Seek, And Ye Shall Find: Testing Hypotheses About Other People

In the course of social relationships, individuals often attempt to make judgments about the personal attributes of other people. At times, this quest for knowledge may involve the active testing of hypotheses about other people. When individuals form early impressions of their new acquaintances, they may wish to test hypotheses based upon expectations about their acquaintances' personal dispositions: Is this new acquaintance as friendly as a mutual friend has led me to believe? Is that new acquaintance as boring as every other graduate of the same college? Similarly, when individuals find themselves questioning the accuracy of existing beliefs about friends, they may wish to test hypotheses based on alternate interpretations of their natures: Is this friend whom I have always liked really as mean-tempered as everyone now tells me? Is that friend’s unexpected change in behavior a sign of a corresponding change in character? In fact, whenever individuals find themselves wondering whether particular attributes are characteristic of other people or whether other individuals are particular types of people (Is this person sufficiently conscientious to do the job? Is that person a genuine intellectual?), they essentially have formed hypotheses about the personal attributes of other people. Having formed hypotheses about other people, individuals then may proceed to test these hypotheses. In particular, individuals systematically may use their subsequent social interactions as opportunities to actively collect behavioral evidence with which to test their hypotheses. This essay is

It is the theory which decides what we can find.

- Albert Einstein

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concerned with the processes by which individuals actively test hypotheses about other people.

Having formed a hypothesis about another person, how might an individual test it actively using social interaction? Consider the case of an individual who wishes to test the hypothesis that another person is friendly and sociable. Jim has been told by Brian that Chris is a sociable and outgoing person. Now, Jim knows that Brian is hardly the world’s shrewdest judge of character. In fact, Jim knows that Brian’s assessments of other people’s personalities are often wrong as right. Accordingly, Jim decides to regard Brian’s pronouncement about Chris as a hypothesis to be tested. How, then, is Jim to test the hypothesis that Chris has a sociable and outgoing nature? Perhaps he will use their first conversational encounter as an opportunity to actively test his hypothesis. He might plan his hypothesis-testing strategy by saying to himself: “If Chris is as sociable and outgoing as Brian has claimed, then Chris probably goes to lots of parties. I’ll steer the conversation in the direction of parties. If Chris goes to parties, then I will know that Brian was right when he said that Chris is a sociable and outgoing type of person.” In accord with this strategy, at some appropriate time in the conversation, Jim might say “Tell me about a party you went to” and Chris might oblige with an account of a party. Jim then might conclude that he has confirmed the hypothesis that Chris is sociable and outgoing.

However, had this same Chris been reputed to be shy and retiring, Jim might have found himself testing this hypothesis by asking about the times that Chris wanted to be alone. He then might have found that, in keeping with a shy and retiring disposition, Chris indeed did spend time alone. In each case, as a direct consequence of Jim’s hypothesis-testing efforts, Chris’ actions have provided actual behavioral confirmation for Jim’s initial hypothesis. After all, most (if not all) people have been to some parties and have spent some time alone in their lifetimes. Moreover, most (if not all) people will be particularly likely to talk about parties when asked to do so in conversation. Similarly, they will be particularly likely to talk about quieter times when conversations move in that direction.

This hypothetical scenario illustrates the key aspects of just one strategy of testing hypotheses in social interaction. As a hypothesis-tester, Jim asked Chris a series of questions designed to determine whether or not Chris’ actual behavior and life experiences matched those of a characteristically sociable and outgoing person. In choosing and asking his questions, Jim formulated and enacted a confirmatory hypothesis-testing strategy. The defining characteristic of a confirmatory strategy for testing hypotheses in social interaction is the preferential soliciting of behavioral evidence whose presence would tend to confirm the hypothesis under scrutiny. That is, to test the hypothesis that another person was friendly and sociable by means of a confirmatory strategy, an individual would devote (as did Jim) most of his conversation to probing for instances of the presence of sociable and outgoing behaviors. For example, the individual might ask (as did Jim) about those times when the other person went to parties, those times when the other person sought out new friends, etc. To the extent that such a confirmatory hypothesis-testing strategy yielded relatively many hypothesis-confirming instances of friendly and sociable actions, the hypothesis-tester would accept the hypothesis under consideration.

Why write a scenario to illustrate a confirmatory hypothesis-testing strategy? Why not write a scenario illustrating a disconfirmatory hypothesis-testing strategy in which an individual would preferentially solicit behavioral evidence whose presence tends to disconfirm the hypothesis? After all, most (if not all) hypotheses about personal attributes (e.g., this person is sociable and outgoing) have readily available alternative competing hypotheses (e.g., this person is shy and retiring). Thus, to test the hypothesis that another person was friendly and sociable by means of a disconfirmatory strategy, individuals would devote most of their conversation to probing for instances of the presence of shy and retiring behaviors. For example, an individual might ask about times when the person had wanted to spend time alone, had avoided meeting new people, etc. To the extent that such a disconfirmatory hypothesis-testing strategy yielded relatively few such hypothesis-disconfirming instances of shy and retiring actions, the individual would accept the hypothesis under consideration.

Or, why not write a scenario illustrating an “equal-opportunity” strategy of soliciting hypothesis-confirming and hypothesis-disconfirming evidence with equal diligence? Thus, to test the hypothesis that another person was friendly and sociable by means of an “equal-opportunity” strategy, individuals would devote equal amounts of their conversation to probing for instances of friendly-sociable and shy-retiring behaviors before deciding whether or not to accept the hypothesis. After all, in the absence of relevant empirical evidence, the confirmatory, the disconfirmatory, and the “equal-opportunity” strategies are all possible and plausible approaches to testing hypotheses about other people.

As it happens, the choice to write a scenario illustrating the enactment and the consequences of a confirmatory hypothesis-testing strategy is an outcome of a series of experimental investigations. The activities of the principal characters in this illustrative scenario are representative of the typical activities of participants in these investigations. In these studies, individuals were provided with hypotheses to test about the personalities of other people (targets). These individuals then prepared to test these hypotheses (that their targets were extraverts, or that their targets were introverts) by choosing a series of questions to ask their targets during a later interview (for details of the basic procedural paradigm, see Snyder & Swann, 1978b).

In these investigations, individuals planned to test their hypotheses by preferentially soliciting behavioral evidence whose presence would tend to confirm their hypotheses. To test the hypothesis that their targets were extraverts, individuals were particularly likely to choose questions that one typically asks of people already known to be extraverts (e.g., “What would you do if you wanted
to liven things up at a party?’). To test the hypothesis that their targets were introverts, individuals were particularly likely to choose precisely those questions that one typically asks of people already known to be introverts (e.g., ‘What factors make it hard for you to really open up to people?’). That is, participants planned to test their hypotheses by preferentially soliciting behavioral evidence whose presence would tend to confirm the hypothesis under scrutiny.

Moreover, these confirmatory hypothesis-testing procedures channeled social interaction between hypothesis-testers and targets in ways that caused the targets to provide actual behavioral confirmation for the hypothesis-testers’ hypotheses. Targets who were being ‘tested’ for extraversion actually came to behave in relatively sociable and outgoing fashion. Targets who were being ‘tested’ for introversion actually came to behave in relatively shy and reserved fashion.

Evidently, an individual’s active attempts to test a hypothesis about another individual may initiate a chain of events that channel subsequent social interaction in ways that cause the target of that hypothesis to provide behavioral confirmation for the hypothesis-tester’s hypothesis. How pervasive is the commitment to confirmatory hypothesis-testing strategies? What are the psychological processes that underlie and generate both the preferential soliciting of hypothesis-confirming behavioral evidence and the interpersonal consequences of hypothesis-testing activities? What are the theoretical implications of these investigations of hypothesis-testing processes in social interaction for understanding the nature of social knowledge? It is the intent of this essay to provide answers to these questions. Consider, first, the empirical efforts to chart the unfolding dynamics of hypothesis-testing processes in social interaction; and, then, the theoretical and meta-theoretical implications of investigations of hypothesis-testing processes.

FORMULATING STRATEGIES FOR TESTING HYPOTHESES ABOUT OTHER PEOPLE: A PARADIGMATIC INVESTIGATION

A series of empirical investigations have examined the strategies that individuals formulate to test hypotheses about other people with whom they anticipate social interaction. In an initial paradigmatic demonstration, Snyder and Swann (1978b, Experiment 1) provided participants with hypotheses about other individuals (targets). Participants then prepared to test their hypotheses by planning a series of questions to ask the target in (what they believed to be) a forthcoming interview. Specifically, the experimenter informed participants that they would be taking part in an investigation of how people come to know and understand each other. The experimenter explained that one way to learn about other people is to ask them questions about their likes and dislikes, their favorite activities, their

life experiences, and their feelings about themselves. Each participant would attempt to find out what another person (supposedly waiting in another room) was like by asking questions designed to determine whether that person was the type whose personality was outlined on a card provided by the experimenter. These personality profiles provided the participants with hypotheses about the other individual.

The personality profile was one of two that had been prepared in advance. Some participants learned that it would be their task to assess the extent to which the target’s behavior and life experiences matched those of a prototypic extravert. According to the personality profile (Snyder & Swann, 1978b):

Extraverts are typically outgoing, sociable, energetic, confident, talkative, and enthusiastic. Generally confident and relaxed in social situations, this type of person rarely has trouble making conversation with others. This type of person makes friends quickly and easily and is usually able to make a favorable impression on others. This type of person is usually seen by others as characteristically warm and friendly [p. 1203]

Other participants learned that their assignment would be to determine the extent to which the target’s behavior and life experiences matched those of a prototypic introvert. According to the personality profile (Snyder & Swann, 1978b):

Introverts are typically shy, timid, reserved, quiet, distant, and retiring. Usually this type of person would prefer to be alone reading a book or have a long serious discussion with a close friend rather than to go to a loud party or other large social gathering. Often this type of person seems awkward and ill at ease in social situations, and consequently is not adept in making good first impressions. This type of person is usually seen by others as characteristically cool and aloof [p. 1204]

The experimenter then explained that the profile (the hypothesis) dealt in abstract generalities and global characteristics. However, getting to know someone involves finding out concrete information and specific facts about what that person actually thinks, feels, and does. Accordingly, the participant would choose 12 questions that would help find out whether the target’s specific beliefs, attitudes, and actions in life situations matched the general characteristics described in the profile.

The experimenter then provided participants with a list of ‘Topic Areas Often Covered by Interviewers,’ from which to choose their 12 questions. The questions on the topic sheet inquired about a wide range of beliefs, feelings, and actions within the domains of personal experience and interpersonal relationships. Undergraduate rater-judges previously had classified these questions into three categories:
1. Extraverted Questions. These questions were ones that the rater-judges thought typically would be asked of people already known to be extraverts: for example, "What kind of situations do you seek out if you want to meet new people?"; "In what situations are you most talkative? What is it about these situations that makes you like to talk?'

2. Introverted Questions. According to the rater-judges, these questions characteristically would be asked of individuals already known to be introverts: for example, "What factors make it hard for you to really open up to people?"; "What things do you dislike about loud parties?'

3. Neutral questions. Questions for which there was no consensus that it was an extraverted question or an introverted question and those classified by the rater-judges as irrelevant to introversion and extraversion were classified as neutral questions: for example, "What are your career goals?"; "What do you think the good and bad points of acting friendly and open are?'

Participants then selected the 12 questions that they estimated would provide them with the information to test the hypothesis about the target. The experimenter then informed each participant that the interview would not actually take place, and thoroughly debriefed each participant.

What strategies did participants formulate to test their hypotheses about targets with whom they anticipated social interaction? In accord with a confirmatory strategy, participants preferentially chose to solicit behavioral evidence whose presence would tend to confirm their hypotheses. Thus, participants planned to ask extravert-questions much more frequently when planning to test the hypothesis that their targets were extraverted individuals than when preparing to test the hypothesis that their targets were introverted individuals. Similarly, participants chose to ask introvert-questions more frequently when planning to test the hypothesis that their targets were introverted individuals than when preparing to test the hypothesis that their targets were extraverted individuals. And, despite the fact that participants could have allocated many of their choices to neutral questions, they tended not to exercise this option. Moreover, participants chose neutral question with equally rare frequency whether they were testing the extravert or the introvert hypothesis.

This paradigmatic investigation provided clear evidence that individuals systematically formulate confirmatory strategies for testing hypotheses about other people. To test the hypothesis that their targets were extraverts, participants were particularly likely to choose to ask precisely those questions that one typically asks of people already known to be extraverts. Similarly, to test the hypothesis that their targets were introverts, participants were particularly likely to choose to ask precisely those questions that one typically asks of people already known to be introverts.

How pervasive is the commitment to confirmatory hypothesis-testing strategies? In the initial investigation (Snyder & Swann, 1978b, Experiment 1), participants chose to ask questions that solicited hypothesis-confirming evidence about twice as often as they chose to ask questions that solicited hypothesis-disconfirming evidence. A series of subsequent investigations have attempted to define the boundary conditions within which hypothesis-testers will choose to preferentially solicit hypothesis-confirming behavioral evidence. Each investigation has attempted to identify circumstances in which hypothesis-testers will avoid confirmatory strategies. Yet, despite repeated and diverse attempts to accomplish this goal, these investigations not only failed to yield even one circumstance in which hypothesis-testers avoid confirmatory strategies, but also failed to identify even one procedure that successfully diminishes the magnitude of the preferential soliciting of hypothesis-confirming evidence.

Origins of the Hypothesis

Hypotheses differ in their origins. Some hypotheses emerge from more credible sources than do others. Consider again the case of Jim and his hypothesis that Chris is a friendly and sociable individual. Surely, Jim would have had more faith that this hypothesis accurately captured Chris' nature if the hypothesis had emerged from a credible source (perhaps a demonstrably reliable and valid personality assessment device) rather than from the intuitions of his friend Brian (who, it will be recalled, had a rather undistinguished track record of accurately perceiving other people). Will the origins of a hypothesis influence the strategies that individuals formulate to test that hypothesis?

In an experiment designed to answer this question (Snyder & Swann, 1978b, Experiment 1), participants were provided with hypotheses about other people within the basic question-choosing procedural paradigm. Some participants were prepared to test the hypothesis that their targets were extraverts, whereas others, the hypothesis that their targets were introverts. However, the experimenter also provided participants with information about the (supposed) origins of the personality profile (which, it will be recalled, constituted the hypothesis to be tested). Some participants learned that the hypothesis was based upon "a summary of the results of a personality test the other person took last week." The intent here was to give the hypothesis some credibility by having it "emerge" from the target's own actions. Moreover, pretesting had indicated that the undergraduate population from which participants in this investigation were recruited continue to have considerable faith in the validity of personality assessment procedures. Accordingly, these participants ought to have had some reason to believe that their hypotheses accurately captured their targets' natures.
By contrast, other participants learned that the hypothesis was simply a description of a hypothetical type of person. The intent here was to make clear that the hypothesis had no connection whatsoever to any actions of the target. These participants were given no reasons to believe that the hypothesis was true or false. Their task simply was to discover whether or not their targets were like a hypothetical type of person. The hypothesis, rather than emerging from some actions of the target that might suggest that it would prove true, appeared to emerge, so to speak, “from thin air.”

The origins of the hypothesis being tested had no noticeable effect on the questioning strategy that individuals adopted to test their hypotheses. Hypothesis-testers were just as likely to formulate confirmatory strategies of preferentially soliciting the presence of hypothesis-confirming evidence when there were no reasons to anticipate the outcome as when they had some reason to expect that their hypotheses were true. In either case, they planned to preferentially ask extravert-questions to test the hypothesis that their targets were extraverts, and introvert-questions to test the hypothesis that their targets were introverts.

Certainty of the Hypothesis

It seems to matter not at all whether or not individuals have any reason to suspect that their hypotheses would prove to be accurate. Hypotheses that emerge from thin air are accorded the same treatment as hypotheses that emerge from credible personality assessment devices. But, would individuals avoid confirmatory hypothesis-testing strategies if they had compelling reasons to believe that their hypotheses will prove to be inaccurate? In an investigation of this possibility (Snyder & Swann, 1978b, Experiment 3) participants chose the set of questions that they would use to test the hypothesis that their targets were extraverts. Their task was identical to that of the basic procedural paradigm, except that some participants learned information that was designed to graphically convey the certainty that their hypotheses would prove to be inaccurate or would prove to be accurate.

To make it seem quite unlikely that their targets were extraverts, some participants learned that they were a member of a sorority of which only 7 of 30 members were extraverts. Accordingly, they were to find out if she was one of the very few extraverts in the sorority. By contrast, to make it seem quite likely that their targets actually were extraverts, some participants learned that she was a member of a sorority of which fully 23 of 30 members were extraverts. Accordingly, they were to find out if she was one of the very many extraverts in the sorority.

There is no doubt that participants in this investigation understood the implications of the information about the composition of the sorority. Participants who believed that there were very many extraverts in the sorority estimated that it was much more likely that their specific targets were extraverts than did participants who believed that there were very few extraverts in the sorority. Yet, this knowledge of the likelihood that their hypotheses would prove accurate or inaccurate had no demonstrable effect on the formulation of strategies for testing these hypotheses. Participants were as likely to formulate confirmatory strategies of preferentially searching for the presence of hypothesis-confirming evidence when they knew that it was quite unlikely that their targets were extraverts (that is, when they knew that there were very few extraverts in the target’s sorority) as when they knew that it was quite likely that their targets were extraverts (that is, when they knew that there were very many extraverts in the target’s sorority) as when they had no information about the presumptive accuracy or inaccuracy of their hypotheses (that is, when [in the basic procedural paradigm] they learned nothing about the target). In each case, hypothesis-testers planned to ask equally many more extraverted questions and equally fewer introverted questions than their counterparts who attempted (in the basic procedural paradigm) to test the hypothesis that their targets were introverts.

Incentives for Accuracy

Would individuals continue to formulate confirmatory strategies for testing hypotheses about the personalities of other people if they were offered substantial incentives for testing their hypotheses as “accurately” as possible? To evaluate this possibility, some participants in an investigation of hypothesis testing (Snyder & Swann, 1978b, Experiment 4) learned that the researchers would award “$25 to the person who develops the set of questions that tell the most about . . . the interviewee.”[p. 1209].” Thus, they should “try to be as accurate as possible in finding out what the interviewee is like”[p. 1209].” Some participants were offered this incentive to test the hypothesis that their targets were extraverts, and others, to test the hypothesis that their targets were introverts.

Participants in this investigation did not abandon their confirmatory strategies for testing their hypotheses about their targets when offered a $25 incentive for accuracy. In fact, they were no less likely to preferentially solicit the presence of hypothesis-confirming behavioral evidence from their targets than were individuals who had not been offered such large incentives for accuracy. With or without substantial incentives for accuracy, individuals planned to ask more extravert-questions to assess their targets’ extraversion than to assess their introversion; at the same time, they planned to ask more introvert-questions to determine their targets’ introversion than to determine their extraversion. Apparently, the offer of substantial monetary incentives was not sufficient to even diminish, let alone override, the propensity to preferentially solicit the presence of hypothesis-confirming evidence.
Testing Competing Hypotheses

Surely, there must be some way to induce individuals to eschew their confirmatory strategies for testing their hypotheses about other people. Typically, in these investigations, participants have had access to one of the two personality profiles (either that of the prototypic extravert or that of the prototypic introvert) and have designed interview strategies to determine whether or not their targets were the type of person described in the personality profile. Perhaps, it might be argued, participants planned to preferentially solicit evidence whose presence would tend to confirm their hypotheses because they had no alternative hypotheses to consider. What if, instead of providing participants with a hypothesis, one were to provide them with both personality profiles and ask them to find out whether their specific targets were more similar to the prototypic extravert or more similar to the prototypic introvert? How would participants proceed to evaluate equally probable competing hypotheses about their targets?

In an investigation designed to answer this question (Snyder & Swann, 1977a) participants chose the questions that they would ask of their targets in (what they believed to be) a forthcoming interview. Some participants received both the extraverted personality profile and the introverted personality profile, with the instructions that both profiles “describe two hypothetical persons familiar to us all—the extravert and the introvert. Your task will be to find out if the other person is more like an extravert or more like an introvert.”

What interview strategies did these participants formulate when they had competing hypotheses about their targets’ personalities? Did they formulate “equal-opportunity” strategies and sample questions representatively from both the extraverted and introverted domains? Or, did they preferentially sample questions from one domain or other, perhaps because they had assumed (for purposes of planning an interview strategy) that their targets were either extraverts or introverts? As it happened, even when faced with competing hypotheses to test, individuals continued to preferentially solicit behavioral evidence from one domain. Participants who were assigned the task of testing competing hypotheses formulated interview strategies equivalent to those of participants who attempted to test the sole hypothesis that their targets were extraverts. In either case, participants chose to ask more extravert-questions than did participants who attempted to test the sole hypothesis that their targets were introverts.

It appears that participants coped with competing hypotheses by acting as if they were testing only one hypothesis—the extravert hypothesis. But why the extravert hypothesis? Why not the introvert hypothesis? One explanation of this outcome may be eliminated with ease. It is unlikely that participants assumed that extraverts appear in the world with greater frequency than introverts, and therefore chose to sample questions from the extravert-domain. After all, in an earlier investigation, participants had been totally insensitive to concrete information about the frequency of extraverts in the sorority to which the target was to be assigned.

Knowledge of Disconfirming Attributes

Even in the face of competing hypotheses, individuals plan to preferentially solicit evidence whose presence would tend to confirm only one of the competing hypotheses. Nevertheless, there may exist a related procedure for inducing individuals to avoid confirmatory hypothesis-testing strategies. So far, in these investigations, the hypotheses have been framed in terms of those attributes that characteristically are thought to be present in, respectively, prototypic extraverts (e.g., “extraverts are typically outgoing, sociable, energetic, confident, talkative, and enthusiastic”) and prototypic introverts (e.g., “introverts are typically shy, timid, reserved, quiet, distant, and retiring”). Thus, at the same time as the hypotheses have explicitly defined those attributes whose presence would confirm the hypothesis, they have been mute about those attributes whose presence would disconfirm the hypothesis under consideration. An individual who desired, for whatever reason, to solicit disconfirming evidence would be forced to self-generate on his or her own that set of attributes that would provide disconfirming evidence. Such an individual, when faced with the extravert hypothesis and a list of all those attributes whose presence reflects extraversion, would have to quickly bring to mind all those attributes whose presence would indicate that a person is not an extravert (e.g., the presence of shy, reserved, quiet, cool, aloof behaviors).

Perhaps, it might be argued, participants in these investigations planned preferentially soliciting confirming evidence because (as a result of the hypothesis having been framed in terms of confirming attributes) those attributes that would constitute confirming evidence simply were more cognitively available to the participant than were those attributes that would constitute disconfirming evidence. Whatever the case, the finding that participants formulated strategies and chose questions that were highly biased toward the confirming hypothesis is clear.
instead of providing individuals with hypotheses framed exclusively in terms of confirming attributes, one were to provide them with hypotheses that were framed both in terms of confirming attributes and in terms of disconfirming attributes? What if, for example, the extravert hypothesis not only made clear what an extravert is but also made equally clear what an introvert is not?

To probe the strategies that individuals would use to test such hypotheses, Snyder and Campbell (1980) had participants choose sets of questions to test either the hypothesis that their targets were extraverts or the hypothesis that their targets were introverts. For some participants, the personality profile that constituted the hypothesis to be tested provided information both about those attributes whose presence would confirm the hypothesis and those attributes whose presence would disconfirm the hypothesis. Thus, the personality profile of the hypothetical extravert affirmed the presence of all those attributes that characterize a prototypic extravert (e.g., “are typically outgoing, sociable, energetic, confident, talkative, and enthusiastic”) at the same time as it denied the presence of all those attributes that characterize a prototypic introvert (e.g., “are rarely shy, timid, reserved, quiet, distant, and retiring”). Similarly, the personality profile of the hypothetical introvert affirmed the presence of all those attributes that characterize a prototypic introvert (e.g., “is usually seen by others as characteristically cool and aloof”) at the same time as it denied the presence of all those attributes that characterize a prototypic extravert (e.g., “is rarely seen by others as characteristically warm and friendly”).

What interview strategies did these participants formulate to test hypotheses that were framed in terms of both confirming and disconfirming attributes? Surely, any participant who wished to formulate disconfirmatory or “equal-opportunity” strategies had all the ammunition that they needed to choose a set of questions that would embody such strategies. But, such was not the case. Confirmatory hypothesis-testing strategies were as prevalent in the sample of individuals who participated in this investigation as they had ever been.

Even when the hypotheses made clear those attributes whose presence would confirm and those attributes whose presence would disconfirm the hypothesis under scrutiny, participants planned to preferentially solicit evidence that would tend to confirm their hypotheses. Participants chose more extravert-questions to test the hypothesis that their targets were extraverts than to test the hypothesis that their targets were introverts. At the same time, participants planned to ask more introvert-questions to test the hypothesis that their targets were introverts than to test the hypothesis that their targets were extraverts. Moreover, these manifestations of the formulation of confirmatory hypothesis-testing strategies were as evident for these participants whose hypotheses defined both confirming and disconfirming attributes as they were for other participants whose hypotheses defined only the confirming attributes.

The procedure of providing participants with hypotheses framed in terms of both confirming and disconfirming attributes was not sufficient to even diminish, let alone override, the propensity to preferentially solicit behavioral evidence whose presence would confirm these hypotheses. But what would happen if participants were provided with hypotheses framed exclusively in terms of attributes that would disconfirm the hypotheses? To answer this question, Snyder and White (1978) provided participants with either the extravert hypothesis or the introvert hypothesis framed exclusively in terms of attributes typically thought to be absent in, respectively, with prototypic extraverts (e.g., rarely shy, timid, reserved, quiet, distant, retiring, etc.) or with prototypic introverts (e.g., rarely outgoing, sociable, energetic, confident, talkative, enthusiastic, etc.). Again, participants systematically formulated confirmatory strategies: they chose extravert-questions more frequently to test the extravert hypothesis than to test the introvert hypothesis, and introvert-questions more frequently to test the introvert hypothesis than to test the extravert hypothesis. This preferential soliciting of hypothesis-confirming evidence occurred despite the fact that the hypotheses contained not one single reference to confirming attributes. Evidently, the propensity to preferentially solicit hypothesis-confirming behavioral evidence is not a consequence of framing hypotheses exclusively in terms of hypothesis-confirming attributes.

The Lengths to Which One Must Go

Over and over again, individuals who participated in these investigations formulated confirmatory hypothesis-testing strategies. It seemed to matter not at all to these individuals where their hypotheses originated, how likely it was that their hypotheses would prove accurate or inaccurate, whether substantial incentives for accurate hypothesis-testing were offered, or whether the hypotheses explicitly defined disconfirming attributes. As far as these individuals were concerned, a hypothesis was a hypothesis was a hypothesis. They accorded all hypotheses equal status when preparing a strategy to solicit information with which to test these hypotheses. In each case, participants planned to preferentially solicit (by means of the questions that they chose to ask their targets) behavioral evidence whose presence would tend to confirm their hypotheses. Even when faced with competing hypotheses of equal credibility, participants continued to preferentially solicit behavioral evidence from one domain. Moreover, even when one goes beyond the testing of hypotheses about other people to the testing of hypotheses about one’s self, individuals preferentially accumulate confirming evidence to test hypotheses about their own personal attributes (cf. Snyder & Skrypnek, 1979).

Is there any procedure that will induce individuals to avoid the preferential soliciting of evidence from one behavioral domain? Yes. But, oh, the lengths to which one must go to accomplish this feat. The only procedure that successfully induces individuals to avoid the preferential soliciting of behavioral evidence from one domain is one that provides them with no hypotheses to test. When
participants chose that series of questions that they would ask to find out about their targets in the absence of any hypotheses about their targets' personalities (that is, in the absence of a profile), they came closer than any other group of participants in this series of investigations to formulating an “equal-opportunity” interview strategy of sampling questions representatively from both the extravert- and the introvert-domain (Snyder & Swann, 1977b). In comparison with participants who chose their questions in order to test hypotheses about their targets' extraverted or introverted natures, these participants asked fewer of those questions that would have provided confirming evidence for either hypothesis and more of those questions that would have provided disconfirming evidence for either hypothesis.

Thus, it was only when participants were given no hypotheses to test that they even approached the formulation of interview strategies that avoided a preferential sampling of behavioral evidence from one or other domain. Of course, the fact that individuals may avoid confirmatory strategies when they are not attempting to test any hypotheses hardly constitutes the identification of a circumstance in which individuals avoid confirmatory strategies when they are attempting to test hypotheses about other people. If any procedure exists for inducing individuals to eschew confirmatory hypothesis-testing strategies in favor of either disconfirmatory or “equal-opportunity” hypothesis-testing strategies, that procedure has yet to appear.

The Consequences of Confirmatory Strategies for Testing Hypotheses About Other People

Time and again, investigations of strategies for testing hypotheses about other people have yielded the same outcome. To test their hypotheses, individuals who participated in these experiments wanted to ask their targets precisely those questions that they would have asked of someone for whom the hypothesis was already known to be true. Consider, now, the consequences of enacting these confirmatory hypothesis-testing strategies in social interaction.

So far, hypothesis-testers in these investigations never had the opportunity to interrogate their targets. What would happen if one were to allow hypothesis-testers the opportunity to interview their targets and “collect the data” that their confirmatory strategies would provide them? Would these confirmatory evidence-gathering procedures generate behaviors that would erroneously confirm their hypotheses? Would targets who are being “tested” for extraversion actually come to behave in relatively sociable and outgoing fashion? Would targets who are being “tested” for introversion actually come to behave in relatively shy and reserved fashion? After all, the more often one inquires about the target’s extraversion, the more often the target will have opportunities to provide instances of extraverted behavior. Similarly, the more often one inquires about the target’s introversion, the more often the target will have opportunities to provide instances of introverted behaviors. Confirmatory hypothesis-testing strategies may constrain targets to behave in ways that provide actual behavioral evidence for the hypothesis under consideration.

In order to more systematically probe these processes, Snyder and Swann (1977b, Experiment 2) conducted an experimental investigation of hypothesis-testing processes in social interaction. Hypothesis-testers first formulated their hypothesis-testing strategies and then carried out these strategies by actually interviewing their targets.

Hypothesis-Testing in Social Interaction

In this investigation, participants were scheduled in pairs of previously unacquainted individuals. To ensure that they would have no contact before their interaction, they had been instructed to arrive at separate experimental rooms that were located on different corridors. Each participant was assigned randomly to one of two roles: hypothesis-tester or target. Half of the hypothesis-testers were instructed to assess the extent to which their targets’ behavior and experiences matched those of the prototypic extravert. The other half of the hypothesis-testers were instructed to assess the extent to which their targets’ behavior and experience matched those of a prototypic introvert. At the same time as the hypothesis-testers were choosing questions to ask their targets during the forthcoming interviews, the experimenter informed participants assigned to the role of target that they would be interviewed by another student. Targets were instructed simply to answer all the questions in as informative, open, and candid a manner as possible.

All dyads then participated in interviews in which the hypothesis-testers asked the 12 questions that they had chosen and the targets answered these 12 questions. These interviews were conducted by means of microphones and head-phones connected through a stereophonic tape recorder. All interviews were tape-recorded, with each participant’s voice on a separate channel of tape. To assess the extent to which the answers of the targets provided actual behavioral confirmation for the attributes of the hypothesis-testers’ hypotheses, a panel of naive judges listened to tape recordings of the interviews. These listener-judges heard only the track of the tape containing the targets’ voices, and rated each target on a variety of attributes associated with extraversion and introversion: for example, talkative–quiet; unsociable–sociable; friendly–unfriendly; poised–awkward; introverted–extraverted; enthusiastic–apathetic; shy–outgoing; energetic–relaxed; cold–warm; and unconfident–confident.

It is now possible to chart processes of hypothesis testing in social interaction. Consider, first, the effects of the hypothesis-testers’ hypotheses on the hypothesis-testing strategies formulated by the hypothesis testers and, then, on
the targets’ behavioral self-presentation during the interviews, as measured by the listener-judges’ evaluations of the tape recordings. By now, it should come as no surprise to learn that hypothesis-testers formulated confirmatory strategies to test hypotheses about their targets’ natures. In accord with this strategy, hypothesis-testers chose to ask extravert-questions more frequently when planning a strategy to test the hypothesis that their targets were extraverted individuals than when formulating a strategy to test the hypothesis that their targets were introverted individuals. Moreover, hypothesis-testers chose to ask introvert-questions more frequently when planning a strategy to test the hypothesis that their targets were introverts than when preparing to test the hypothesis that their targets were extraverts.

These hypothesis-testers attempted to evaluate the accuracy of their hypotheses about their targets by preferentially soliciting evidence whose presence would tend to confirm their hypotheses. And, indeed, during the interview the targets provided precisely the behavioral evidence that would appear to confirm the hypotheses being tested by the hypothesis-testers. For, the listener-judges’ ratings of the targets’ contributions to the interviews provided clear evidence that targets hypothesized to be extraverts actually presented themselves in more extraverted fashion than did targets hypothesized to be introverts. Evidently, the targets’ answers to the hypothesis-testers’ questions did provide actual behavioral confirmation for the hypotheses being tested by the hypothesis-testers. Moreover, it should be recalled that these behavioral differences were detectable by naive listener-judges who had access only to tape-recordings of the targets’ contributions to the interviews.

As a consequence of the confirmatory strategies used by the hypothesis-testers to gather evidence with which to test their hypotheses, targets presented themselves in ways that provided actual behavioral confirmation. But, did the hypothesis-testers regard their hypotheses as having been confirmed by the target’s actions? Apparently so. For, when all was said and done, the experimenter (during the post-experimental debriefing session) asked hypothesis-testers what they had learned about the targets’ characteristic nature. Those who had tested the hypothesis that their targets were extraverts, on the average, regarded their targets as more extraverted by nature than did their counterparts who had tested the hypothesis that their targets were introverts.

The sequential outcomes of this experimental investigation provide empirical documentation for each and every stage of the unfolding drama of the hypothesis-testing process in social interaction: the hypothesis-tester’s formulation of confirmatory strategies, the hypothesis-tester’s use of confirmatory data-gathering procedures in social interaction with the target of the hypothesis, and the target’s behavioral confirmation of the hypothesis being tested. In light of this demonstration of the self-confirming nature of hypotheses about other people, it becomes easier to understand why so many popular beliefs about other people (in particular, clearly erroneous social and cultural stereotypes) are so stubbornly resistant to change. Even if one were to develop sufficient doubt about the accuracy of these beliefs to proceed to actively test them, one nevertheless might be likely to gather all the evidence one needs to confirm and retain these beliefs. And, in the end, one may be left with the secure (but totally unwarranted) feeling that these beliefs must be correct because they have survived (what may seem to the individual) perfectly appropriate and even rigorous procedures for assessing their accuracy.

The “Professional” Hypothesis-Tester

The adoption of confirmatory hypothesis-testing strategies, and the interpersonal consequences that accompany them, may not be limited to everyday attempts to understand the personalities of people with whom one interacts. In their professional activities, many individuals routinely interview others to test hypotheses about their natures. Employers interview job candidates to test hypotheses about their suitability for particular jobs (e.g., Does this applicant have the attributes that define the ideal executive?). Clinical psychologists and psychiatrists interview their clients to test hypotheses about the links between their past experiences and their current complaints (e.g., Does this person have the background that typically yields psychosomatic disorders?).

Consider the case of interactions between clinicians and their clients. There has been considerable concern with the extent to which clients’ behaviors come to match the conceptual frameworks and theoretical orientations of their therapists (cf. Frank, 1974; Scheff, 1966). Somehow, therapists elicit from their clients material confirming their views. Accordingly, client values come to match those of their therapists (cf. Bandura, Lipsher, & Miller, 1960; Rosenthal, 1955; Kelkowitz, Cohen, & Ortmeyer, 1967). Even the dreams that clients report come to contain increasing amounts of “approved” material (cf. Whitten, Kramer, & Baldrige, 1963). Accordingly, the kinds of improvement reported by clients tend to conform to the therapists’ theoretical orientation. Patients in psychoanalysis express increasing amounts of formerly “unconscious” material as therapy progresses (Frank, 1974). By contrast, those individuals who improve in client-centered therapy report reduced discrepancies between their real self and their ideal self, which is precisely the change predicted by the theory underlying this form of treatment (Rogers & Dymond, 1954).

A similar view of the relationship between physician and client also has been suggested by Balint (1957). According to Balint, every doctor has a “theory” of how a patient ought to behave when sick. Furthermore, Balint (1957) claims that these beliefs exert powerful influences on all aspects of the doctor’s activities with patients: “It was almost as if every doctor had revealed knowledge of what was right and what was wrong for patients to expect and to endure and further, as
if he had a sacred duty to convert to his faith all the ignorant and unbelieving among his patients [p. 216]." It is this process that Balint has christened the "apostolic" mission of medicine.

Research on hypothesis-testing in social interaction may suggest the processes by which such outcomes may be generated. Having diagnosed the client’s "problem," the therapist may selectively and preferentially solicit confirming evidence. This activity may be guided by a hypothesis about what kinds of "backgrounds" lead up to what kinds of current "problems." For example, the psychiatrist who believes (erroneously) that adult gay males had bad childhood relationships with their mothers may meticulously probe for recalled (or fabricated) signs of tension between their gay clients and their mothers, but neglect to so carefully interrogate their heterosexual clients about their maternal relationships. No doubt, any individual could recall some friction with his or her mother, however minor or isolated the incidents.

The point is that all individuals have childhood histories with events and experiences that could "account for" aspects of their adult lifestyles in need of "explanation." Yet, a search for the past that explains the present is only done when some contemporary event needs a historical explanation. Accordingly, "searchers" don’t realize the extent to which their hypotheses would be confirmed even when there was no current problem to be explained. As evidence for this proposition, consider the study of Renaud and Estess (1961) who conducted life history interviews with 100 men chosen precisely because their adult lives gave no indications whatsoever of "problems." These men were in excellent health, were occupationally and educationally superior in their accomplishments, had no histories of mental or psychological conflict, complained of no problems of personal, social, marital, or occupational adjustment.

But with what kinds of events and experiences were the childhood histories of these "normal" individuals filled? Quite simply, the childhood histories of these men were laden with the kinds of "traumatic events" and "pathogenic factors" that are found ordinarily in the histories of psychiatric patients who are disabled by their symptoms. In fact, Renaud and Estess (1961) found that the life histories of these 100 "normals" were rife with:

- overt parental discord as seen in divorce or separation; covert parental discord as manifested in lengthy periods of withdrawal; exclusiveness or lack of mutuality; excessively rigid or overindulgent patterns of discipline, or both; resolution of oedipal anxieties through overidentification with one parent to the exclusion of the other; unresolved sibling rivalries; repressive and unrealistic approaches to sexual information and sexual practices; frequent maternal physical complaints of a type recognized today as related to tension and conflict [p. 795].

In short, as Renaud and Estess (1961) observed: "these data abound with material such as we are accustomed to encounter in the histories of psychiatric patients [p. 795]." In fact, Renaud and Estess quite candidly admitted that, had these men come to them complaining of "colitis, ulcers, phobias, work inhibitions, incapacitating shyness, etc. [p. 795]," they would have found no trouble finding evidence of the "background factors" that are supposed to predispose one to these problems. Of course, these men did not suffer from any of these problems, so (other than for purposes of a research investigation into the pathogenicity of the childhoods of apparent "normals") no one would ever have bothered to probe into their backgrounds. As long as one only probes into the backgrounds of "troubled" adults, it will be all too easy to blame any and all contemporary problems on whatever "pathogenic" background is demanded by one’s hypothesis that links current symptoms and historical causes.

HYPOTHESES TESTING:
A THEORETICAL ANALYSIS

The time has come to consider, from a theoretical perspective, the processes that might underlie and generate the hypothesis-testing strategies documented in our empirical investigations. Why do individuals preferentially solicit evidence whose presence would tend to confirm their hypotheses about other people? The following theoretical analysis is an attempt to account for why individuals are so pervasively and stubbornly committed to confirmatory hypothesis-testing strategies. The central theses of this analysis are quite simply that: (1) the processes of human thought foster, promote, and almost ensure the ready and willing adoption of confirmatory strategies by hypothesis-testers, and (2) the structural organization of human social behavior almost guarantees that targets can and will display a vast repertoire of hypothesis-confirming actions.

Consider the perspective of an individual who is contemplating a hypothesis about another person in anticipation of testing the accuracy of that hypothesis. This individual’s choice of a hypothesis-testing strategy, no doubt, reflects beliefs about what types of evidence are particularly relevant and informative for purposes of accepting or rejecting the hypothesis under scrutiny. There is every reason to believe that this individual will believe that it is the presence of confirming evidence that is particularly informative and relevant for purposes of hypothesis testing. That is, he or she most likely operates with an implicit "philosophy of science" that dictates that hypotheses about other people survive according to their ability to accumulate confirming evidence.

Considerable evidence from the research literature on logical reasoning supports this assertion. In research on concept formation and concept utilization, people prefer and use positive instances of concepts over negative ones (cf. Hovland & Weiss, 1953). Moreover, confirming instances generally have more impact on inductive conclusions than do disconfirming instances (cf. Gollob, Rossman, & Abelson, 1973); and, covariation between positive instances leads
construct of the prototypic extravert. By contrast, participants asked to report factual information relevant to testing the hypothesis that Jane was an introvert were particularly likely to report instances of Jane behaving in accord with their construct of the prototypic introvert. This outcome occurred despite the fact that all participants had access to equivalent amounts of hypothesis-confirming and hypothesis-disconfirming evidence that they had learned before they were provided with any hypotheses about Jane.

Evidently, as the investigations of Snyder and Cantor (1979) suggest, people do believe that the presence of confirming evidence is particularly relevant and informative for purposes of testing hypotheses about others. (See Snyder and Campbell (1979) for other investigations of the hypothesis-tester’s beliefs about the relevance and informativeness of different types of evidence.) Moreover, individuals seem to define the task of testing a hypothesis as one of building the case in support of that hypothesis by preferentially accumulating evidence whose presence would confirm the hypothesis under scrutiny (cf. Snyder & Cantor, 1979). Accordingly, in anticipating the behavior of the target, the hypothesis-tester may be much more likely to think of instances in which the target behaves in accord with the hypothesis than to think of instances in which the target violates the hypothesis. In so doing, the individual may draw upon richly detailed and well-articulated conceptions of prototypic personality types (e.g., the prototypic extravert, the prototypic introvert, etc.) for knowledge of specific behavioral manifestations of global personality attributes (cf. Cantor & Mischel, 1977). Thus, an individual who anticipates interaction with a target hypothesized to be an extravert may bring to mind all those actions by which a hypothetical extravert might manifest an extraverted disposition.

If representations of the target behaviorally confirming the individual’s hypothesis are more cognitively “available” than representations of the target violating the hypothesis, then there is every reason to believe that the individual will overestimate the likelihood that the target will, in fact, behave in ways that confirm the hypothesis. Considerable evidence suggests that individuals use “availability” as a heuristic for estimating frequency: Events that are easy to bring to mind are thought to occur with greater frequency than events that are difficult to bring to mind (cf. Tversky & Kahneman, 1973). If so, by virtue of contemplating the forthcoming interaction with the target in the light of the hypothesis, the individual not only will regard confirming evidence as particularly relevant for testing the hypothesis but also will believe that these hypothesis-confirming actions will occur in great numbers and that these hypothesis-confirming behaviors will be representative of the target’s true personal nature (cf. Ross, Lepper, Strack, & Steinmetz, 1977).

To the extent that the individual believes that hypothesis-confirming behaviors are both relevant to the hypothesis-testing task and typical of the target’s activities, he or she may consider it unreasonable to confine the conversation to those topics about which the target can provide the most informative and
meaningful facts. Accordingly, an individual may use social interaction as an opportunity to preferentially solicit evidence that confirms the hypothesis under consideration.

Such a preferential evidence-gathering procedure may generate a sample of evidence in which hypothesis-confirming evidence will be over-represented and hypothesis-disconfirming evidence will be under-represented: There is every reason to believe that most people, as targets, will be "generous" in providing specific instances of hypothesis-confirming actions. There is sufficient situational-to-situation variability in human social behavior that most people about whom hypotheses are tested will have behaved, in some situations and at some times, consistently with the hypothesis under consideration (c.f. Mischel, 1968). However, these same people probably will have behaved, in other situations and at other times, in ways that would tend to disconfirm that same hypothesis. Accordingly, to the extent that the individual preferentially solicits hypothesis-confirming instances of the target's behavior, such a data-gathering procedure will be particularly successful in generating a sample of data in which confirming evidence is over-represented and in which disconfirming evidence is under-represented. Of course, it will be this sample of data upon which the individual will base the decision to accept or reject the hypothesis in question. Accordingly, the individual may accept this hypothesis more readily than the actual events in the target's life truly warrant.

HYPOTHESIS TESTING AND THE SOCIAL NATURE OF SOCIAL KNOWLEDGE

Confirmatory hypothesis-testing strategies and their consequences are not confined to the domain of hypotheses about the personal attributes of other people. Indeed, the same preferential search for confirming evidence that characterizes attempts to test hypotheses about the world of people seems to characterize attempts to test hypotheses about the world of objects. In their attempts to establish the truth or falsity of general "if... then" propositions, people overwhelmingly search for specific instances that would verify the truth of the proposition and neglect to search for instances that would falsify the proposition under consideration. For example, had you participated in an experiment described by Wason and Johnson-Laird (1972):

four cards would have been placed in front of you, showing the following symbols: E K 4 7
You know that each of these cards has a letter on one of its sides and a number on its other side, and you are then presented with the following rule which refers only to the four cards:

*If a card has a vowel on one side, then it has an even number on the other side.*
Your task is to name those cards, and only those cards, which need to be turned over in order to determine whether the rule is true or false [p. 173].

Almost without exception, in such circumstances, problem-solvers say either "E and 4" or "only E." Both answers are wrong. The correct answer is "E and 7." Any odd number on the other side of E falsifies or disconfirms the rule in 7. Time and again in their investigations of problem solving, Wason and Johnson-Laird (1972) have observed seemingly intelligent individuals (including professional logicians) attempt to determine whether rules are true or false by searching only for evidence that could verify or confirm the truth of the rule at the same time as they neglected to search for more logically compelling evidence that could falsify or disconfirm the truth of the rule. Thus, participants seem not to understand that no matter how many confirming instances one has discovered, it still takes only one disconfirming instance to falsify the rule. Thus even with an even number on the other side of E and a vowel on the flip side of 4, the "if vowel... then even" rule would still be falsified by a vowel on the other side of 7.

In their logical reasoning, individuals in experiments devised by Wason and Johnson-Laird (1972) appear to fall victim to the cognitive processes described centuries ago by Sir Francis Bacon:

The human understanding, when any proposition has been laid down... forces everything else to add fresh support and confirmation... it is the peculiar and perpetual error of the human understanding to be more moved and excited by affirmatives than negatives, whereas it ought duly and regularly to be impartial; nay in establishing any true axiom the negative instance is the most powerful [1620/1853, emphasis added]

There is, on first consideration, a striking similarity between the activities of individuals assigned to test hypotheses about letters, numbers, and other attributes of physical reality and the activities of individuals assigned to test hypotheses about extraversion, introversion, and other attributes of social reality. In either case, individuals formulate and enact confirmatory strategies for testing their hypotheses. In either case, the adoption of confirmatory strategies increases the likelihood that hypotheses will be confirmed erroneously by the evidence generated by those strategies. Yet, the similarities may be only superficial ones. Although the strategies adopted may appear to be similar, the consequences of these strategies are strikingly different in the two domains. And, it is these differing consequences that make social reality and the world of people fundamentally and inherently different from physical reality and the world of objects.

To appreciate the differing consequences of confirmatory strategies for testing hypotheses about objects and about people, one must look not to what people do (that is, to the confirmatory strategies that they formulate and enact) but rather to what people do not do (that is, to the disconfirmatory strategies that they do not formulate and enact). There is no doubt that a disconfirmatory strategy (that is, one that preferentially searches for disconfirming evidence) is the logically appropriate one for problems of the type devised by Wason and Johnson-Laird.
(1972). If individuals searched for instances that would falsify or disconfirm hypothetical rules, they would be less likely to accept erroneous propositions about events in the physical world.

But, what would happen if individuals assigned experimentally to test hypotheses about the personalities of other people were to adopt disconfirmatory strategies for testing their hypotheses? In such a strategy, individuals preferentially solicit evidence that disconfirms or invalidates their hypotheses. Thus, with a disconfirmatory strategy, an individual given the task of determining whether or not another person was an extravert would choose questions typically asked of individuals already known to be introverts. Similarly, another individual would attempt to determine whether or not the target was an introvert by choosing questions typically asked of individuals already known to be extraverts.

Were such disconfirmatory strategies enacted in social interaction, the outcome, of course, would be **behavioral disconfirmation**. Interviewers testing the hypothesis that their targets were extraverts would create targets who presented themselves in relatively introverted fashion. Interviewers testing the hypothesis that their targets were introverts would create targets who presented themselves in relatively extraverted fashion. As a consequence of hypothesis-testers having adopted disconfirmatory strategies, targets would come to behave in ways that erroneously disconfirm the hypotheses under scrutiny.

Apparently, for purposes of testing hypotheses in social interaction, disconfirmatory strategies are no less reactive (i.e., constraining of the outcomes of hypothesis-testing) than are confirmatory strategies. The only difference is that, whereas confirmatory strategies will yield hypothesis-confirming outcomes too frequently, disconfirmatory strategies will generate hypothesis-disconfirming outcomes too frequently. Why is a search for disconfirming evidence a non-reactive (or unconstraining) strategy in the case of testing the truth of logical propositions but a highly reactive (or constraining) strategy in the case of testing the accuracy of hypotheses about people? The answer, quite simply, is that **people are not objects**. Objects, and accordingly the truth value of propositions about them, exist independently of our transactions with them. There will or will not be even numbers on the other side of cards with vowels on their faces no matter which cards I choose to examine to determine whether the rule is correct.

However, the nature of social reality is somewhat different from that of physical reality. The behavior of other people is very much a product of our own actions toward them. How others present themselves to us is, in large measure, a product of how we first treat them. If I preferentially probe for instances of your friends and sociable actions, I will see and hear a rather different "you" than if I preferentially probe for instances of your shy and retiring actions. In general, to the extent that an individual preferentially solicits instances from one domain of behavior and experience in an attempt to test a hypothesis about another person, such instances will be over-represented in that person's self-presentation.

But what of the potential for a nonreactive strategy of hypothesis testing in social interaction? It should be clear by now that both the confirmatory strategy and the disconfirmatory strategy are highly reactive procedures for testing hypotheses about other people. It should be readily apparent too that an "equal-opportunity" strategy of sampling representatively from the domain of confirming and disconfirming evidence is no less reactive a strategy. If participants in a typical experiment on hypothesis testing were to ask equal numbers of extravert- and introvert-questions, they would only succeed in providing their targets with equal opportunities to appear extraverted and introverted. "Half and half" interview strategies would succeed only in creating "half and half" people.

In fact, any hypothesis-testing strategy that involves actual social interaction will be, by the very nature of the involvement of the hypothesis-tester with the target, a reactive strategy. Whatever actions the hypothesis-tester takes toward the target, they will serve to constrain and channel the target's behavior. Perhaps, the only procedure for faithfully testing a hypothesis is to observe a target who is unaware of being observed. Ideally, the hypothesis-tester would observe the target in interaction with a wide variety of other individuals who might have diverse hypotheses and beliefs about the target and attempt to "average" the target's self-presentation in these diverse contexts. Such a sleuth-like approach seems unlikely to be adopted on a wide scale.

These considerations of the reactive nature of the procedures by which individuals test hypotheses about other people, as well as the differences between testing hypotheses about objects and testing hypotheses about people, help to make clearer just what it is that is inherently and fundamentally social about **social knowledge**. Investigations of hypothesis-testing processes in social interaction serve to sensitize us to the links between the domain of thought and the domain of action. To the extent that individuals chronically formulate and enact confirmatory strategies for assessing the accuracy of their hypotheses and beliefs about other people, they create for themselves a world in which hypotheses become self-confirming and beliefs become self-perpetuating. (For other demonstrations of the self-perpetuating nature of beliefs, see Snyder, 1981; Snyder & Swann, 1978a; Snyder, Tanke, & Berscheid, 1977; Snyder & Uroswit, 1978.)

The outcomes of investigations of the interpersonal consequences of beliefs suggest that beliefs can and do create social reality: The very events of the social world (specifically, the behaviors of others with whom we interact in social relationships) may be reflections and products of our images of the social world (specifically, our beliefs, hypotheses, and theories about other people). Social knowledge is **social knowledge** precisely because of its intimate involvement in the construction of social reality in ongoing relationships. This, of course, means that social thought cannot be studied meaningfully in static circumstances of minimal personal involvement. This approach prevents us from witnessing the intimate interplay between social knowledge and social behavior in ongoing interpersonal relationships. Instead, cognitively oriented social psychologists ought to attend to the influence of thought on the unfolding dynamics of continu-
ing sequences of social interaction. Only then can a cognitive social psychology be a truly social psychology. For, it is as if the events of social interaction and interpersonal relationships are the stage on which the unfolding drama of the structure and process of human social thought are played out and revealed to interested spectators.

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