitive work required to deal with extraneous intrusive thoughts should likewise discourage assimilation and promote rapid switching of psi modes.

The Psi-Facilitating Effect of Hypnosis

While flaws in design make some matters of interpretation uncertain (Schechter 1984; Stanford & Stein, 1994), many studies have shown above-chance scoring in participants who are hypnotized and chance or below-chance scoring in control groups. Hypnosis, particularly in persons inclined to be especially responsive to it, would seem to be a good situation for securing a positive unconscious as well as conscious intention to score well when that is suggested by the hypnotist and is generally acceptable to the subject. As Hilgard (1965) has said, hypnosis tends to produce a manner of effort characterized by an absence of cognitive analysis and planning, selective inattention, heightened access to memory and fantasy as opposed to ongoing realities, and an absence of the kind of reality testing that ordinarily characterizes waking consciousness. The positive intention would be expected to make an inclination toward psi-hitting generally likely, and the manner of effort would be likely to assure a tendency toward relatively large scoring deviations while providing access to an inner stream of inadvertent material of the sort that expresses preconscious activity. This is the combination most likely to result in strong overall positive scoring.

Dreams as a Vehicle for Psi

The dreaming state of awareness is noted both for its lack of reflectiveness and for the absence of conscious, rational processing (Boss, 1977). Thus a shifting of intentions and cognitive tack, with consequent shifting of directional tendency, would be unlikely to occur. As in the hypnosis situation, a pro-knowing orientation with little directional switching, together with the particularly inadvertent material of the dream, would be expected to lead to strongly positive performance. Confirming this, reviews (Child, 1985; Sherwood & Roe, 2003) have shown that dreaming sleep can be especially propitious

in conveying ESP information about target material that the dreamer desires to perceive. Going to the trouble of participating in an ESP dream study would seem to make it likely that a person intends, at both conscious and unconscious levels, to come to consciously engage the intended information. The motivation involved in laboratory studies would be particularly keen, and effects there have been found to be stronger.

The Ganzfeld as a Psi-Conducive Situation

The ganzfeld protocol's combination of mild sensory deprivation, the provision of an undifferentiated visual and auditory field, and relaxation provides the same combination of ideal conditions just described for hypnosis and dreaming, and it has often been reported to show positive scoring (Bem & Honorton, 1994). Extreme scoring has been reported as well (e.g., Rogo, 1977), and I have found this in my own unreported analyses of my own and others' ganzfeld data. However, researchers have not often hypothesized this or tested for it. Our model would predict that these psychological factors would be especially likely to result in strong hitting for participants whose manner of verbalizing suggests a positive implicit approach to the situation and an absence of anxiety and cognitive analysis. This is the pattern that has been found (Carpenter, 2001, 2005).

The Importance of Caring About the Information

An unconscious intention to know about something should tend to produce a psi orientation in the *toward* direction when some pertinent event about that thing is impending. The fact that something is consistently cared about implies that the person would tend to have a dispositional tendency to wish to know pertinent things about it, rendering relevant extrasensory information more subject to assimilation. It also seems that something or someone of central emotional importance to the person should be associated with a relatively invariant intention to know, hence producing a stable directional orientation or a relatively large deviation in response from chance expectation. Hence, both large and positive deviations would be expected in regard to personally important material. Many lines of work support this assumption. Collections of reports of spontaneous psychic experiences typically have shown that cases involving personally important information are statistically over-represented. Information about beloved other persons is particularly common (Feather & Schmicker, 2005; Gurney, Myers, & Podmore, 1886; Rhine, 1962a, 1962b; Schwartz, 1971; Stevenson, 1970). Although reporting bias may account for some of this trend, it is congruent with several experimental findings. When targets are more meaningful, scoring has been found to be higher (DaSilva, Pilato, & Hiraoka, 2003; Dean, 1962; Kanthamani & Rao, 1975; Nash & Nash, 1968;

Rao, 1962; Skibinsky, 1950). When the testing itself feels more meaningful, scoring deviations are more extreme (Rogers, 1966, 1967). The more meaningful interpersonal context provided by an agent or sender with whom one is emotionally close is associated with higher performance (Broughton & Alexander, 1997; Stuart, 1946), and this is similar to the finding that a reciprocity of liking between agent and percipient often helps performance (Anderson & White, 1956, 1957; Nash, 1960). Having a more satisfying and meaningful outcome of good performance has been found to help performance (Stanford, Stio, O'Rourke, Barile, Wolyniec, Bianco, & Rumore, 1976). When the sought information is more need-relevant in the context of the interpersonal testing situation, those targets were found to be perceived more accurately (Roll, Morris, Damgaard, Klein, & Roll, 1973). Even targets associated with unknown material that is potentially more emotionally meaningful to the percipient have been found to boost scores (Carpenter, 1971). It would seem that we learn most about what we care most about in the arena of pre-sensory apprehensions, as well as more generally. Perhaps, again it might be fruitful to consider that paranormal phenomena are rather like creative ones. In that case, these words attributed to Wolfgang Amadeus Mozart are pertinent: "Neither a lofty degree of intelligence nor imagination nor both together go to the making of genius. Love, love, love, that is the soul of genius."

The Decline Effect

The *First Sight* model holds that the mind normally and pre-consciously employs extrasensory information in the anticipation of its developing experience. However, these are normally very rapid and transient processes, and in ESP testing there is usually no quick development of an experience of the sought material. When effort continues and no sensory experience is forthcoming, our model predicts that the mind will obey its ordinary pattern of moving away from the extrasensory "prime" toward other sources of incipient experience. Initially, this may tend toward a switch in direction to a tendency to misidentify or significantly miss the target. Thus, we would predict a decline in hitting and ultimately in scoring extremity as testing proceeds. The decline effect has been described as perhaps the most consistent finding in parapsychology (Palmer, 1978). Three major types of declines have been reported: long-term declines of high-scoring subjects to a chance level (e.g., Banham, 1966; Brugmans, 1922; Pratt, 1973; Rhine, 1934/1973), within-session declines of hitting (e.g., Dean & Taetzsch, 1963; Humphrey, 1945; Parker & Beloff, 1970; Schmeidler, 1968; Roll & Klein, 1972), and declines of scoring extremity (Carpenter, 1966, 1968, 1969; Carpenter & Carpenter, 1967; Rogers & Carpenter, 1966; Sailaja & Rao, 1973). As almost all reports of scoring declines have been drops from psi-hitting to chance performance (in one case from psi-missing to chance performance, Schmeidler, 1964a), the decline of scoring extremity may be the more general phenomenon.

This finding may be related to others in work on Perception Without Awareness (PWA). As mentioned above, Sohlberg, Billingshurst, and Nysten (1998) have reported that an "overdosage" of too many subliminal exposures of a stimulus that is normally evocative of a good mood gives a reverse effect of a bad mood. Bem (2005), in his "precognitive boredom effect," has found that a relatively large number of exposures of an emotionally neutral stimulus tends to produce a precognitive aversion in regard to that target. Smaller numbers of exposures had no effect at all. Apparently the mind tends to preconsciously choose to move away from any stimulus that is too often presented without the development of any accompanying sensory material. Tease it too much with no experience forthcoming and the mind will lose interest and turn away. This appears to be generally functional in light of the core premise that psi processes serve to anticipate developing experience. If some potential experience does not in fact develop, the mind must move on to other primes congruent with the experience that is actually developing. It may then be the case that if testing effort is kept up too long, one preconsciously will wish to avoid the material initially by turning away (expressed as psi-missing) and then by having no consistent direction of interest at all (expressed as tight variance of scores, or persistent nonreference).

UTILITY OF THE MODEL FROM THE POINT OF VIEW OF ORDINARY NONPSYCHIC EXPERIENCE

Ideally, our model should make the constructs of parapsychology more sensible to the many persons who do not easily find them so. Even if the model has some utility for accounting for psychic experiences, these events are still odd or perhaps even dangerous aberrations from the point of view of everyday experience for most people.

The Apparent Incongruity of Evidence for ESP with the Absence of Psychic Knowledge in Everyday Life

When first confronted with what appears to be evidence for the reality of ESP, common sense is offended. Everyday experience tells us that we cannot see around corners or read next week's newspaper. As a professor of mine once quipped, "If people could do that, don't you think someone would have noticed by now?" We are all initially skeptical when very reliable assumptions appear to be violated. It seems as if we are being asked to choose between an understanding of human nature as we believe it to be from our experience and another version endowed with magical powers of knowledge and action. The *First Sight* model implies that we are not forced into any such choice. It suggests that the apparent predominant absence of paranormal phenomena and their occasional unbidden intrusions are all part of a sensible whole. A person is not endowed with magical powers of knowing because, according to this model, ESP is not knowledge at all. It is

the mind's capacity to unconsciously anticipate knowledge at a point prior to any actual sensory experience. In everyday experience, consciousness is occupied by knowledge which is the result of all active preconscious processes, including psi, and which is often validated and given closure by interpretable sensory experience. The preconscious processes themselves are not available to awareness. This is not belied by the fact that accurate *guesses* may often be made about events not sensorily available (or only subliminally available). For example, Emanuel Swedenborg's famous vision of a fire 300 miles distant from him (Sigstedt, 1952), as remarkably accurate as it was, was not *knowing* in the sense that knowledge was available to those near the fire. It was an accurate interpretation of fantasy images provoked by extrasensory apprehensions experienced in a state of reverie. As another example, the gifted remote viewer is not assumed by this model to *know* the location of a sought missing person. Rather, the place of the missing person, which the viewer desires to know, arouses an anticipational network of preconscious feelings and meanings that serve to orient his or her attention. If someone were about to simply tell the viewer what he or she wants to know, this anticipation would merely make the viewer slightly quicker and more efficient in understanding what he or she is about to be told. The viewer would never consciously know of having anticipated it. However, if this information is not available to the viewer, this anticipational arousal must "hover" on the edge of awareness, without cognitive closure because no validating sensory information is available. The skilled and practiced viewer tolerates this suspended uncertainty, consults the inadvertent feelings and images issuing from the "hovering" anticipational activation, and draws out a collection of allusive chunks of content containing measurable truth.

In everyday life, we do not ordinarily search out the possible connection between inadvertent psychological phenomena and distant realities, nor are situations generally conducive to doing so. Many truth-implying experiences probably flow by uninterpreted and unremembered. We pass most of our hours sensibly intending to understand what is close at hand for us, in good critical touch with reality and in states of mind other than those most suited to glimpsing the activity of preconscious processes. Those processes are not inactive at such moments, but they are invisible.

Thus, by this model, the general absence of psi experience and the occasional occurrence of psi experience may be understood in the same terms, all as sensible parts of normal functioning. This reasoning may not be compelling to someone who has never felt the need to seriously confront the possible reality of psi phenomena, but it may at least make the possibility seem more sensible.

The Fear of Psi

Besides thinking of psi as unusual and improbable, many people also find the possibility of psi experiences a frightening idea. There are

probably many sources of this apprehension. Three important ones would appear to be the popular association of psychic claims with mental illness, fears of being influenced or controlled by extra-personal forces, and the moral proscription against delving into such questions by major religious traditions. This model may offer some help in regard to each of these matters.

Psi and mental illness. Experiences that people construe as psychic, or "Subjective Paranormal Experiences" (Neppe, 1983), are popularly associated with madness, and indeed, they may characterize psychotic breakdowns of either a manic or schizophrenic sort (American Psychiatric Association, 1994), as well as less severe conditions, such as schizotypal personality disorder and dissociative identity disorder. Many people are fearful of apparently paranormal experiences for this reason, and many who believe they may have had such experiences are fearful that others will think that they are insane. In my role as a clinical psychologist, I have often found that it is reassuring to authoritatively tell such persons that they are perfectly sane, when I am sure that they are. Assuming that the premises of this model are correct, it might be even more reassuring to inform them that psi is not only normal, it is probably universal among human beings although its normal mode of functioning is almost entirely preconscious. It might be most reassuring if we could say that there is absolutely no connection in reality between genuine psi and psychosis, but reality may be more complex than our constructs would have it. The *First Sight* model suggests that persons who are suffering from prolonged confusion or disorientation might in fact be open to experiencing a plethora of preconscious processes, including psi, but their ability to interpret the experiences accurately and use them constructively would be severely compromised. However, persons who appear to be able to exercise some control over their psi productions and make constructive use of them present a very different picture. Their openness to preconscious material represents a positive adaptation, not a breakdown of functioning. In this way, they are like the creative persons described by Kris (1952) who have the capacity of "regression in the service of the ego." Like persons who have developed their sensibilities in art or music, or cultivated their powers of memory or attention to detail, many such persons seem to have gone to the trouble of developing the skill to make use of cues that are probably available to all of us—cues that are useless and quickly forgotten without the requisite skill in employing them.

Fear of extrapersonal influence. This fear arises not only in regard to extrasensory phenomena but with the idea of subliminal influence as well. To say that some activity is unconscious or preconscious seems mystifying and gives us the sense that the activity might be done somehow by something separate from our conscious intentions. If such influences occur, perhaps we are all really slaves to impersonal physical processes that control us.

However, these "influences" are actually our own (preconscious) activity as we engage in pursuing the construction and meaning of our

experience. They are not done *to us* but are done *by us*. This is one reason I have grounded this model in an existential context, that is to say, attempted to think in terms of life as it is actually lived all together; as opposed to seeing it in the context of an abstraction about some aspect of life. Existentially, we are active, whole beings; we press forward with our lives. We are not simply the products of mechanical processes impinging upon us, but we *use* those processes for our becoming. Some important aspects of this using are unconscious and preconscious. The fact that part of my using is unconscious does not mean that this part is being done by someone or something else. It is still being done by me. When I walk from one place to another, I am not conscious of all the myriad of muscular actions that make the walking work. They are unconscious constituents to my action of walking. However unconscious, they are still being done by me; they are part of my walking and are serving my intention of getting to the new place. Now concerning the observations of parapsychology, we may say that at the outermost edge of all of our pressing forward, we use psi processes, which is to say, we make use of the fact that we exist always a little beyond ourselves in space and ahead of ourselves in time (actually, we can make use of bigger spans ahead and beyond if that meets our needs, but ordinarily a little ahead and beyond is most useful for us).

Scientists frequently contribute inadvertently to this fear of being impersonally driven. Since many scientists presume (preconsciously) that the best account of something is impersonal and does not refer to any sort of intention, they use ways of speaking about unconscious processes that imply that the processes are purely physical actions, like chemical reactions. This may feel comfortable to the scientist because it seems to account for something on a basic level. It also adds to the mystifying sense that somehow we might all be robots, in spite of our experience of intention and consciousness. Even more oddly, given the findings of parapsychology, we might be robots driven by distant influences!⁵ However, if a scientific account of the person is to be adequate to its subject, it must incorporate the existential fact that life-as-lived is much more a *project* than a *process*. Impersonal processes like chemical reactions are certainly constituent parts of the project of life, but they are not the whole story. To proceed as if they are is mystifying and is a failure to avoid the reductionistic fallacy (Rychlak, 2003). For psychology to be adequate to its subject matter, our model suggests that it must take account of the fact that preconscious processes are used by each individual in the pursuit of meaningful experience, not inflicted upon him or her. Conveying this sort of understanding to the general public should help dispel the fantasies and fears of external control.

Moral proscriptions against the paranormal. The *Holy Bible* and the *Koran*, along with many other texts of the monotheistic faiths, contain numerous references to paranormal phenomena such as prophecies,

⁵ Many acutely paranoid individuals have inhabited this terrifying possibility.

blessings, curses, and miracles. Sometimes these are seen as sacred events and are viewed with reverence. At other times they are seen as evil and condemned severely. Similarly, great texts of Eastern wisdom, such as the Yoga Sutras of Patanjali (Satchidananda, 1990), speak of the various *siddhis*, or paranormal powers, that accompany the highest levels of spiritual development. However, they caution that such powers must not be sought for their own sake but should be experienced only within the context of utter compassion and reverence for the Supreme. Perhaps a common theme for all of these spiritual traditions is that paranormal abilities may be real, but if they are sought for their own sake and developed toward the end of personal power and aggrandizement over others, they are destructive and should be avoided. If held in the context of loving reverence for all creation and for the transcendent powers behind creation, they may lead in the positive directions of healing, enlightenment, and self-transcendence. The *First Sight* model has no theological commitments, but it does stress a conception of human nature in which each person is not contained within personal, physical boundaries but ontologically and epistemologically extends beyond that into intimate commerce with all the rest of reality, including all other persons. To pursue paranormal experiences selfishly, against the interests of others, would therefore be self-contradictory and by the logic of the model perhaps doomed to failure. If the model is basically correct, it implies that as we learn more about the functioning of psi processes, we will in turn learn more about our profound interconnectedness and the inseparability of our interests from those of all beings. Seeking such knowledge is in tune with the great traditions of wisdom and faith, not contrary to them.

THE UTILITY OF THE MODEL FOR HARMONIZING PARAPSYCHOLOGY WITH OTHER BRANCHES OF SCIENCE

This model offers a view of psychological functioning that includes a sensible place for psi processes. It shows how the errant anomalies described by parapsychologists may actually represent tirelessly active and normally unconscious capacities utilized in our ongoing adjustments to the circumstances of our lives. This model does not prove that psi processes actually occur. However, developing a picture of the mind in which psi can fit together with the other facts of psychological processes should make it easier for scientists of other disciplines to attend with more interest to all of the research which does prove that psi phenomena are genuine occurrences. At least two other things are necessary, however, before many scientists will take seriously the possibility of that reality. They want from parapsychologists a replicable phenomenon, and they want a mechanism for how a mind may interact with distant matter or with other minds.

The Problem of Replication

For some parapsychologists this problem has already been solved. The replicability of an effect is a matter of degree, and many parapsychological hypotheses in broad terms have been shown by meta-analysis to be reliable enough and free enough of apparent error to be considered real (Utts, 1996). Still, no parapsychological phenomenon is perfectly reliable, and no parapsychologist, no matter how many successful studies he or she may have conducted, is currently able to toss a coin into the air and either will or predict with absolute accuracy the face on which it will land. Can this model hasten the day in which such reliability is achieved? It may, because it suggests a direction for understanding not only the sporadic anomalies of apparent psi but also the countless moments of apparent absence of psychic process, all in the same terms. Understanding the true scope of a phenomenon, in its implicit as well as its explicit expressions, will provide a firmer basis for comprehension and prediction. Even if this model is proved to be basically wrong, the research disproving it should lead us in the direction of greater understanding, and as the understanding of psi phenomena improves, the replicability of operations demonstrating it will as well.

A Mechanism for Psi

I have presented this model in the context of a phenomenological approach to the basic ontological and metaphysical problems that appear to beset the psi hypothesis. In a phenomenological approach, a dualistic split between the subjective and objective aspects of experience is eschewed, and the need for providing some sort of physical mechanism linking mind to world or present to future event is avoided. The facts as observed are left to speak for themselves. I believe that this is a sufficient basis for grounding meaningful psychological scientific work. This will not seem satisfying, however, to scientists who are deeply committed to a physicalist conception of the mind. Most scientists probably assume that all mental events are ultimately reducible to physical events, the "promissory materialism" of Popper and Eccles (1977, p. 96). As stated earlier, this derivative and reductionistic idea of the mind also leads to the assumption that mere consciousness should have no reach beyond the physical body, and mere intention should have no immediate grip of its own upon physical events. For many scientists, such assumptions are so deeply held that they seem to be given realities. From such a base, psi phenomena will always seem unreal because they will feel impossible.

Developments during the last century in basic theoretical physics call into question this structure of assumptions. Current research in physics is heavily involved with the study of what David Bohm (Bohm & Hiley, 1993) calls "quantum interconnectedness." The theorem of J. S. Bell (1964)

specified this expectation of nonlocal correlation between separated quanta of light under certain circumstances. The theorem has been empirically proven (Freedman & Clauser, 1972). Although it cannot be said that a mechanism for psychic connections between mental events and distant physical events has been established by these means, several physicists have argued that these and other aspects of quantum mechanics have opened a door that may lead in that direction (e.g., Bohm, 1990; Josephson & Pallikari-Viras, 1991; Targ, 2004; Walker, 1975; Whiteman, 1977). As physics broadens to encompass consciousness, the parapsychologist's phenomena may find a warm home. The model of psi developed in this paper should be ultimately congruent with such an expanded conception of reality.

Even if a scientist is not a reductionist in regard to mental processes, he or she may reasonably want an account of psi phenomena that is elaborated in terms of known psychophysiological processes. This model should be eminently congruent with such psychophysiological accounts as they are developed and become available to our use. Many contributions in this area have been made already (e.g., Broughton, 2002; Ehrenwald, 1977, 1978; Kelly & Kelly, in press). The *First Sight* model of psi, as it is developed further, may provide a useful structure to which accounts of relevant nervous system activity can be related. Analogous work is already being done that relates preconscious perceptual processes with various aspects of psychophysiological activity (e.g., Shevrin, 1988; Shevrin, Bond, Brakel, Hertel, & Williams, 1996).

SUGGESTED DIRECTIONS FOR FUTURE RESEARCH

Various features of this model suggest particular directions for study. The following are examples.

Study the Inadvertent Expression of Psi Processes in Situations Not Understood as Parapsychological Experiments

Because psi processes are presumed to be active all the time and their typical expression is in the form of inadvertencies, more study should be done to elucidate the functioning of psi in situations in which persons are carrying on "normal" activities and not attempting to express some paranormal effect. This suggestion has been made before by Stanford (1974), and I wish to second it here. Schechter (1977) has summarized research that has looked for unconscious extrasensory effects in such situations as academic tests, and Carpenter (2002), Ehrenwald (1948,) and Eisenbud (1969, 1970) have examined the expressions of ESP in psychotherapy. Psi effects in what would otherwise appear to be "normal" experiments on psychological phenomena have been reported also, such as Klintman's (1984) study of reaction times to the presentations of colors and Bem's (2003) examination of relative preference between matched pairs of

pictures. Such work suggests directions that we may take, but, assuming that psi functions ubiquitously, we can extend such investigation into almost any behavioral context.

Analyze Scoring Direction and Scoring Extremity Separately and Routinely

The *First Sight* model emphasizes that scoring direction and extremity are expected to be influenced by different factors and that both are important and continuous aspects of ongoing psi process. Both parameters of performance should be analyzed regularly in studies of ESP and PK, with attention paid to variables that affect each of them. It is important to avoid any analyses such as the use of the "direct hit" in ganzfeld research that confound the two parameters as this creates unnecessary confusion. The rank of number one represents both the most extreme score of psi-hitting and one of the higher values of scoring extremity. Any correlations between some other variable and this binary psi variable (one versus all other ranks) thus confound these two basic parameters of psi process and cannot be clearly interpreted. Palmer (1997) has also addressed this problem. In assessing relevant patterns of performance in rank-order data, the methods of Solvfin, Kelly, & Burdick (1978) are helpful.

Focus on Inadvertent Aspects of Response That Are Especially Likely To Be Sensitive Expressions of Psi

Since psi functioning is intrinsically preconscious, it is reasonable to operationalize it by examining inadvertent expressions of its orienting action rather than by asking participants to try to generate an approximation of conscious knowledge. Aspects of response that are generally known to reflect preconscious processes are likely to yield fruitful results. Examples of this useful approach are already available, such as the use of unconscious physiological responses (Braud, 2003; Dean, 1962; Radin, 2003; Radin, Taylor, & Taylor, 1995; Spottiswood & May, 2003), spontaneous social behavior (Carpenter, 2002), perceptual judgments (Kreidler & Kreidler, 1972, 1973), involuntary pupillary fixations (Palmer, 1994), word associations (Stanford, 1973), and affective reactions (Bem, 2003).

Employ Implicit Measures of Psychological Independent Variables

Since the variables affecting psi functioning (directional orientation and directional switching) act on an unconscious level, it should be more useful to study them with implicit or behavioral methods such as projective techniques than with self-report measures such as questionnaires. Such implicit measures tend to be more valid indicators of preconscious processes. As McClelland, Koestner, & Weinberger (1989) point out, self-report measures appear to be most effective at predicting future self-conscious

self-representation, as in the responses to future questionnaires. Projective measures, on the other hand, or other implicit measures that sample behaviors presumed to implicitly express the unconscious issues being studied are superior in predicting behavior in future situations in which the behavior is not self-conscious (i.e., most of the time, and probably always in regard to psi functioning). (See Dauber, 1984; Fazio & Olson, 2003; and Weinberger, Kellner, & McClelland, 1997). Examples of other measures that would be expected to be more valid include defining as "creative" those persons who successfully do creative work and assessing a percipient's "defensiveness" by his or her choice of carrying out a task in a chair that was either fully or partially reclined (Stanford & Schroeter, 1978).

Study the Action of Psi Processes in the Context of Other Preconscious Phenomena

It would be wise to borrow aggressively and collaboratively from mainstream psychologists who are working with preconscious phenomena. Psychologists have been ingenious in recent decades at developing methods for gaining experimental access to some unconscious and preconscious mental processes. Perception without awareness, implicit memory, implicit social perception, perceptual defensiveness, and subliminal psychodynamic activation are examples of the fertile work being done. Psi phenomena do not represent disguised knowledge but the functioning of preknowledge, preperceptual apprehensive mental processes at a point beyond the physical impingement of a stimulus upon the organism. In consciously collaborative work, parapsychologists will have new contributions from their own tradition. For example, although there is some notice of the phenomenon of significant missing in the perception-without-awareness (PWA) literature (e.g., Bonnano & Stillings, 1986; Grosz & Zimmerman, 1965; Merikle & Reingold, 1991), they have paid less systematic attention to this matter than parapsychologists have.

Two studies from the laboratory of the Rhine Research Center demonstrate some of the forms such integrative work might take. In a study currently being analyzed, we are examining the effect of an attempted suboptimal-perception manipulation of the participants' merger-motivation, mood of security, and cognitive approach on their ESP performance in the ganzfeld. We are checking the effects of the manipulation by analyzing session transcripts and by post-session experience reports. If the manipulation has the desired effect, we expect heightened levels of scoring in that condition. In another study soon to begin, a first series will examine the effect of a subliminal manipulation of mild moods of insecurity and security on both an ESP task and a replication of the "mere exposure" effect (in which a false sense of familiarity is engendered by subliminal exposure). In the second series, the subliminal stimuli engendering feelings of insecurity and security will be "delivered" only by an extrasensory agent. We will then examine whether this action leads to an extrasensory "mere exposure"

effect, and to indirectly measured changes in mood. Thus, in these studies we are examining the commingling of psi and other preconscious processes as expressed in ganzfeld mentation and in a different inadvertent ESP response. The first study examines the effect of subliminal stimulation on an extrasensory task; the second examines the action of an extrasensory intention upon a classical PWA effect. Through such beginning steps as these, and others to follow, we hope to shed more light upon the ways in which "first sight" interacts with other preconscious psychological processes in the development of the stream of consciousness.

CONCLUSION

How is it that consciousness takes the form that it does? In this and the preceding paper I am proposing a model in the context of which answers to this perennial psychological question might be sought. In so doing, I am also suggesting that what have been considered psychic phenomena actually represent continuously ongoing and normally unconscious processes that contribute to the construction of experience and action. Since these processes are presumed to begin the sequences of events leading to experience, they may fairly be referred to as *First Sight*. The model also suggests basic ways in which the mind may utilize its presensory apprehensions in the context of developing sensory experience, and ways in which its anticipatory effects may be surmised indirectly.

The model is intended to be useful in several ways. It develops an understanding of psi functioning which places it in the context of normal, preconscious psychological processes and suggests that the mind uses psi apprehensions in the anticipation and construction of experiences and actions, much as it uses subliminal or suboptimal perceptual information. Curiously, some researchers in the field of suboptimal perception have attributed little utility to their phenomena in everyday life. One prominent scientist has even suggested that subliminal perception may be only a kind of laboratory freak with no practical importance and only rare occurrence in everyday life (Bargh, 1992). To the contrary, this model proposes that the mind continually uses suboptimal and extrasensory information in anticipating, constructing, and understanding its own developing experience. If psi processes function in everyday experience in a continuously active if normally implicit way, then they cannot be omitted by any psychologist attempting to understand the basic problem of the field according to William James (1890): how experience comes to be what it is.

It is a propitious time. Serious parapsychological work has proceeded for over 100 years, and findings are now numerous enough and secure enough that implicit patterns are more clearly emerging. Psychology, after its long exile to the publicly behavioral, has rediscovered

consciousness and at the same time has found a fruitful field in the preconscious processes that contextualize consciousness. It is time to think scientifically of all these things at once. An understanding of our psychological nature cannot be adequate without the anomalies of parapsychology. Walt Whitman (1900) proclaimed, "I... am not contain'd between my hat and boots." As this seems literally to be true, scientifically understanding our larger selves should lead us to greater possibilities of knowledge and action. The *First Sight* model is intended to blaze a trail into a new common ground and to inspire other explorers in the search.

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