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Tactics of Manipulation

David M. Buss
University of Michigan

Mary Gomes
Stanford University

Dolly S. Higgins and Karen Lauterbach
Harvard University

Manipulation is one means by which environments are altered to correspond to characteristics of individuals. We conducted two studies to identify the manipulation tactics that people use to elicit and terminate the actions of others. Factor analyses of four instruments revealed six types of tactics: charm, silent treatment, coercion, reason, regression, and debasement. Tactics of manipulation showed strong individual difference consistency across contexts. The charm tactic, however, was used more frequently for behavioral elicitation, whereas the coercion and silent treatment tactics were used more frequently for behavioral termination. Manipulation tactics covaried significantly across self-based and observer-based data sources with personality scales of Neuroticism, Extraversion, Ambitious–Lazy, Arrogant–Unassuming, Quarrelsome–Agreeable, and Calculating and with characteristics of subjects' social environments. We draw implications for an interactionist framework of person–environment correspondence, for an expansion of the taxonomic task that faces personality psychology, and for identifying links between personality and other scientific disciplines.

Natural selection favors people 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 alive. These include predators and prey of different species as well as mates, parents, children, rivals, and allies of the same species. Manipulation of living objects may be defined as the various means by which organisms influence and exploit the sense organs and behavioral machinery of other organisms (Dawkins & Krebs, 1978; Krebs & Dawkins, 1984).

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

By what tactics do humans manipulate one another? Under what conditions are different tactics displayed? What are the relative frequencies of alternative manipulation tactics? And how do others respond to specific manipulative attempts? These and related questions address a central issue that has galvanized the field of personality psychology for the past 2 decades: What is *interactionism* and how can we best conceptualize and empirically examine links between features of people and features of their environments?

Person–Environment Correspondence

In the decade since Magnusson and Endler (1977) published their volume on interactionism in personality psychology, there has been strong consensus about the importance of both person and environment variables. No compelling conceptual framework, however, has emerged to incorporate their interaction. The dominant response to calls for interactionism has been the analysis of variance (ANOVA) framework, in which interaction is conceived as nonadditive statistical interaction of person and situation variables crossed in experimental design. Despite its frequent use, enthusiasm for the ANOVA approach has waned as telling limitations have been noted and documented empirically (e.g., Ekehammar, 1974; Golding, 1975).

One limitation is that studies can be constructed at will to manipulate variance attributable to the person component, the situation component, or the interaction component. Selection of a weak situational manipulation, for example, results in less variance attributable to the situation, whereas selection of an inappropriate, ill-conceived, or poorly measured person variable attenuates variance attributable to persons. A second limitation is that crossing levels of persons with levels of environments, an essential part of the ANOVA paradigm, does not often occur in nature. Outside the psychological laboratory, people are rarely randomly assigned to conditions. But perhaps the most telling limitation is that interactions in the ANOVA sense do not capture the dynamic interchange and mutual influence between people and environments that most psychologists view as central features of the concept of interaction.

An alternative approach is to identify the links between features of people and features of their environments that occur in everyday life (Buss, 1984b, 1985a). This person–environment correspondence framework has three essential components. The first is descriptive and involves documenting empirically the nature and domains of person–environment correspondence that occur in people's lives. The second component is causal and involves identifying the mechanisms and specific actions that are responsible for producing obtained person–environment correspondences. The third component entails examination of the consequences that follow from obtained person–environment links.

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Correspondence concerning this article should be addressed to David M. Buss, Department of Psychology, University of Michigan, 580 Union Drive, Ann Arbor, Michigan 48109-1346.

Three Mechanisms of Person–Environment Correspondence

Three essential mechanisms are posited to causally produce person–environment correspondence (Buss, 1985a): selection, evocation, and manipulation. *Selection* involves nonrandom choices of interpersonal and physical milieus. Mate selection is a dramatic example of the importance of this mechanism in producing person–environment correlations (Buss, 1984b). Nonrandom selection of a mate results in subsequent exposure to a prolonged act environment that shows stability over time (Buss, 1985b; see also Snyder, 1981; Snyder & Gangestad, 1982).

The second person–environment mechanism, *evocation*, may be defined as nonrandom and unintentional elicitation of reactions from the environment. Researchers have conceptualized evocation in the context of behavioral genetics and developmental psychology (Plomin, DeFries, & Loehlin, 1977; Scarr & McCartney, 1983) and have studied it empirically in the context of parent–child interactions (Buss, 1981). Highly active children, for example, appear to evoke "upper limit control" behavior from parents that is designed to reduce the noise and intensity that such children typically generate. Less active children do not elicit such responses and so inhabit a more quiescent and peaceful interpersonal milieu.

Manipulation, the third person–environment mechanism, is defined by the tactics used intentionally to coerce, influence, change, invoke, and exploit the environment. No insidious or malevolent intent need be implied by the mechanism of manipulation. Conceptually, manipulation is the broadest mechanism of person–environment correspondence because, in principle, there are countless actions that a person could use to influence the nature of the environment subsequently inhabited. Manipulation differs from selection in that selection involves choosing to enter existing habitats, whereas manipulation entails altering those environments already inhabited.

Several areas of personality research appear to deal with the ways in which people shape or manipulate their environments. The work on Machiavellianism (Christie & Geis, 1970), for example, has explored a personality style that is characterized by manipulativeness, cynicism about human nature, and shrewdness in interpersonal behavior. In the context of laboratory experiment games, those high in Machiavellianism appear to display "an acute and opportunistic sense of timing" (p. 159) and appear able to capitalize especially on situations containing ambiguity regarding rules. In a different context, Patterson (e.g., Patterson & Bechtel, 1977) has examined coercion in the context of families and identified discriminative stimluli that moderate the use of coercive behaviors.

Both the evolutionary perspective and the person–environment correspondence framework point to the importance of manipulation as a central process in social interaction. These perspectives are valuable in guiding research toward this important line of inquiry. However, in spite of offering a valuable heuristic, neither perspective offers specific predictions about which tactics of manipulation will be used, in what contexts they will be used, how effective they will be, or precisely how each tactic will be linked with specific features of the social environment.

Manipulation implies influence for a reason, purpose, or goal. In principle, manipulation tactics should vary with the goals toward which they are directed. Tactics used with the boss to obtain a higher salary would be expected to differ from those used with the spouse to obtain a backrub or with a friend to obtain the use of a car. For this first empirical probe, we chose two broad conditions in which to study tactics of manipulation: (a) *behavioral instigation*, or tactics used to get another to do something, and (b) *behavioral termination*, or tactics used to get another to stop doing something. Close relationships were selected as the context in which to study tactics of behavioral instigation and termination.

The basic purposes of the study were as follows: (a) to provide a first empirical examination of tactics of manipulation that are used for behavioral instigation and termination in the context of close relationships; (b) to identify the relative frequencies with which each tactic is performed; (c) to identify performance frequency differences in manipulation tactics between behavioral instigation and termination; (d) to examine the cross-situational consistency of individual differences in the use of manipulation tactics between the instigation and termination contexts; (e) to identify the links between more traditionally assessed personality variables and tactics of manipulation; (f) to examine person–environment correlations for manipulation tactics in the form of couple correspondence; and (g) to identify the connections between use of specific manipulation tactics and the act environment that people inhabit.

Preliminary Study: Nominations of Acts of Influence

Subjects

Sixty-seven college undergraduates participated as subjects for the preliminary study of nominating acts of influence in the context of close relationships.

Procedure

Each subject received one of two nomination forms. The first contained this instructional set: "When you want to get your romantic partner to do something, what do you do (please list specific actions)?" The second nomination form contained these instructions: "When you want to get your partner to *stop* doing something, what do you do (please list specific actions)?" The goal of these procedures was to obtain a reasonably diverse set of influence tactics in the context of close relationships.

We examined the large number of nominations for redundancy, meaning, coherence, and thematic content. Three judges nominated the major categories within which the tactics of influence belonged. Allowing for slightly different labeling of similar content categories, the three judges nominated five categories in common and two distinctive categories. The five common categories were retained for the main study.

The three judges then independently nominated the seven best exemplars for each category. Nominations that received at least two endorsements were retained. This produced a 35-act instrument (see Buss & Craik, 1983, 1984) consisting of seven act exemplars for each of the five categories: (a) *reason tactic* (e.g., "I ask her to do it"), (b) *regression tactic* (e.g., "I whine until she does it"), (c) *coercion tactic* (e.g., "I demand that she does it"), (d) *charm tactic* (e.g., "I compliment her so that she will do it"), and (e) *debasement tactic* (e.g., "I debased myself so that she would do it").

Two structurally analogous forms were developed. The first contained the 35 actions in the form of behavioral instigation, or getting the partner to do something. The second form contained the same set of tactic stems but ended with the goal of behavioral termination. For example,

the act "I curse at her until she does it" became "I curse at her until she stops doing it." The complete instrument for the behavioral instigation condition is provided in the Appendix.

Main Study: Assessment of Manipulation Tactics

Method

Subjects

Subjects for the main study were 118 undergraduates composing 59 dating couples. Couples were recruited through ongoing classes, fliers placed in dormitories, and announcements in the student newspaper. Because our goal was to examine tactics of manipulation in the context of close relationships, we asked subjects how long they had dated (a requirement of at least 6 months of prior dating was imposed).

Materials

Among a larger battery of tests and assessment measures, we used the following instruments for this study.

Tactics of manipulation. Four different forms of the 35-act instrument described in the preliminary study were generated from a 2 × 2 matrix. The first axis consisted of the goal or context of the influence, behavioral instigation or behavioral termination. We developed a self-report version of each form as well as a structurally analogous observer-report version. Four instructional sets were developed, one for each version. For example, the self-report version of the behavioral instigation form contained these instructions:

> When you want to get your partner to do something for you, what are you likely to do? Look at each of the items listed below and *rate how likely you are to do each when you are trying to get your partner to do something.* None of them will apply to all situations in which you want your partner to do something, so rate how likely you are, *in general,* to do what is described. If you are *extremely likely* to do it, circle a 7. If you are *not at all likely* to do it, circle a 1. If you are *somewhat likely* to do it, circle 4. Give intermediate ratings for intermediate likelihoods of performing the behaviors.

Eysenck Personality Questionnaire (EPQ). The EPQ (Eysenck & Eysenck, 1975) is a self-report instrument that contains 90 true–false items. Four scales are scored from this instrument: Extraversion, Neuroticism, Psychoticism, and a Lie scale designed to detect dissembling.

Interpersonal Adjective Scales (IAS). The Interpersonal Adjective Scales (128-item version; Wiggins, 1979) were developed to represent a reasonably comprehensive taxonomy of the interpersonal domain in the form of a circumplex structure. The 16 scales, each containing eight adjectives, are Dominant, Ambitious, Extraverted, Gregarious, Agreeable, Warm, Ingenuous, Unassuming, Submissive, Lazy, Introverted, Aloof, Quarrelsome, Cold, Calculating, and Arrogant. In self-report form, subjects rate how characteristic or uncharacteristic each adjective is on a 9-point scale. Adjectives are intermingled and are not identified by the scale to which they belong.

Interviewer judgments about couple relationship. Each couple was interviewed by a pair of interviewers drawn from an eight-member team. Each interview lasted about 30 min. A dozen standard questions were posed to each couple. Questions posed by the interviewers included the following: How did you meet? What are the similarities and differences between you? Do you think you will be together 5 or 10 years from now? In addition to the standard questions, interviewers were trained to probe further into issues raised during the course of the interview. Directly following each interview, the two interviewers independently rated each couple on a set of relationship variables: How well matched do you think the couple is? How similar is the couple? Who has more power (who takes more control)? How long lasting will the relationship be? Ratings were made on 7-point scales. To obtain a more reliable assessment of each couple relationship variable, we composited the scores for the two interviewers. The correlations between the independent interviewers were .65 (how well matched), .44 (how similar), .57 (who has more power), and .53 (probability of termination).

Procedure

Subjects completed the self-report versions of the tactics of manipulation, IAS, and EPQ in their spare time. Couples were then tested in groups ranging from 4 (two couples) to 12 (six couples) individuals. Couples were separated for the duration of the testing session to prevent discussion of the instruments. In this testing session, subjects completed the observer forms of the tactics of manipulation and were interviewed. Total confidentiality was assured for all responses. Not even the subject's partner could see the responses without expressed written permission.

Results

Sex Differences in Manipulation Tactics

We conducted the first set of analyses to examine whether significant sex differences existed in the use of tactics of manipulation. *T* tests for sex differences were conducted for each of the 35 acts of manipulation for each of the four instruments. Although significant sex differences occasionally emerged for a given instrument, only one act showed significant sex differences across more than one data source. For example, the item "He or she whines until I do it" showed greater female than male performance frequencies for the observer data source in the instigation condition, $t(90) = 2.82$, $p < .006$. Similarly, the act "I allowed myself to be debased so that he or she would do it" showed significantly greater male than female performance for the self-report data source in the termination condition, $t(108) = 2.30$, $p < .025$. However, neither of these sex differences was replicated in any of the other conditions or for the other data source. Only the act "I repeated the request from different angles" showed significant sex differences across more than one data source (observer data sources for the instigation and termination conditions), but even this sex difference was not replicated in the remaining conditions. We concluded that in this sample, at least, strong sex differences that replicate across conditions and data sources do not exist.

Factor Analyses of Manipulation Tactics

To identify the major dimensions along which tactics of manipulation vary and to confirm the initial rational item grouping, we conducted four separate factor analyses using varimax rotation, one for each of the four manipulation instruments. Inspection of the factor loadings revealed highly similar factors and loadings across the four instruments. Six major factors were identified across the four instruments and analyses: Charm, Silent Treatment, Coercion, Reason, Regression, and Debasement. All but Silent Treatment were also rationally generated a priori. The four highest loading acts on the Silent Treatment factor had been earlier classified intuitively as Regression. The factor loadings for the four separate factor analyses are shown in Table 1. A seventh factor emerged on one of the factor analyses. It appeared to be a "reciprocity" tactic involving two items: "I give up something so that he or she will do it" and "I give him or her a small gift so that he or she will do it." Because of

Table 1
Factor Loadings of Tactics of Manipulation

Specific act	Instigation		Termination	
	Self	Observer	Self	Observer
Charm tactic				
I compliment her so she'll do it (stop it)	.70	.73	.64	.78
I act charming so she'll do it (stop it)	.85	.75	.74	.80
I try to be loving and romantic when I ask her	.86	.72	.70	.76
I give her a small gift or card before I ask	.47	(.26)	.56	.56
I tell her I'll do her a favor if she'll do it	.35	(.25)	.46	.42
Silent treatment tactic				
I don't respond to her until she does it (stops it)	.79	.90	.82	.84
I ignore her until she does it (stops it)	.82	.87	.76	.80
I am silent until she agrees to do it (stop it)	.79	.70	.79	.88
I refuse to do something she likes until she does it	.43	.57	.65	.47
Coercion tactic				
I demand that she do it (stop it)	.61	.69	.62	.73
I yell at her until she does it (stops it)	.80	.52	.66	.84
I criticize her for not doing it (stopping it)	.55	(.18)	.62	.61
I curse at her until she does it (stops it)	.78	(.17)	.57	.58
I threaten her with something if she doesn't do it	.60	.49	.42	.55
Reason tactic				
I give her reasons for why she should do it (stop)	.79	.43	.77	.86
I ask her why she doesn't do it (stop it)	.58	.69	.61	.64
I point out all the good things that will come from doing it (stopping it)	.78	.69	.70	.67
I explain why I want her to do it (stop it)	.76	(.23)	.48	.72
I show her that I would be willing to do it for her	.45	.65	.55	(.34)
Regression tactic				
I pout until she does it (stops it)	.76	.55	.75	.70
I sulk until she does it (stops it)	.75	.65	.82	.71
Debasement tactic				
I allow myself to be debased so she'll do it	.71	.77	.82	.79
I lower myself so she'll do it (stop it)	.86	.50	.87	.80
I act humble so she'll do it (stop it)	.30	(.23)	.42	.45

Note. For expositional clarity, only the male version of the acts are presented. Factor loadings in parentheses reflect those for which the highest loading occurred on another factor.

its lack of robustness across conditions and data sources, this seventh factor was not carried forward in subsequent analyses.

Because each of the 35 acts of manipulation are keyed in the same direction, it is possible that individual differences in the use of the response scale may be confounded with scores on various tactics. An alternative data analytic strategy, therefore, would be to examine subjects' relative use of a tactic compared with his or her use of others. Note that this alternative approach addresses a different set of questions and ignores a subject's overall elevation or depression on tactic use. For example, a man who reported performing, and whose partner reported him performing, many acts of manipulation, but whose use of coercion was slightly higher than his use of regression, would receive similar scores upon transformation as would a male subject who reported (and whose partner reported) that he performed few acts of manipulation, but whose coercion use was nonetheless slightly higher than regression use.

Nonetheless, this alternative data analytic strategy was explored. We standard scored responses for each subject across the 35 acts of manipulation for each data source and for each of the two conditions. These transformed scores were then factor analyzed in the same manner as were the untransformed scores. The results proved difficult to interpret. No clear factors emerged across data sources. Items that were assigned a priori to the same scale, such as coercion (e.g., "I yell at him so he will do it"; "I curse at her so she will do it"), and which loaded on the same factor in the untransformed factor analysis, loaded on different factors in some of the factor analyses using the transformed scores (these analyses are available from David M. Buss).

For subsequent analyses, we elected to use composites constructed on the basis of the results of the factor analyses of the untransformed scores. Four composites were computed by summing the acts shown in Table 1 for each tactic—one com-

Table 2
Frequencies of Tactic Performance Across Conditions

Manipulation tactic	Condition	Data source	*M*	*SD*
Reason	Instigation	Self	5.31	1.12
Reason	Instigation	Observer	5.38	0.86
Reason	Termination	Self	5.28	1.05
Reason	Termination	Observer	5.05	1.26
Charm	Instigation	Self	3.13	1.28
Charm	Instigation	Observer	3.11	1.26
Charm	Termination	Self	2.51	1.09
Charm	Termination	Observer	2.56	1.19
Regression	Instigation	Self	2.17	1.23
Regression	Instigation	Observer	2.27	1.43
Regression	Termination	Self	2.39	1.41
Regression	Termination	Observer	2.28	1.39
Coercion	Instigation	Self	1.81	0.98
Coercion	Instigation	Observer	1.71	0.85
Coercion	Termination	Self	2.40	1.23
Coercion	Termination	Observer	2.35	1.24
Silent treatment	Instigation	Self	1.79	1.02
Silent treatment	Instigation	Observer	1.89	1.11
Silent treatment	Termination	Self	2.04	1.50
Silent treatment	Termination	Observer	2.47	1.53
Debasement	Instigation	Self	1.44	0.82
Debasement	Instigation	Observer	1.35	0.82
Debasement	Termination	Self	1.42	0.82
Debasement	Termination	Observer	1.27	0.63

Note. Means and standard deviations shown are divided by the number of acts composing each composite tactic so that relative frequency can be evaluated.

posite each for the two data sources crossed by the two conditions. Note that the present use of two data sources minimizes the importance of response-style problems. Subsequent analyses can examine the robustness of relationships that emerge *across data sources* that do not share the same response style.

Relative Performance Frequencies Across Conditions and Data Sources

To compare the relative frequencies with which each major manipulation tactic was reported to be performed, we divided the means and standard deviations for each of the 24 composites by the number of items forming each one. These results appear in Table 2. As shown in Table 2, the reason tactic showed the highest performance frequency across all conditions and data sources. This was especially apparent in the following acts: "I asked him or her to do it"; "I explained why I wanted her or him to do it"; "I gave reasons why he or she should do it"; and "I point out all the good things that will come from doing it."

The charm tactic was the second highest in performance frequency (overall $M = 2.81$). This was followed by the regression, coercion, and silent treatment tactics, which had overall means of 2.28, 2.07, and 2.05, respectively. The debasement tactic composites showed the lowest performance frequencies across all conditions and data sources. Especially rarely performed manipulation acts were "I allow myself to be debased so that he or she will do it" and "I lower myself so that he or she will do it."

Agreement Between Self and Partner Data Sources

Agreement or lack of agreement between users and recipients of manipulation tactics poses interesting conceptual issues that preclude interpretation as simple reliability coefficients. Recipients may most accurately perceive tactics when they are least effective. Recipients may be impervious to tactics that work. Similarly, acts of influence may become habitual so that not even the actor has accurate self-knowledge. Some tactics may be more readily observable than others and thus lead to greater agreement between self and observers. Table 3 shows correlations between self- and partner ratings of the six tactics under conditions of instigation and termination. Also shown are the conditions for a total manipulation score generated by summing across the 35 acts of manipulation.

The mean agreement across tactics for the instigation condition was .42, whereas the mean agreement for the termination condition was only .25. Thus there appeared to be greater agreement between self and partner on the frequency of instigation tactics when compared with termination tactics. This finding was especially apparent with the reason, charm, and debasement tactics; the silent treatment, coercion, and regression tactics showed approximately equivalent levels of agreement. Across conditions, the coercion tactic received the highest self-

Table 3
Agreement, Consistency, and Context Differences for Tactics

	Agreement[a]		Consistency[b]		Context[c]	
Tactic	Instigation	Termination	Self	Observer	Self	Observer
Charm	.36***	.11	.72***	.71***	5.58***	6.99***
Silent treatment	.28**	.29**	.71***	.68***	4.99***	4.89***
Coercion	.53***	.53***	.78***	.80***	7.09***	7.67***
Reason	.77***	.17	.80***	.74***	0.46	2.59*
Regression	.33**	.28**	.79***	.74***	1.96	0.51
Debasement	.27*	.12	.89***	.71***	0.51	1.10
Total score[d]	.44***	.42***	.91***	.90***	2.28*	0.51

[a] Agreement signifies correlation between self and partner observer.
[b] Consistency signifies correlations across instigation and termination contexts.
[c] Context signifies *t* tests between the instigation and termination conditions.
[d] Total score consists of the sum of all 35 acts of manipulation.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4
Correlations Among Composited Tactics: Same Data Source

Tactic	1	2	3	4	5	6
1. Charm	—	.41***	.29**	.40***	.26**	.41***
2. Silent treatment	.25**	—	.56***	.21*	.52***	.48***
3. Coercion	.28**	.58***	—	.18	.53***	.49***
4. Reason	.29**	.15	.26*	—	.15	.22*
5. Regression	.26**	.68***	.51***	.14	—	.34***
6. Debasement	.31**	.23*	.30**	.01	.31**	—

Note. Correlations among tactics assessed through self-reports appear above the diagonal; those assessed through the observer data source appear below the diagonal.
* $p < .05$. ** $p < .01$. *** $p < .001$.

other agreement, whereas the debasement tactic received the lowest self–other agreement. The total manipulation score showed modest agreement across data sources. In sum, cross data–source agreement appeared modest overall, slightly higher for instigation than for termination, and highest for the coercion tactic across conditions.

Cross-Context Consistency of Individual Differences

Also shown in Table 3 are the cross-context consistency coefficients for the six tactics and total score and the two data sources separately. These reflect the degree to which rank order of individual differences in frequency was maintained across conditions. The individual tactic consistency coefficients were reasonably high, ranging from .89 to .71. The total scores showed consistencies of .91 and .90. Overall, it is clear that individuals do maintain well their relative positions in performance frequencies of manipulation tactics across conditions of instigation and termination.

Cross-Context Differences in Performance Frequencies

One intriguing issue is whether there were main effects owing to condition. Did the sample as a whole use different tactics of manipulation in the context of behavioral instigation when compared with the context of behavioral termination? The *t* tests shown in Table 3 suggest that the answer is affirmative. The charm tactic was more often used for behavioral instigation. The silent treatment and coercion tactics were more often used for behavioral termination. Thus, it appears that subjects used aversive controls to terminate unwanted behavior of others, whereas they used reward differentially to instigate desired actions of others. The fact that these results occur with approximately equal magnitude for each of the two data sources separately lends credence to their robustness.

Table 5
Correlations Among Composited Tactics: Separate Data Sources

Observer-report data source	Self-report data source					
	1	2	3	4	5	6
1. Charm	—	.02	.20*	.10	.24*	.19*
2. Silent treatment	.19	—	.37***	.15	.32**	.11
3. Coercion	.11	.26	—	.04	.51***	.20*
4. Reason	.00	.15	.21*	—	.23*	.21*
5. Regression	.22*	.34**	.38***	.07	—	.05
6. Debasement	.16	.46***	.44***	−.02	.46***	—

* $p < .05$.
** $p < .01$.
*** $p < .001$.

Correlations Among Composites

Table 4 shows the correlations among the composite manipulation tactics for the self-reported data source (above the diagonal) and the partner-reported data source (below the diagonal) for the instigation condition (correlations for the termination condition were similar and may be obtained from David M. Buss). In general, there was a positive manifold in the matrix such that most tactics of manipulation were positively correlated with one another. One possibility is that a response style may have inflated the magnitude of these correlations. To examine this hypothesis, we correlated the self-reported tactics with the observer-based tactics. These correlations appear in Table 5.

As shown in Table 5, there was again a positive manifold between the various tactics when assessed through different data sources. The magnitudes of these positive correlations were slightly lower than analogous correlations between tactics measured through the same data source, suggesting the possible operation of a response style. However, the overwhelming positive manifold between tactics measured through separate data sources also suggested a substantive interpretation—namely that people who are above the mean on performing one tactic tend to be above the mean on performing a variety of other tactics. This appeared especially true of the relations between the regression tactic and the tactics of coercion, debasement, and silent treatment. In contrast, the charm and reason tactics were less strongly correlated with the other tactics of manipulation.

Correlations With Standard Personality Variables

Tables 6 and 7 show the correlations between the six manipulation tactics and total score with the EPQ and the IAS, respectively. Because the instigation and termination tactics were highly correlated (Table 3), and to conserve space, only the correlations for the instigation tactics are shown in these and subsequent tables (the entire set of correlations may be obtained from

Table 6
Eysenck Personality Questionnaire × Tactics of Manipulation (Instigation)

Tactic	Extraversion		Neuroticism		Psychoticism	
	Self data	Observer data	Self data	Observer data	Self data	Observer data
Charm	.24*	.16	.08	−.01	.11	.18*
Silent treatment	.05	−.03	.33***	.24*	.04	.04
Coercion	.11	−.09	.20*	.11	.08	.07
Reason	.20*	−.06	.01	.00	.10	.19*
Regression	.05	.13	.28**	.19*	.05	.14
Debasement	.09	.22*	.25*	.09	.08	.16
Total score	.18	.05	.24*	.12	.10	.12

* $p < .05$.
** $p < .01$.
*** $p < .001$.

David M. Buss). Correlations are shown separately for the self-reported and other-reported manipulation tactics.

As shown in Table 6, the Neuroticism scale of the EPQ correlated significantly across data sources with tactics of manipulation. Specifically, those who scored high on Neuroticism tended to perform high frequencies of silent treatment and regression manipulation tactics.

Table 7 shows correlations between the self- and other-reported manipulation tactics and the IAS. Noteworthy are those relations that were significant for both data sources. Use of the charm tactic was correlated across data sources with the IAS Calculating scale. Use of the silent treatment tactic was correlated positively across data sources with the IAS Calculating, Cold, and Quarrelsome scales and negatively with the Agreeable and Gregarious scales.

Both the coercion and regression tactics were correlated across data sources with the IAS Arrogant (positive) and Unassuming (negative) scales. The coercion tactic showed additional correlations with the Quarrelsome (positive) and Agreeable (negative) scales. Interestingly, the debasement tactic covaried significantly with the Lazy (positive) and Ambitious (negative) scales. These findings suggest that those who are relatively slothful and lacking ambition influence others by subjugating themselves; the more ambitious appear to avoid self-subjugation and, instead, use reason as a tactic of influence.

In sum, there were clear links between standard personality dimensions and the use of specific sorts of manipulation tactics. Use of the silent treatment was linked with neuroticism and with the quarrelsome quadrant of the Wiggins circumplex. Use of the debasement tactic was linked with the lazy or nonascendant quadrant of the circumplex. And use of reasoning to influence others was linked with the ambitious and ascendant quadrant of the circumplex. Interestingly, the total manipulation score was positively correlated, with IASs calculating across both data sources.

Correlations With Couple Relationship Variables

As shown in Table 8, manipulation tactics also correlated across data sources with couple relationship variables, as judged by male and female interviewers who had no knowledge of the manipulation scores of the subjects. Perhaps the most striking findings of Table 8 are the pervasive negative correlations between all manipulation tactics and the variables *well matched* and *couple similarity*. The less well-matched and less similar couples tended to use more manipulation tactics. This was especially apparent for use of the silent treatment, but it also appeared with charm, reason, and debasement.

Whether the man or the woman was judged to have more power within the relationship was correlated significantly across data sources by using regression tactics. Specifically, if the woman had more power, more tactics of regression tended to be used than if the man had relatively more power.

Across both data sources, high probabilities of judged relationship termination correlated positively with high use of coercion and debasement manipulation tactics. In sum, tactics of manipulation showed coherent links with independently assessed characteristics of the couple relationship.

Person–Environment Links

The last set of analyses centered around links between the use of manipulation tactics and the tactics to which one is exposed. Within the current framework, these are conceptualized as person–environment links. Table 9 shows these links in two forms. It gives both the correlations between the observer-reported tactics and the self-reported environment and the correlations between the self-reported tactics and the observer-reported environment. Thus both sets of correlations involve links between independent data sources. Interpreted here are those analogous correlations significant for both analyses.

The first striking feature of the matrix is that all correlations are positive in sign, which suggests that elevated use of any manipulation tactic tends to be associated with being the recipient of higher frequencies of other tactics of influence. Because all correlations are based on data derived from separate sources, this overall positive manifold must be interpreted as a substantive finding.

A second finding concerns reciprocity. Does the use of a given tactic tend to be associated with receiving that tactic in return? The relevant correlations are shown in the matrix. Of the 12 relevant correlations, all were positive, and 8 reached statistical significance. For the total manipulation scores, these person–environment correlations were .33 ($p < .05$) for the self-re-

Table 7
Correlations Between Interpersonal Adjective Scales (IAS) and Manipulation Tactics (Instigation)

IAS scale	Charm		Silent		Coercion		Reason		Regression		Debasement		Total score	
	Self	Observer	Self	Observer	Self	Observer	Self	Observer	Self	Observer	Self	Observer	Self	Observer
Ambitious	−.23*	−.12	−.23*	−.13	.29**	−.15	.22*	.20*	−.33***	.06	−.40***	−.21*	−.27**	−.13
Dominant	.00	.14	−.12	.17	.07	.11	.31**	.15	.02	.24*	−.07	.01	.07	.18
Arrogant	.16	.21*	.22*	.17	.28**	.26*	.21*	−.04	.31***	.24*	.40***	.16	.31**	.20
Calculating	.29**	.20*	.28**	.19*	.27**	.13	.18*	.30**	.23*	.16	.28**	.20*	.39***	.27*
Cold	.03	.20*	.20*	.19*	.17	.19*	.02	.19*	.13	.05	.16	.03	.18	.25*
Quarrelsome	.09	.18	.29**	.32**	.35***	.25*	.00	−.02	.20*	.16	.31***	.16	.24*	.23*
Aloof	−.02	−.04	.14	.11	.05	.13	.07	.00	.12	−.07	.15	−.11	.08	.00
Introverted	.01	−.04	.13	−.06	.13	−.06	.02	−.04	.01	−.19*	.07	−.17	.01	−.11
Lazy	.22*	.06	.35***	.17	.35***	.13	.03	−.25*	.36***	.08	.40***	.18*	.33**	.07
Submissive	.00	−.22*	.14	−.03	.01	−.11	−.05	−.32**	−.04	−.25*	.18*	−.16	.03	−.28*
Unassuming	−.08	−.21*	−.24*	−.07	.29**	−.21*	.01	.13	−.30**	−.35***	−.13	−.34***	.23*	−.33**
Ingenuous	−.11	−.15	−.21*	−.15	−.23*	−.14	−.03	−.30**	−.17	.11	−.12	−.25*	−.26*	−.32**
Warm	−.03	.05	−.15	−.17	−.17	−.20*	.03	−.23*	−.11	−.09	−.02	.03	−.10	−.20
Agreeable	−.12	−.13	−.27**	−.22*	−.33***	−.26**	.10	−.12	−.29**	−.11	−.16	−.25*	−.23*	−.27*
Gregarious	−.10	.12	−.19*	−.23*	−.10	−.25	.17	−.22*	−.14	−.10	−.12	.12	−.10	−.29**
Extraverted	.01	.11	−.09	.08	.10	.04	.27*	−.06	.08	.15	−.02	.11	.08	.06

* $p < .05$, ** $p < .01$, *** $p < .001$.

ported tactics with the observer-reported environment and .41 ($p < .01$) for the observer-reported tactics with the self-reported environment. Thus there appears to be considerable reciprocity in these person–environment links. Couple correspondence seems particularly strong for the charm and coercion tactics.

Several additional findings in Table 9 are noteworthy. Use of the silent treatment was correlated with receiving regression and debasement tactics. Those who used regression tactics tended to be recipients of coercion tactics. Finally, use of debasement tended to be associated with receiving both silent treatment and coercion tactics.

In sum, these results suggest that the currently assessed tactics of manipulation are linked not only to standard personality dimensions such as neuroticism, ambitiousness, and quarrelsomeness, but they also show coherent links to the interpersonal environment to which one is exposed.

Discussion

We have identified six distinct tactics of manipulation, and these tactics emerge from the factor analyses of four instruments. The six tactics, ordered by their frequency of use from most to least as assessed with the four instruments, are reason, charm, regression, coercion, silent treatment, and debasement.

Agreement between self and partner on relative performance varied across the tactics. The highest self–other agreement occurred for the coercion tactic, perhaps because it is the most overt and open to observation. The debasement tactic showed the least self–other agreement, perhaps because its use is more covert and less readily observable. Subjects showed moderately high consistency in using manipulation across the contexts of behavioral instigation and behavioral termination. This individual difference consistency ranged from a low of .71 to a high of .89.

Despite strong consistency in the individual difference sense, the sample as a whole deployed different tactics for behavioral instigation and termination. Specifically, the charm tactic was used more for instigating the behavior of others. In contrast, the coercion and silent treatment tactics were used more frequently for terminating unwanted behavior of others. Differential deployment of manipulation tactics depending on the goal occurred with similar magnitude across self- and observer-reported data sources and is therefore a robust substantive finding.

Manipulation tactics showed correlations across data sources with standard personality variables. In particular, those high on EPQ Neuroticism tended to use regression and silent treatment tactics more than those who scored low. Strong validity was provided for the IAS Calculating scale. High scorers tended to use all manipulation tactics relatively frequently. This finding was strongest for charm, silent treatment, reason, and debasement, which showed significant correlations for both data sources.

Those using the reason tactic relatively often tended to score high on IAS Ambitious. In contrast, those who used debasement relatively frequently tended to score high on IAS Lazy. Coercive and silent treatment tactics covaried across data sources with IAS Quarrelsome (positive) and Agreeable (negative). These results provide validational information for several IAS scales and suggest that one relatively neglected part of per-

Table 8
Correlations Between Relationship Variables and Manipulation Tactics (Instigation)

Tactic	Well matched		Similarity		Power (she or he)		Probability of termination	
	Self data	Observer data	Self data	Observer data	Self data	Observer data	Self data	Observer data
Charm	−.11	−.33***	−.23*	−.30**	.00	−.10	.07	.27*
Silent treatment	−.25**	−.18*	−.23*	−.19*	−.07	−.20	.35***	.16
Coercion	−.13	−.12	−.14	−.07	−.02	−.12	.25**	.18*
Reason	−.20*	−.35***	−.16	−.18*	.00	−.25*	.14	.19
Regression	−.27**	−.10	−.39***	−.10	−.27**	−.26**	.16	.22*
Debasement	−.17	−.34***	−.18*	−.33***	.00	−.25*	.27**	.36*
Total score	−.27**	−.39***	−.31**	−.31**	−.07	−.27*	.26**	.33***

Note. Relationship variables are based on interviewer judgments composited with unit weighting across the male and female interviewers.
* $p < .05$. ** $p < .01$. *** $p < .001$.

sonality consists of the tactics used to shape our interpersonal world.

In addition to clear links to personality variables, manipulation tactics covaried with independently assessed characteristics of the couple's relationship. The less similar and less well matched the couple, the more frequently they deployed tactics of manipulation. This finding was especially robust for the silent treatment, debasement, and reason tactics. Couples judged by interviewers to be relatively well matched and similar tended to use these manipulation tactics less frequently.

Judgments of the relative power balance within the relationship (man vs. woman) were correlated with use of the regression tactic. When women were judged by interviewers to have more power, regression tactics were displayed more frequently in the relationship. Judged probability of relationship termination was correlated positively with the use of both coercion and debasement tactics.

The final set of results center around links to the manipulation environment to which one is exposed. Two general findings emerged. First, elevated use of any manipulation tactic was associated with elevated receipt of manipulative acts by the partner. Second, couples showed correspondence with respect to their tactics.

These results have implications for future research conducted within the person–environment correspondence framework (Buss, 1984b, 1985a), for the taxonomic task that faces personality psychology, and for links between personality and other disciplines.

Implications and Future Research Directions

As outlined in the introduction, there are three basic mechanisms in the present interactionism framework by which links between features of persons and features of their environments are produced. One can *select* environments nonrandomly, such as habitats, climates, and locations in the physical realm or friends, mates, and colleagues in the social sphere. One can *evoke* responses unintentionally, such as eliciting landslides through incautious motion or provoking hostility through a high activity level. One can also *manipulate* inanimate and living objects.

This study offers an empirical probe into the tactics that people use to manipulate one another, the personality characteristics of those who use them, and links between use of these tactics and certain features of the social environment. Results suggest that personality does not consist simply of intrapsychic structures or even adjustments to the environment, which implies organismic change to a fixed environment. A central part of personality consists of the ways in which we shape the world we inhabit. Future studies could examine manipulation tactics across a broader array of social relationships, including those used with friends, parents, children, allies, and competitors.

Table 9
Person–Environment Links

Tactic	1	2	3	4	5	6
1. Charm	.41*** (.29***)	.13	.16	.14	.14	.19
2. Silent treatment	.13	.27* (.11)	.41***	.01	.26	.22
3. Coercion	.17	.16	.48*** (.35**)	.05	.29**	.22*
4. Reason	.01	.16	.20*	.25** (.07)	.03	.07
5. Regression	.22*	.25*	.42***	.25*	.09 (.30**)	.16
6. Debasement	.16	.21*	.34**	.18*	.30**	.26* (.12)

Note. Numbers in parentheses and below the diagonal are correlations between self-reported tactics and the observer-reported environment. Those in and above the diagonal are between observer-reported tactics and the self-reported environment.
* $p < .05$. ** $p < .01$. *** $p < .001$.

This framework calls for an expanded view of the taxonomic task that faces personality psychology. The taxonomic task expands to include not just dispositions identified through lexical or statistical analyses (Buss & Craik, 1985) such as those of Norman (1963), Goldberg (1981), Gough (1968), Cattell (1946), Guilford (1975), Eysenck (1947), or Costa and McCrae (1980). Personality taxonomies should include assessment of the relatively enduring ways in which people select, evoke, and manipulate the environments they inhabit, as well as the projects (Little, 1983) and life tasks (Cantor & Kihlstrom, 1986) toward which these mechanisms are directed. In this way, personality psychology can move beyond trait identification and advance toward a more dynamic interactionism.

A closer rapprochement between personality and social psychology is also suggested by this framework. Influence has been a central topic in social psychology (Cialdini, 1985), but studies have omitted the role of consistent individual differences in the tactics by which influence occurs. Attention to the manner in which dispositions are played out in the social sphere benefits both disciplines. Toward this end, future work could assess the effectiveness of each tactic of manipulation as well as which people display them potently.

A final implication centers around the integration of evolutionary biology with personality psychology (Buss, 1984a). Recent work in evolutionary theory (e.g., Dawkins & Krebs, 1978; Krebs & Dawkins, 1984) suggests that the manipulation of competitors, allies, parents, offspring, friends, and lovers is central to reproductive success. Existing humans have ancestors who were especially adept at influencing others. This implies that there are evolutionarily relevant proximate goals toward which tactics of manipulation are directed, such as resource acquisition, alliance formation, intrasexual competition, mate selection, and nepotistic investment (Buss, 1986). Future research could profitably examine the proximate goals toward which human manipulative tactics are directed.

References

Buss, D. M. (1981). Predicting parent–child interactions from children's activity level. *Developmental Psychology, 17,* 59–65.

Buss, D. M. (1984a). Evolutionary biology and personality psychology: Toward a conception of human nature and individual differences. *American Psychologist, 39,* 1135–1147.

Buss, D. M. (1984b). Toward a psychology of person–environment (PE) correspondence: The role of spouse selection. *Journal of Personality and Social Psychology, 47,* 361–377.

Buss, D. M. (1985a). Human mate selection. *American Scientist, 73,* 47–51.

Buss, D. M. (1985b). The temporal stability of acts, trends, and patterns. In C. D. Spielberger & J. N. Butcher (Eds.), *Advances in personality assessment* (Vol. 5, pp. 165–196). Hillsdale, NJ: Erlbaum.

Buss, D. M. (1986). Can social science be anchored in evolutionary biology? Four problems and a strategic solution. *Revue Europeénne des Sciences Sociales, 24,* 41–50.

Buss, D. M., & Craik, K. H. (1983). The act frequency approach to personality. *Psychological Review, 90,* 105–126.

Buss, D. M., & Craik, K. H. (1984). Acts, dispositions, and personality. In B. A. Maher & W. B. Maher (Eds.), *Advances in experimental personality research* (Vol. 13, pp. 241–301). New York: Academic Press.

Buss, D. M., & Craik, K. H. (1985). Why not measure that trait? Alternative criteria for identifying important dispositions. *Journal of Personality and Social Psychology, 48,* 934–946.

Cantor, N., & Kihlstrom, J. F. (1986). Social intelligence: The cognitive basis of personality. In P. Shaver (Ed.), *Review of personality and social psychology.* Beverly Hills, CA: Sage.

Cattell, R. B. (1946). *Description and measurement of personality.* New York: World Book.

Christie, R., & Geis, F. L. (1970). *Studies in Machiavellianism.* New York: Academic Press.

Cialdini, R. B. (1985). *Influence: Science and practice.* Glenview, IL: Scott, Foresman.

Costa, P. T., Jr., & McCrae, R. R. (1980). Still stable after all these years: Personality as the key to some issues in aging. In P. B. Baltes & O. G. Brim (Eds.), *Life span development and behavior* (Vol. 3). New York: Academic Press.

Dawkins, A., & 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.

Ekehammar, B. (1974). Interactionism in personality from a historical perspective. *Psychological Bulletin, 81,* 1026–1048.

Eysenck, H. J. (1947). *Dimensions of personality.* London: Routledge & Kegan Paul.

Eysenck, H. J., & Eysenck, S. B. (1975). *Eysenck Personality Questionnaire manual.* San Diego, CA: Educational Testing Service.

Goldberg, L. R. (1981). Language and individual differences: The search for universals in personality lexicons. In L. Wheeler (Ed.), *Review of personality and social psychology* (Vol. 2, pp. 141–165). Beverly Hills, CA: Sage.

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.

Gough, H. G. (1968). An interpreter's syllabus for the California Psychological Inventory. In P. McReynolds (Ed.), *Advances in psychological assessment* (Vol. 1, pp. 55–79). Palo Alto, CA: Science & Behavior Books.

Guilford, J. P. (1975). Factors and factors of personality. *Psychological Bulletin, 82,* 802–814.

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.

Little, B. R. (1983). Personal projects: A rationale and method for investigation. *Environment and Behavior, 15,* 273–309.

Magnusson, D., & Endler, N. S. (1977). *Personality at the crossroads: Current issues in interactional psychology.* Hillsdale, NJ: Erlbaum.

Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology, 66,* 574–583.

Patterson, G. R., & Bechtel, G. G. (1977). Formulating the situational environment in relation to states and traits. In R. B. Cattell & R. M. Dreger (Eds.), *Handbook of modern personality theory* (pp. 254–286). New York: Halstead Press.

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.

Scarr, S., & McCartney, K. (1983). How people make their own environments: A theory of genotype → environment effects. *Child Development, 54,* 424–435.

Snyder, M. (1981). On the influence of individuals on situations. In N. Cantor & J. F. Kilstom (Eds.), *Personality, cognition, and social interaction.* Hillsdale, NJ: Erlbaum.

Snyder, M., & Gangestad, S. (1982). Choosing social situations: Two investigations of self-monitoring processes. *Journal of Personality and Social Psychology, 43,* 123–135.

Wiggins, J. S. (1979). A psychological taxonomy of interpersonal behavior. *Journal of Personality and Social Psychology, 37,* 395–412.

Appendix

Tactics of Manipulation

Instructions: When you want your partner to do something for you, what are you likely to do? Look at each of the items listed below and *rate how likely you are to do each when you are trying to get your partner to do something.* None of them will apply to all situations in which you want your partner to do something, so rate how likely you are, *in general,* to do what is described. If you are *extremely likely* to do it, circle 7. If you are *not at all likely* to do it, circle 1. If you are *somewhat likely* to do it, circle 4. Give intermediate ratings for intermediate likelihoods of performing the behaviors.

	Not at all likely			Somewhat likely			Extremely likely
1. I ask him to do it.	1	2	3	4	5	6	7
2. I pout until he does it.	1	2	3	4	5	6	7
3. I demand that he do it.	1	2	3	4	5	6	7
4. I compliment him so he'll do it.	1	2	3	4	5	6	7
5. I beg him to do it.	1	2	3	4	5	6	7
6. I explain why I want him to do it.	1	2	3	4	5	6	7
7. I sulk until he does it.	1	2	3	4	5	6	7
8. I embarrass him into doing it.	1	2	3	4	5	6	7
9. I act charming so he'll do it.	1	2	3	4	5	6	7
10. I whine until he does it.	1	2	3	4	5	6	7
11. I give him reasons for doing it.	1	2	3	4	5	6	7
12. I ignore him until he agrees to do it.	1	2	3	4	5	6	7
13. I criticize him for not doing it.	1	2	3	4	5	6	7
14. I tell him how happy I'll be if he does it.	1	2	3	4	5	6	7
15. I act humble so he'll do it.	1	2	3	4	5	6	7
16. I show him that I would be willing to do it for him.	1	2	3	4	5	6	7
17. I am silent until he agrees to do it.	1	2	3	4	5	6	7
18. I compare him to someone who would do it.	1	2	3	4	5	6	7
19. I give him a small gift or card before I ask him to do it.	1	2	3	4	5	6	7
20. I give him something so he'll do it.	1	2	3	4	5	6	7
21. I repeat the request from different angles.	1	2	3	4	5	6	7
22. I don't respond to him until he does it.	1	2	3	4	5	6	7
23. I yell at him so he'll do it.	1	2	3	4	5	6	7
24. I try to be loving/ romantic when I ask him to do it.	1	2	3	4	5	6	7
25. I let him do something that I don't approve of so that he'll do it.	1	2	3	4	5	6	7
26. I draw analogies between what I want done and cases in our past.	1	2	3	4	5	6	7
27. I tell him I'll leave if he doesn't do it.	1	2	3	4	5	6	7
28. I threaten him with something if he doesn't do it.	1	2	3	4	5	6	7
29. I tell him I'll do him a favor if he'll do it.	1	2	3	4	5	6	7
30. I lower myself so he'll do it.	1	2	3	4	5	6	7
31. I ask why he doesn't do it.	1	2	3	4	5	6	7
32. I refuse to do something that he likes until he does it.	1	2	3	4	5	6	7
33. I curse at him until he does it.	1	2	3	4	5	6	7
34. I point out all of the good things that will come from doing it.	1	2	3	4	5	6	7
35. I allow myself to be debased so he'll do it.	1	2	3	4	5	6	7

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