

## Selection, Evocation, and Manipulation

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This article proposes three key mechanisms by which personality and social processes are intrinsically linked. *Selection* deals with the manner in which individuals choose to enter or avoid existing environments. *Evocation* is defined by the ways in which individuals unintentionally elicit predictable reactions from others in their social environments. *Manipulation* deals with the tactics that individuals use intentionally to alter, shape, exploit, or change the social environments they inhabit. Empirical findings from 57 dating couples (undergraduates), and previous research within social, personality, and developmental psychology, are used to illustrate the heuristic value of this framework.

Personality psychology and social psychology have been separated historically more by differences in conceptual and research paradigms than by fundamental differences in content. Self-esteem, for example, has been studied as a consistent individual-difference dimension within the personality research paradigm (e.g., Coopersmith, 1967; Phinney, 1984) and as a manipulable psychological state within the social research paradigm (e.g., Aronson & Linder, 1965). Indeed, many of the individual-difference dispositions that personality psychologists study are intrinsically social in nature (e.g., Wiggins & Broughton, 1985).

The paradigm differences, however, are far from trivial. The personality research paradigm is based on the assumption that human dispositions, inclinations, or proclivities show at least some stability over time or consistency across situations (cf. Ozer, 1986, for an extended treatment). Personality research is often designed to assess the nature, stability, origins, and consequences of such characteristics. Historically, this has translated into the study of individual differences. Social psychological research, in contrast, typically focuses on characteristics that are more easily manipulable in the laboratory or in everyday interaction. Consequently, the effects of manipulable situations (e.g., on attitudes, conformity, social loafing, helping, aggression) often compose the primary conceptual and empirical foci.

At this point in the history of the two disciplines, there is no doubt about the robustness of the findings produced by each paradigm. In personality psychology, differences among individuals have been demonstrated to be stable over both short and long periods of time (e.g., Block, 1971; Buss, 1985a; Conley, 1984; Costa & McCrae, 1980; McCrae & Costa, 1982; Mischel

& Peake, 1982). This conclusion appears to be accepted by investigators with different theoretical positions and is no longer controversial. The effects of social influences on phenomena such as conformity (Asch, 1955), obedience to authority (Milgram, 1965), and social loafing (Latané, 1981) have also been robustly documented. No one doubts the power of situations to affect important classes of behavior in lawful ways. To whatever limited extent it is sensible to compare the two research paradigms on variance accounted for, neither has proven consistently superior by the criterion of magnitude of effects (e.g., Funder & Ozer, 1983).

It is important conceptually to note that, in spite of the differences in focus, there is nothing intrinsic to either paradigm that precludes either stability or manipulability of behavior. Buss, Gomes, Higgins, and Lauterbach (1987), for example, have documented large context effects on mean levels of manipulation tactics and simultaneously substantial consistency of individual differences in displays of those tactics across precisely the same contexts. Context effects do not preclude individual-difference stability, nor does stability preclude context effects. The two deal with different levels of analysis.

Both disciplines deal intrinsically with stability, regularity, or lawfulness in human behavior. Although personality psychologists historically have focused on regularities in individual differences, social psychologists have focused on regularities in *modal human responses* (Buss & Craik, 1984). No one predicts that a rock, a sack of potatoes, or even a chimpanzee would conform, aggress, help, or loaf under the manipulable conditions in which human subjects modally respond in these ways. The stability, lawfulness, and regularity of such modal human responses suggest a psychological unity among humans and are intrinsic to social psychological phenomena. Without such lawfulness, there would be only transient, ephemeral, and highly idiosyncratic responses that would be largely unpredictable.

It is in this sense that social psychology and personality psy-

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chology are both concerned with dispositional phenomena. They differ primarily in an emphasis on modal or species-typical dispositional tendencies versus individual-difference dispositional tendencies and on contextual effects (broadly defined) versus individual-difference effects (broadly defined). There is no inherent reason, either conceptually or empirically, why analysis of human behavior should be restricted to only one of these levels of analysis, despite historical traditions that have done so.

It is partly the recognition that both stable individual differences and evoked modal tendencies are important that produced a chorus of calls for interactionism in the past decade (e.g., Magnusson, 1981; Magnusson & Endler, 1977). The dominant response to these calls has been the analysis of variance (ANOVA) solution in which both person and situation variables "crossed" in the experimental design so that the interaction term could be examined. Extraverts and introverts, for example, have been exposed to conditions of high and low ambient stimulation and their responses on cognitive measures have been examined. The interaction in this case was that extraverts performed well under high stimulation and poorly under low stimulation, whereas the reverse was true for introverts (Eysenck, 1981). This is an interaction in the statistical sense of nonadditive effects of person and situation variables.

This ANOVA solution to the problem of interactionism, however, has severe limitations for a general model of person-environment relationships (e.g., Bowers, 1973; Golding, 1975; Wachtel, 1973). It is a trivial matter to demonstrate that the variance accounted for by the person term, the situation term, or the interaction term can be varied at will by experimenters. Selection of an impotent situation will preclude much of the variance being apportioned to that component, whereas selection of an unreliable, invalid, or poorly conceived person variable will have similar effects on the variance attributable to that component.

Perhaps more important, individuals in everyday life are not randomly exposed to all possible situations. Individuals seek and avoid situations selectively. They elicit different responses from their social environment, sometimes unintentionally. Individuals also purposefully alter, influence, change, exploit, and manipulate the environments they have selected to inhabit. These forms of interaction are not well captured by ANOVA solutions. This suggests an alternative approach to interactionism, one that focuses on the person-environment linkages that occur in everyday life.

In this article I focus on three mechanisms or processes that are hypothesized to produce person-environment correspondence: selection, evocation, and manipulation (cf. Plomin, DeFries, & Loehlin, 1977; Scarr & McCartney, 1983). Examples of these mechanisms in the contexts of physical and social environments are given in Table 1. Persons may select habitats in the physical environment and mates in the social environment. Persons may evoke avalanches through incautious motion or coercive control through a high activity level. Individuals may manipulate their physical environment by decorating their house and their social environment by reinforcing dependent behavior in selected others.

Three basic questions may be posed as a starting point within

Table 1  
*Causal Mechanisms of Person-Environment Correspondence:  
Examples From Physical and Social Domains*

Mechanism	Physical environment	Social environment
<i>Selection:</i> Individuals choose certain environments and congregate nonrandomly in them; enter some environments and avoid others.	Selection of a rural or urban habitat  Selection of a warm or cold climate	Mate selection  Peer selection
<i>Evocation:</i> Individuals elicit or provoke responses from environments unintentionally.	Person who treads heavily elicits more avalanches  Clumsy person elicits more noise and clatter in physical environment	Highly active children evoke stronger parental control behavior  Society likes to "cut down" individuals who are too dominant so that the meek will inherit the earth
<i>Manipulation:</i> Individuals intentionally alter, create, modify, or exploit certain environments.	"Aesthetically oriented" person decorates home with paintings and sculptures  High sensation seeker equips home with latest video and audio equipment	Person high on need for control reinforces dependent behavior in others  Low conscientious person uses sex to get ahead

this approach: (a) *Descriptively*, what are the links between features of persons and features of their social environments? (b) *Causally*, what mechanisms are responsible for creating these person-environment links? (c) *Consequently*, what are the sequelae of the operation of these mechanisms and the creation of these correspondences? These questions provide a strong foundation for integrating social psychology and personality psychology and are examined in the remainder of this article.

### Selection

The process of selection has a long history in everyday life. Animal breeding, for example, capitalizes on the process of selection and has occurred for centuries. The formulation of selection as a causal mechanism in science, however, has a surprisingly short history. The process of evolution (e.g., origin of different species, changes within the same species over generations) was long known to occur, but its mechanism remained a mystery until Darwin's (1859) discovery of natural selection.

The process of selection has a deceptively simple structure, consisting mainly of three components: variation, selection, and retention (cf. Campbell, 1965). There must be variation for the process of selection to operate. This may be genetic variation in the case of organic evolution, but may be variation in words (lexical evolution), inventions (cultural evolution), or

members of business companies (organizational evolution). Selection requires variants on which to operate.

The second component—selection—refers to mechanisms that differentially favor some variants over others. In organic evolution, these selection mechanisms are many and varied, but all can be reduced to processes that affect differential gene reproduction (Hamilton, 1964). Variants that lead to longer survival, better mating opportunities, greater acquisition of resources, better defense against predators and parasites, and greater advantages for offspring—variants that lead to differential gene reproduction—are typically favored over variants that do not promote fitness maximization.

The selective favoring of variants, however, can occur without any basis in genes and without the context of organic evolution. Some new words may be favored over others in usage because they are easier to remember, refer to more important objects, or afford greater eloquence. Institutions may select individuals based on differential productivity, differential difficulty in replaceability, or differential vocal amplitude or stridency.

Retention is the last component of the selection process. In a strict sense, selection can operate without mechanisms for retaining selected variants. But such processes will produce effects that are transient and will lack the cumulative quality of selective mechanisms that do carry media for retaining selected variants. In organic evolution, genes provide the medium of retention, but there are many other media and mechanisms of retention.

Words, for example, are retained through books, dictionaries, encyclopedias, and individual memories. Some organizations have tenure policies in which individuals who pass through the selection mechanism are retained until retirement. In the context of mate selection, there are legal sanctions, family pressures, and other social forces that enforce (albeit imperfectly) the retention of obtained spouses. Because of the profound and cumulative consequences of selection and retention mechanisms in social life, much attention and effort surround their operation.

Social selections permeate daily life. These choices range in importance from the seemingly trivial (Should I attend this party?) to the profound (Should I select this person as my mate?). Social selections are decision nodes that direct us down one path while simultaneously preempting other paths. They determine the nature of the environments to which we are exposed and in which we must subsequently reside. Because these selections are often nonrandom, based on individual dispositions, propensities, and proclivities, the mechanism of selection provides a natural integrative concept linking personality psychology and social psychology. Indeed, the social selections lawfully enacted by individuals may be properly regarded as an integral part of what is meant by personality.

Mate selection provides a dramatic example of this mechanism and places a single individual into close and prolonged proximity and alters the nature of the social environment subsequently inhabited. By selecting a mate, one is simultaneously selecting the social acts to which one will be enduringly exposed (Buss, 1984).

One of the ubiquitous findings in the mate-selection literature is that for nearly every variable that has been examined,

from single acts to personality variables to ethnic, racial, status, and physical variables, there is a positive correlation between spouses. Spouses seem to assort on the basis of similarity, not complementarity (Buss, 1985b; Buss & Barnes, 1986). Indeed, of all the possible deviations from panmixia (random mating) that have been documented worldwide, the single deviation that has never been demonstrated, with the exception of biological sex, is disassortative mating (the coupling of dissimilar individuals).

There are many potential mechanisms that could account for positive assortment, however, and preferential selection based on personality characteristics is only one possibility. Sheer proximity, for example, could account for the positive assortative mating coefficients. If this were the case, the causal mechanisms would consist of those processes that place similar individuals into close proximity and these processes may or may not be traceable to personality as traditionally defined.

I conducted a study of dating couples to investigate whether the social selections of mates are based partly on the personality characteristics of the selectors. One hundred fourteen undergraduates, composing 57 dating couples, were asked to express their preferences for a potential mate on 40 bipolar adjective scales (Goldberg, 1983) that are scored for five major dimensions of personality: surgency, agreeableness, conscientiousness, emotional stability, and openness. The subjects' personality dispositions were separately evaluated on these dimensions using the same 40 bipolar adjective scales. Two data sources were used for this second stage: self-reports and reports by the dating partners, who had no knowledge of the preference scores of the target subjects. Correlations were computed between the sets of personality ratings and the subjects' mate preferences.

As shown in Table 2, these correlations were consistently positive, even when based on separate data sources. Those who scored high on surgency wanted a surgent mate; those who scored high on conscientiousness desired a conscientious mate. These data provide evidence that the obtained positive correlations on personality variables between spouses are due, at least in part, to direct social preferences based on selectors' personality characteristics. Personality characteristics appear to play a pivotal role in the social mechanism of selection (see also Emmons & Diener, 1986, and Emmons, Diener, & Larson, 1986, on nonrandom selection of situations). In sum, selection provides a compelling concept for integrating personality psychology and social psychology.

### Evocation

Once social environments are selected and entered, a second class of social processes is set into motion over which an individual may have little control and which may occur unintentionally. This second class consists of evocations—the actions, strategies, reputations, and coercions that are consistently and predictably elicited by individuals, or more precisely, by relatively enduring features of those individuals.

The study of evocation has a long history in both social psychology and personality psychology, although different terms have been used to describe instances of this mechanism. Cattell (1973), for example, coined the term *coercion to the biosocial*

**Table 2**  
*Correlations Between Five Personality Dispositions and Preferred Personalities of Mates*

Personality dispositions	Males (n = 57)		Females (n = 51)		Total sample (n = 108)	
	S-data	O-data	S-data	O-data	S-data	O-data
Surgency	.33*	.28	.59***	.25	.47***	.21*
Agreeableness	.37**	.24	.44***	.28**	.40***	.25**
Conscientiousness	.34*	.24	.59***	.28*	.49***	.26**
Emotional stability	.29*	.40**	.52***	.36**	.35***	.28**
Openness/intellectance	.56***	.40**	.63***	.33*	.58***	.36***

Note. S-data refers to self-reported personality dispositions; O-data refers to analogous reports by the dating partner (observer).  
 \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

norm to describe the tendency of social groups to dislike individuals who are extreme on a given dimension and to coerce such individuals to become more modal. Empirically, Cattell demonstrated that others tend to "cut down" those who are too dominant so that the meek will inherit the earth. In this example, it is not that dominant persons seek or intend to elicit coercion but rather that these social responses are elicited unintentionally from others, much as there are modal evoked responses to someone who is physically disabled or looms 7 ft tall.

In social psychology, several evocation processes have been documented empirically. Kelly and Stahelski (1970) found that competitive persons in a prisoner's dilemma game tended to elicit competition, even when interacting with cooperative persons. This evocation process apparently occurs without the awareness of the competitor, who simply assumes that he or she lives in a competitive environment—an assumption confirmed by the (unknowingly evoked) competitive actions of others.

Perhaps the most well-documented case of a feature of persons consistently eliciting reactions of others is that of individual differences in activity level. Bell (1968) hypothesized that highly active children would elicit *upper limit control* behaviors from parents and teachers that were designed to reduce the noise and intensity that such children typically display. Bell further hypothesized that children at the low end of the activity-level dimension, in contrast, would elicit *lower limit control* behaviors from others: action designed to increase the activity levels of children who were perceived to be too sluggish, passive, or quiescent.

The first prediction was confirmed in a longitudinal study conducted by Jack and Jeanne Block at the University of California at Berkeley (Buss, 1981). Children's activity levels were assessed by means of an actometer—a motoric recording device similar to a self-winding wristwatch—when they were 3 and 4 years of age. A year later, the children were videotaped interacting with their parents; the interactions were rated independently by judges who had no knowledge of the hypothesis or of the children's activity-level scores.

Several themes of parental behavior were consistently associated with highly active children. Such parents were rated as getting into power struggles and competing with their children, displaying hostility toward their children, being highly talkative, and generally appearing frustrated with the interaction. These results were observed fairly consistently across the four sets of

interaction dyads (e.g., father-son, mother-daughter, etc.), although the specific relations varied somewhat across these conditions.

Although direct causality could not be established within this study (e.g., the parents of highly active children may themselves be more active, thus contributing to the strained interactions), there was convergent evidence that the active children were eliciting parental behavior. For example, highly active children were judged to be aggressive and competitive by their nursery school teachers (Buss, Block, & Block, 1980). The general elicitation of upper limit control behavior by highly active children has also been corroborated by independent investigators (e.g., Bell & Harper, 1977).

The study of evocation as a mechanism by which features of persons are brought into correspondence with features of their social environments, however, has just begun, and there are many possibilities for research (e.g., Snyder, 1984). One possibility is described that is especially important for the personality-social interface. Historically, perhaps the most neglected component of personality concerns what have been labeled social roles, relationships, and effects. Many dimensions of personality directly invoke these notions. *Charming, provocative, honored, trusted, and fearsome* are dispositional terms that describe not so much the actions that persons perform but rather the reactions that such persons typically elicit from others. This aspect of personality, noted 50 years ago by Allport (1937), has been largely ignored in personality psychology.

Evocation processes raise an intriguing possibility: that at least some dimensions of personality encoded within the natural language represent social judgment categories that are invoked because they represent modal elicited reactions. Fearsome persons evoke avoidance. Honored persons evoke respect. Provocative persons evoke sexual overtures. The study of modal social reactions that are consistently evoked by persons displaying certain personality dispositions provides a second promising node for integrating personality psychology and social psychology.

## Manipulation

Once social environments are selected, processes of evocation do not exhaust the set of mechanisms creating links between persons and environments. Manipulation, defined as the

ways in which individuals intentionally or purposefully (although not necessarily consciously) alter, change, influence, or exploit others, is a third important class of person-environment processes. No evil, malicious, or pernicious intent need be implied by the mechanism of manipulation, although such intent is not excluded either. The term is simply descriptive, much in the way that the term *manipulation* is used by cognitive psychologists to describe intentional alteration of objects by children or the purposeful shuffling of symbols by language users.

Natural selection favors individuals who successfully manipulate objects in their environment. Some manipulable objects are inanimate, such as the raw materials used to build shelters, tools, clothing, or weapons. Other manipulable objects are living and include predators and prey of different species, and mates, parents, children, rivals, and allies of the same species. The ways in which organisms exploit the sense organs and behavioral machinery of other organisms has become a major topic in evolutionary biology, and this perspective has radically altered biological conceptions of social communication (e.g., Dawkins & Krebs, 1978; Krebs & Dawkins, 1984).

Among group-living species such as ours, manipulation of conspecifics is especially important. Individuals lacking the ability to manipulate others may fail to elicit parental care, acquire resources, establish reciprocal alliances, rise in hierarchies, or attract mates. Existing individuals had ancestors who successfully manipulated members of their own species in these ways. Individuals who lacked such skills are no one's ancestors.

The purposeful, intentional, goal-directed ways in which humans manipulate the sense organs and behavioral machinery of others compose a set of mechanisms by which features of persons may be linked with features of the social environment. Central questions in exploring the mechanism of manipulation are as follows: What are the different tactics and acts that humans use to manipulate each other? Which tactics are used more and less often? Which are most and least effective for what goals? What personality characteristics are associated with the use of specific manipulation tactics? What personality characteristics of others consistently elicit specific tactics of manipulation from others?

A series of studies was undertaken to address these and related questions (Buss et al., 1987). Six major tactics of manipulation were identified from factor analyses of four instruments: (a) charm (e.g., He tried to be loving and romantic when he asked her to do it); (b) silent treatment (e.g., She ignored him until he did it); (c) coercion (e.g., He yelled at her until she did it); (d) reason (e.g., She gave him reasons why he should do it); (e) regression (e.g., He pouted until she did it); and (f) debasement (e.g., She "lowered" herself so that he would do it). Individuals showed remarkably high individual-difference consistency across the two contexts of behavioral elicitation (getting the other to do something) and behavioral termination (getting the other to stop doing something), suggesting that the tactics that individuals use may be properly considered personality dispositions. Nonetheless, there were strong context effects for the group as a whole. The charm tactic was used more frequently for eliciting desired behavior from others, whereas the coercion and silent treatment tactics were used more frequently for terminating the unwanted behavior of others. These findings illus-

trate that behavior can be situationally specific and highly discriminative with respect to context but that individuals can retain their relative standing across those contexts.

These six tactics were also associated with more traditionally assessed personality characteristics. Across self-based and observer-based data sources, Eysenck Personality Questionnaire (EPQ) Neuroticism scale scores were significantly correlated with the use of regression and silent treatment tactics. High scorers on the Interpersonal Adjective Scales (IAS; Wiggins, 1979) Calculating scale tended to use all manipulation tactics relatively frequently, with the correlations being strongest for charm, silent treatment, reason, and debasement.

Those using the reason tactic relatively often tended to score high on the IAS Ambitious scale. In contrast, those who used debasement relatively frequently tended to score high on the IAS Lazy scale. Coercion and silent treatment tactics covaried across data sources with IAS Quarrelsome (positive) and Agreeable (negative) scores. These results suggest that the tactics that persons use to manipulate their social world are coherently linked with traditionally assessed dimensions of personality.

What are the implications of these tactics for the social environment inhabited by their users? First, strong evidence was found for tactical reciprocity. Charm and coercion tactics, in particular, showed strong correlations between dating partners. High usage by one partner was linked with high usage by the other. Second, the use of any manipulation tactic was associated with elevated receipt of manipulation tactics from the dating partner. Thus, there was a general positive manifold in the cross-person correlation matrix of manipulation tactics. Third, the use of manipulation tactics was linked with independently assessed features of the subjects' romantic relationships. Couples judged by interviewers to be similar and well matched tended to use fewer manipulation tactics than couples judged to be more dissimilar and less well matched. The use of Regression was linked with the female member of the couple having greater power within the relationship. Finally, observers' judgments of the probability that the relationship would terminate were positively correlated with the overall use of tactics of manipulation, especially for the Coercion and Debasement tactics.

In sum, these preliminary data indicate that the tactics that persons used to manipulate others showed consistent individual differences across contexts and thus may be considered to be personality dispositions in their own right. The differential use of these tactics was reliably associated with traditionally assessed personality characteristics and with features of the romantic relationship in which the subjects were involved, as well as the manipulative social environment to which they were subjected. Thus, manipulation provides a third integrative concept linking personality psychology and social psychology.

## Discussion

The integration of personality and social psychology requires a descriptive basis toward which explanatory accounts can be directed. One starting point is to identify the links between features of persons and features of their social environments that occur in everyday life. A second step requires uncovering the mechanisms responsible for producing those links. Three such

mechanisms are proposed here: selection, evocation, and manipulation. A third step calls for identifying the consequences of obtained links. Empirical illustrations of the functioning of these mechanisms come from developmental psychology (e.g., Bell & Harper, 1977; Buss, 1981), social psychology (e.g., Kelly & Stahelski, 1970; Snyder, 1984), and personality psychology (e.g., Buss, 1985c; Cattell, 1973; Emmons & Diener, 1986). These empirical data and the conceptual framework subsuming them carry several important implications for personality and social psychology.

The first implication is that the two disciplines stand to profit from one another. Mate selection, for example, is a paradigmatic social process. It involves typically prolonged serial interactions that include mates and their respective friends and families. A crucial causal force in this social process, however, consists of enduring personality dispositions. Individuals appear to prefer and to select mates who are similar to them with respect to the dimensions of surgency, agreeableness, conscientiousness, emotional stability, and openness. The mechanism of selection provides a conceptual arena within which consistent individual differences and important social processes can be considered simultaneously.

The process of evocation yields a second intriguing domain for linking personality and social phenomena. Much social psychological research deals with modal human tendencies that are elicited by situational influences such as the modal tendency to slack off in work effort when in large groups (Latané, 1981) or the tendency to obey orders given by an authority figure (Milgram, 1965). The mechanism of evocation suggests the interesting possibility that many of the modal human tendencies are elicited by the personality dispositions of selected others. The personality dispositions of others may compose the central social environment that evokes modal human tendencies. Thus, the mechanism of evocation provides a conceptually compelling node for integrating personality psychology and social psychology.

Manipulation provides the third node. Influence has been a traditional topic within social psychology (Cialdini, 1985), and social processes affecting influence, such as reciprocity, have been well documented. Individuals differ consistently, however, in which tactics of influence they use (e.g., charm, coercion) and hence in the nature of the reciprocal manipulation cycles they enter and perpetuate. Thus, although social psychological research has effectively documented the effectiveness of certain tactics of influence (e.g., Cialdini), it is beneficial to consider consistent individual differences in the use of these tactics.

Although it has been clear for a decade or more (cf. Golding, 1975) that the ANOVA solution to the problem of interactionism is inadequate, no compelling alternatives have emerged. The mechanisms suggested here imply that, by random assignment to condition and by full crossing of person variables with situation variables in the ANOVA design, some of the most interesting ways in which persons and social situations become linked have been excluded. The differential exposure of persons to environments through differential selection, evocation, and manipulation cannot be captured by ANOVA designs. The present framework offers an alternative to the ANOVA solution by identifying person-environment links that form naturally in everyday life

and by proposing a set of mechanisms by which these links are created.

It is important to note that the mechanisms described here are essentially content free. This framework does not provide a theory of how important social selections will be made or toward what ends tactics of manipulation will be directed. In other words, a theory of motivation or teleonomy is needed to understand the directional tendencies of selection and manipulation mechanisms. In that sense, the framework is amenable to a host of alternative theoretical accounts such as those of role theory (Sarbin & Allen, 1968), life task analysis (Cantor & Kihlstrom, 1986), personal projects analysis (Little, 1983), or evolutionary biological analysis (Buss, 1986).

It may be useful to illustrate this point by briefly discussing some current research that is being conducted within this framework and that uses evolutionary biology as a theoretical perspective that provides directional tendencies. According to this account, there are key "evolutionary tasks" toward which human action is directed (Buss, 1986). These include the goals that typically must be accomplished in order to reproduce successfully. Finding a mate, acquiring resources, negotiating hierarchies, guarding acquired mates, conceiving and bearing children, and parenting those children are examples of these tasks.

In this view, selective and manipulative tactics are predicted to be directed toward reproductively relevant resources. Thus, men are predicted to strive to select mates who display cues that indicate high reproductive value such as youth and physical attractiveness (Symons, 1979; Buss & Barnes, 1986). Women, in contrast, are predicted to strive to select mates who display cues such as ambition, industriousness, or good earning capacity that signify ability and willingness to invest resources in offspring. These evolution-based predictions about the directional tendencies of mate selection appear to be supported robustly by independent researchers (Buss, 1987a).

The directional tendencies of tactics of manipulation may be predicted in a similar fashion. Tactics of manipulation used by men and women to compete for mates prior to selection and to retain mates subsequent to selection should be predictable from mate-selection criteria. Specifically, men should compete for mates by acquiring and displaying resources, and women should compete for mates by displaying signs of reproductive value. Men should retain mates with tactics that signal continued resource investment and commitment, and women should retain mates with tactics that signal reaping the promise of male reproductive effort. These predictions about sex differences in the directional tendencies of these manipulative tactics have been strongly supported (Buss, 1987b). Similar evolution-based predictions are being studied in the contexts of manipulation for the goals of resource acquisition, hierarchy negotiation, derogation of competitors, tactics of cooperation, and tactics of parental investment.

In conclusion, the integration of personality psychology and social psychology will require identifying person-environment links in everyday life, understanding the mechanisms responsible for creating those links, and developing a theoretical account of the directional tendencies of those mechanisms. The study of selection, evocation, and manipulation provides a starting point for this integration. The data yielded by this framework

suggest that persons are not passive recipients of environmental presses, that persons actively avoid some social situations and selectively enter others, and that persons elicit and manipulate the social behavior of persons who reside in situations that have been selected. In these ways, personality and social processes are inextricably linked.

## References

- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: Holt, Rinehart and Winston.
- Aronson, E., & Linder, D. (1965). Gain and loss of esteem as determinants of interpersonal attractiveness. *Journal of Experimental Social Psychology*, 1, 156-171.
- Asch, S. E. (1955). Opinions and social pressure. *Scientific American*, 11, 32.
- Bell, R. Q. (1968). A reinterpretation of the direction of effects studies of socialization. *Psychological Review*, 75, 81-95.
- Bell, R. Q., & Harper, L. V. (1977). *Child effects on adults*. Hillsdale, NJ: Erlbaum.
- Block, J. (1971). *Lives through time*. Berkeley, CA: Bancroft Books.
- Bowers, K. S. (1973). Situationism in psychology: An analysis and a critique. *Psychological Review*, 80, 307-336.
- Buss, D. M. (1981). Predicting parent-child interactions from children's activity level. *Developmental Psychology*, 17, 59-65.
- Buss, D. M. (1984). Toward a psychology of person-environment correspondence: The role of spouse selection. *Journal of Personality and Social Psychology*, 47, 361-377.
- Buss, D. M. (1985a). The temporal stability of acts, trends, and patterns. In C. Spielberger & J. N. Butcher (Eds.), *Advances in personality assessment* (Vol. 5, pp. 165-196). Hillsdale, NJ: Erlbaum.
- Buss, D. M. (1985b). Human mate selection. *American Scientist*, 73, 47-51.
- Buss, D. M. (1985c). Person-environment correspondence and the interpersonal act milieu. In R. Hogan & W. Jones (Eds.), *Perspectives in personality: Theory, measurement and interpersonal dynamics* (pp. 173-200). Greenwich, CT: JAI Press.
- Buss, D. M. (1986). Can social science be anchored in evolutionary biology? Four problems and a strategic solution. *Revue Européenne Des Sciences Sociales*, 24, 41-50.
- Buss, D. M. (1987a). Sex differences in human mate selection criteria: An evolutionary perspective. In C. Crawford, M. Smith, & D. Krebs (Eds.), *Sociobiology and psychology: Ideas, issues, and applications* (pp. 335-351). Hillsdale, NJ: Erlbaum.
- Buss, D. M. (1987b). The evolution of human intrasexual competition: Tactics of mate attraction. Manuscript submitted for publication.
- Buss, D. M., & Barnes, M. (1986). Preferences in human mate selection. *Journal of Personality and Social Psychology*, 50, 559-570.
- Buss, D. M., Block, J. H., & Block, J. (1980). Preschool activity level: Personality correlates and developmental implications. *Child Development*, 51, 401-408.
- Buss, D. M., & Craik, K. H. (1984). Acts, dispositions, and personality. In B. A. Maher & W. B. Maher (Eds.), *Progress in experimental personality research* (Vol. 13, pp. 241-301). New York: Academic Press.
- Buss, D. M., Gomes, M., Higgins, D. S., & Lauterbach, K. (1987). Tactics of manipulation. *Journal of Personality and Social Psychology*, 52, 1219-1229.
- Campbell, D. T. (1965). Variation and selective retention in sociocultural evolution. In H. R. Barringer, G. I. Blanksten, & R. W. Mack (Eds.), *Social change in developing areas*. Cambridge, MA: Schenkman.
- Cantor, N., & Kihlstrom, J. (1986). *Personality and Social Intelligence*. Hillsdale, NJ: Erlbaum.
- Cattell, R. B. (1973). *Personality and mood by questionnaire*. San Francisco: Jossey-Bass.
- Cialdini, R. B. (1985). *Influence: Science and practice*. Glenview, IL: Scott, Foresman.
- Conley, J. (1984). The hierarchy of consistency: A review and model of longitudinal findings on adult individual differences in intelligence, personality and self-opinion. *Journal of Personality and Individual Differences*, 5(1), 11-25.
- Coopersmith, S. (1967). *The antecedents of self-esteem*. San Francisco: Freeman.
- Costa, P. T., & McCrae, R. (1980). Still stable after all these years: Personality as the key to some issues in aging. In P. Baltes & Q. G. Brim (Eds.), *Life span development and behavior* (Vol. 3). New York: Academic Press.
- Darwin, C. (1859). *On the origin of the species by means of natural selection, or, preservation of favoured races in the struggle for life*. London: Murray.
- Dawkins, R., & Krebs, J. R. (1978). Animal signals: Information or manipulation? In J. R. Krebs & N. B. Davies (Eds.), *Behavioral ecology: An evolutionary approach*. Oxford, England: Blackwell Scientific Publications.
- Emmons, R. A., & Diener, E. (1986). Situation selection as a moderator of response consistency and stability. *Journal of Personality and Social Psychology*, 51, 1013-1019.
- Emmons, R. A., Diener, E., & Larsen, R. J. (1986). Choice and avoidance of everyday situations and affect congruence: Two models of reciprocal interactionism. *Journal of Personality and Social Psychology*, 51, 815-826.
- Eysenck, H. J. (1981). *A model for personality*. New York: Springer-Verlag.
- Funder, D. C., & Ozer, D. J. (1983). Behavior as a function of the situation. *Journal of Personality and Social Psychology*, 44, 107-112.
- Goldberg, L. R. (1983, June). *The magical number five, plus or minus two: Some conjectures on the dimensionality of personality descriptions*. Paper presented at a research seminar at the Gerontology Research Center, National Institute on Aging, Baltimore City Hospital, MD.
- Golding, S. L. (1975). Flies in the ointment: Methodological problems in the analysis of the percentage of variance due to persons and situations. *Psychological Bulletin*, 82, 278-288.
- Hamilton, W. D. (1964). The genetical evolution of social behavior. *Journal of Theoretical Biology*, 7, 1-52.
- Kelly, H. H., & Stahelski, A. J. (1970). Social interaction basis of cooperators' and competitors' beliefs about others. *Journal of Personality and Social Psychology*, 16, 66-91.
- Krebs, J. R., & Dawkins, R. (1984). Animal signals: Mind-reading and manipulation. In J. R. Krebs & N. B. Davies (Eds.), *Behavioral ecology: An evolutionary approach* (2nd ed.). Sunderland, MA: Sinauer.
- Latané, B. (1981). The psychology of social impact. *American Psychologist*, 36, 343-356.
- Little, B. R. (1983). Personal projects: A rationale and method for investigation. *Environment and Behavior*, 15, 273-309.
- Magnusson, D. (1981). *Toward a psychology of situations: An interactional perspective*. Hillsdale, NJ: Erlbaum.
- Magnusson, D., & Endler, N. S. (1977). *Personality at the crossroads: Current issues in interactional psychology*. Hillsdale, NJ: Erlbaum.
- McCrae, R. R., & Costa, P. T. (1982). Self-concept and the stability of personality: Cross-sectional comparisons of self-reports and ratings. *Journal of Personality and Social Psychology*, 43, 1282-1292.
- Milgram, S. (1965). Some conditions of obedience and disobedience to authority. *Human Relations*, 18, 57-76.
- Mischel, W., & Peake, P. (1982). Beyond déjà vu in the search for cross-situational consistency. *Psychological Review*, 89, 730-755.

- Ozer, D. J. (1986). *Consistency in personality: A methodological framework*. New York: Springer-Verlag.
- Phinney, C. (1984, August). *Self and spouse evaluations: Perspectives of intimate observers*. Paper presented at the 92nd Annual Convention of the American Psychological Association, Toronto, Canada.
- Plomin, R., DeFries, J. C., & Loehlin, J. C. (1977). Genotype-environment interaction and correlation in the analysis of human behavior. *Psychological Bulletin*, *88*, 245-258.
- Sarbin, T. R., & Allen, V. L. (1968). Role theory. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (2nd ed., Vol. 1, pp. 488-567). Reading, MA: Addison-Wesley.
- Scarr, S., & McCartney, K. (1983). How people make their own environments: A theory of genotype → environment effects. *Child Development*, *54*, 424-435.
- Snyder, M. (1984). When belief creates reality. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 18, pp. 248-305). Orlando, FL: Academic Press.
- Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford University Press.
- Wachtel, P. L. (1973). Psychodynamics, behavior therapy, and the implacable experimenter: An inquiry into the consistency of personality. *Journal of Abnormal Psychology*, *82*, 324-334.
- Wiggins, J. S. (1979). A psychological taxonomy of trait descriptive terms: The interpersonal domain. *Journal of Personality and Social Psychology*, *37*, 395-412.
- Wiggins, J. S., & Broughton, R. (1985). The interpersonal circle: A structural for the integration of personality research. In R. Hogan & W. H. Jones (Eds.), *Perspectives in Personality* (Vol. 1, pp. 1-47). Greenwich, CT: JAI Press.

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