THE COGNITIVE EFFECTS OF SPATIAL INVASION

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ABSTRACT

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By

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This thesis deals with the effects of spatial invasion on person perception. The research took place in a laboratory setting. In a two-person situation, subjects interacted with confederates who either maintained a "normal" interaction distance or moved extremely close to the subjects. Two status characteristics, the race of the confederate and the sex of the subject, were also varied in this study.

In the post-experimental session, subjects listed characteristics of the confederate and rated them on three dimensions: a) intensity, the degree of confidence in one's impressions; b) direction, the position of cognitions on an evaluative dimension; and c) salience, the degree to which characteristics are typical of another person. Two additional dimensions were examined: d) differentiation, the number of characteristics listed and e) level of inference, the degree to which intentions or dispositions are attributed to another person.

Results indicated that invaded subjects listed more characteristics for the confederate than noninvaded subjects. For nonphysical characteristics, invaded subjects were more confident and less favorable in their impressions than noninvaded subjects. Also, the degree of salience

was lower for unfavorable characteristics than for favorable characteristics. In addition, for both unfavorable and favorable characteristics, the degree of salience tended to be higher for invaded subjects than for noninvaded subjects. Subjects interacting with the black confederate listed more characteristics than those interacting with the white confederate, while females were more confident of their impressions than males. Finally, the size of one's "personal space" was found to vary with the nature of the experimental situation.

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CHAPTER I

INTRODUCTION AND THEORY

Nonverbal communication is becoming increasingly recognized as a significant factor in interpersonal interaction. Eye-contact, gestures, and posture, to name a few, are components of what may be considered a "silent language" used by individuals in encounters (Hall, 1959). One of the most interesting types of nonverbal communication is the use of physical space. Although space was originally considered an incidental factor in interaction, social scientists are becoming aware of the fact that the distances people maintain between themselves affect social behavior.

A number of factors have been found to influence spatial behavior in social situations. The most striking is culture. Hall (1959, 1966) notes that cross-cultural variations in spatial behavior are profound. Arabs and Latins, for example, stand much closer together during interaction than do either Americans or Englishmen. A second important factor is the relationship between the social actors. Little (1965) found that perceived interaction distance in a dyad is strongly influenced by the degree of acquaintance of the members, the distance being closer for friends than for strangers or acquaintances. The use of space is also affected by personality factors. Schizophrenics seem to have a distorted conception of space (Sommer, 1959), while introverts stand

further from people than do extroverts (Williams, 1963). Finally, the nature of the situation is salient in spatial behavior. Dosey and Meisels (1969) found that interaction distance is greater under conditions of stress than nonstress.

The methods employed in spatial studies have varied. They include observation of the way people seat themselves in cafeterias, the use of silhouette figures placed on felt boards in imaginary settings, and the questionnaire. Each of these approaches, however, has at least one major shortcoming: the amount and kind of information obtained by merely observing spatial behavior is limited; the artificiality of the felt board technique calls into question its applicability to actual social interaction; and the use of space is basically an unconscious phenomenon and is not easily articulated by individuals. "[O]ur culture has tended to play down or cause us to repress and dissociate the feelings we have about space. We relegate it to the informal. . ." (Hall, 1959, 147) Because of this particular difficulty, a technique more indirect than the questionnaire is needed. Garfinkel (1964) has suggested such a technique:

> Procedurally it is my preference to start with familiar scenes and ask what can be done to make trouble. The operations that one would have to perform in order to multiply the senseless features of perceived environments; to produce and sustain bewilderment, consternation, and confusion; to produce the socially structured affects of anxiety, shame, guilt, and indignation; and to produce disorganized interaction should tell us something about how the structures of everyday activities are ordinarily and routinely produced and maintained.
>
> (Garfinkel, 1964, 227)

This "norm violation" technique is well-suited for spatial studies and allows the experimenter a degree of control over the situation. It has been assumed that individuals have norms concerning the proper distances to be maintained in encounters and that only intimate-others may enter one's "personal space," i.e., that area surrounding an individual which he feels is his alone. To study these phenomena, then, one can "intrude" into this personal space and determine the other person's reactions. This approach has been employed by Felipe and Sommer,(1966). Spatial invasions were conducted in a mental institution and in the study hall of a university library. The procedure consisted of approaching a "victim" meeting certain criteria and sitting down next to him. Control subjects met the same criteria but were not invaded. The dependent variable was the percentage of subjects remaining next to the intruder after specified time intervals. The main finding of these studies was the subjects who were invaded remained for a shorter time than did controls. More subtle signs of discomfort such as changes in posture were also noted.

Although such studies are valuable in demonstrating the importance of distance in interaction, they are restricted to the effects of spatial invasion on "motor" responses. Social interaction, however, continually involves "orientational activity," i.e., "efforts on the part of the actor to identify and give meaning to the social situation, and an important part of these efforts consists in determining the intentions and dispositions of others in the situation." (Johnson and Ewens, in press) Surprisingly little research has been conducted on the cognitive effects of spatial invasion. There are theoretical grounds, however,

for expecting norm violation in general, and spatial invasion in particular, to have effects on one's cognitions of others.

Although not considered a student of person perception, Mills (1940) was actually one of the first to discuss the cognitive effects of norm violation. According to Mills, "motives are the terms with which interpretation of conduct by social actors proceeds." (Mills, 1940, 904) They are avowed and imputed in "question" situations, where unexpected or unusual actions occur. One class of such situations are those in which normative expectations break down. The individual seeks a reason for the violation and may look for it in the other person, thus imputing some motive to him.

More recently, Maselli and Altrocchi (1969) have argued that the attribution of dispositions to others is an important source of perceptual order, and that in "order to infer dispositions meaningfully from behavior the agent must have intended his act." (Maselli and Altrocchi, 1969, 446) Inferring intent seems salient, according to the authors, in situations involving "extremity of behavior," i.e., "behavior that is out of role or of lower desirability--and behavior that is particularly unambiguous in its consequences. . ." (Maselli and Altrocchi, 1969, 447) Spatial invasion would, indeed, fit into this category.

The cognitive effects of norm violation have also been examined by Jones, Davis, and Gergen (1961). Their theoretical argument is that (a) behavior whose "locus of causation" lies within the individual is more relevant to inferences about his personal characteristics than behavior caused by external events; (b) behavior conforming to role expectations is treated as externally caused and uninformative with regard to personal characteristics; and (c) when behavior departs from expectations, the

cause is located in the person's motivational forces; it is seen as revealing something of his "true self" through his failure to perform the expected behavior. (Jones, Davis, and Gergen, 1961, 302-303) The researchers hypothesized that subjects, if asked to describe an individual who fulfilled expectations, would do so with little confidence and would avoid extreme statements, but would have a basis for inferring characteristics with confidence in the case of a norm violator. The study required subjects to listen to a recording in which an interviewee either conformed to or violated certain role demands made of him. They then responded to an impression rating scale consisting of sixteen bi-polar adjectives and indicated their confidence in their impressions. Results confirmed the hypotheses.

Applying these arguments to spatial invasion, it is assumed that (a) it is the normative expectation for strangers in our culture to maintain a considerable distance from each other; (b) if one of the individuals exhibits out-of-role behavior by standing too close, the other person will attempt to determine the reason for this action; (c) this will affect the "victim's" perception of the "intruder;" and (d) this perception will differ from that attributed to an individual who maintains a "normal" interaction distance.

A variety of dimensions have been suggested in the social science literature along which cognitions may vary. Those which seem relevant for spatial invasion are the following:

(a) <u>differentiation</u> - the number of cognitions an individual holds about an object or class of objects. In the present research the object is, of course, another individual. In line with the theoretical arguments presented above, it is expected that a person who has been the

"victim" of a norm violation will be interested in determining its cause. He will attempt to pick up as many cues as are necessary to establish the reason for the other person's out-of-role behavior. Interaction with someone conforming to expectations will not require this. "Victims" should, therefore, have more differentiated cognitions of the other person than "nonvictims."

(b) intensity - the confidence one has of the impressions he has formed of the other person. If, indeed, an individual is more concerned with the other person when the latter is behaving out-of-role than when he is conforming to expectations, he should be more confident of his impressions of the other person.

(c) direction - the position of cognitions on an evaluative dimension: e.g., good-bad, favorable-unfavorable, pleasant-unpleasant. It seems reasonable to assume that people in our culture are bothered by spatial invasion, and if its cause is located in the other person, he will be evaluated more negatively.

(d) salience - the degree to which cognitions are thought to characterize a person. Cognitions may be seen as characteristic of an individual only in some situations or as typical of him under all circumstances. In our culture, there appears to be a norm to give a person "the benefit of the doubt" and not to dismiss him as completely undesirable after only one encounter with him. This would tend to make the salience of unfavorable characteristics lower than that of favorable characteristics.

Since there is more concern with the other person in invasion conditions, salience should be greater in invasion conditions than in noninvasion conditions for both favorable and unfavorable characteristics.

(e) inference - the degree to which intentions and dispositions are attributed to a person. The impressions formed by an individual may be the result of mere observation, as in the case of physical characteristics, or may require probing "beneath the surface" and speculating about the other person's personality.

Physical characteristics are generally unambiguous and easily identified in another person. They do not, however, allow much leeway in interpreting the other person's behavior. It would seem then that there should be no differences in the intensity, direction, and salience of physical cognitions between invasion and noninvasion conditions. Nonphysical characteristics, on the other hand, are less clear-cut and must be inferred. They do, moreover, offer a wider degree of latitude for explaining behavior. As is implied above, intensity should, therefore, be greater and direction more negative in invasion conditions than in noninvasion conditions. The greater concern with the other person and the more negative direction of cognitions in invasion conditions work in opposite directions with regard to salience. It is thus expected that they would "cancel" each other, yielding no difference in salience for nonphysical characteristics between invasion and noninvasion conditions.

The following specific hypotheses are tested in the present research:

1. The degree of differentiation will be greater for subjects in conditions of spatial invasion than in conditions of noninvasion.

2. The degree of intensity will be greater for subjects in conditions of spatial invasion than in conditions of noninvasion.

3. The direction of cognitions will be more negative for subjects in conditions of spatial invasion than in conditions of noninvasion.

4. The degree of salience will be lower for "unfavorable" characteristics than for "favorable" characteristics.

5. For both "favorable" and "unfavorable" characteristics, the degree of salience will be greater for subjects in conditions of spatial invasion than in conditions of noninvasion.

6. For physical characteristics, there will be no differences in the degrees of a) intensity, b) direction, and c) salience between invasion and noninvasion conditions.

7. For nonphysical characteristics, a) the degree of intensity will be greater, b) direction will be more negative, and c) there will be no difference in the degree of salience between invasion and noninvasion conditions.

One purpose of the present study is to determine whether the effects of spatial invasion differ in various interaction situations. To test this notion, two additional variables were introduced: the race of the other person and the sex of the subject. These were chosen because they were thought to be relevant, on a common-sense basis, and were easily manipulatable. It was felt that person perception might vary depending on whether the other person was Black or White and whether the subject was male or female.

CHAPTER II

RESEARCH METHODS

Twenty male and twenty female undergraduate students at Michigan State University were recruited from introductory courses in sociology and social science. They were paid $2.50 for their participation in the research.

A factorial design was used with two levels each of interaction distance (invasion-noninvasion), race of male confederate (black-white), and sex of subject (male-female). Subjects were randomly assigned to conditions with one-half of the subjects in each condition being of each sex.

One subject and one confederate--unacquainted with one another--were run in each experimental session. Several minutes after the "subjects" had arrived and were seated in the waiting room, the experimenter appeared, introduced himself, and took them into the laboratory. He directed them to stand on either (long) side of a taped rectangular area, seven feet by six feet. The experimenter then told the subjects that he was interested in how people get to know each other and wanted them to participate in a "get acquainted" experience by telling about themselves. It was pointed out that this would consist of two phases in which each person would speak for two minutes. The topic of the first phase was "family background and what you did before you came to M.S.U." while

the second phase concerned "what you are doing at M.S.U. and something about your future plans."

It was planned that the confederate would always be the first to begin. The experimenter signalled each person to begin and stop speaking by ringing a bell. Before giving the first signal, the experimenter informed the "subjects" that their encounter would be recorded and filmed and showed them the correct way to hold the microphone while speaking. He also told them not to move outside the taped area "since you will be out of camera range." A camera was visible to the participants.

For both phases, the confederate presented a memorized script which depicted him as an average, well-rounded individual. Each confederate spent many hours learning the script and practicing a natural type of presentation (see Appendix A for the script).

In the invasion conditions, the confederate, at the start of phase one, moved from a distance of 4-4½' from the subject to 2-2½' (measuring chest-to-chest); at the start of phase two, he "invaded" to ½-1' from the subject. In the noninvasion conditions, the confederate remained 4-4½' from the subject. During the last two minutes of the experimental session, the confederate stared directly at the subject in all conditions.

In the post-experimental session, the subject was asked to list characteristics which described the "other subject in the experiment." He was instructed to write whatever came to his mind. The total number of characteristics was taken as the degree of differentiation. The characteristics were separated into physical and nonphysical categories in order to determine the degree of inference. A characteristic was

designated as physical if it referred to something that could be empirically observed; otherwise, it was considered nonphysical. To determine the degree of intensity, the subject was asked to indicate on a five-point scale, how certain he was that each characteristic listed was a correct description of the "other subject." The scale ranged from 1) not certain at all to 5) extremely certain. Direction was calculated from a seven-point scale on which the subject indicated how favorable or unfavorable each characteristic was. This scale ranged from 1) a very unfavorable description to 7) a very favorable description. Finally, the degree of salience was calculated from a five-point scale on which the subject rated how typical each characteristic was of the "other subject" in his everyday life. The choices ranged from 1) not at all characteristic to 5) very characteristic. For each of these three dimensions, the mean rating over all characteristics was computed for each subject. (see Appendix B for the complete scales). In addition to the above information, the subject was asked a series of more general questions concerning the confederate and experiment.

CHAPTER III

EXPERIMENTAL RESULTS

Success of invasion. To determine if the spatial manipulation was successful, the subject was asked the following questions: 1) About how far away from you was the other subject standing during the last part of the experiment? and 2) Was he standing too far away, too close, or about the right distance from you? If the subject felt that the confederate stood too close or too far away, he was then asked: How did you feel about his standing too close (too far away)?

Results indicated that subjects in the invasion conditions saw the confederate as standing significantly closer to them than subjects in the noninvasion conditions. The mean distance listed by invaded subjects was approximately 1'5" as compared to 4'6" for noninvaded subjects ($t = 11.882$, $p < .005$). Eighteen of the twenty invaded subjects felt the distance was too close, while no subjects in the noninvasion conditions responded in this manner. Of the eighteen subjects who responded "too close" twelve indicated that they experienced discomfort due to the invasion.

It should be noted that being in close proximity to another person is not always a spatial invasion (compare Patterson and Sechrest, 1970). The present study, however, did involve the subject in a clear norm violation which affected him in certain ways. Subjects were asked if

anything bothered them about the "other subject." Fourteen of the invaded subjects as compared to seven of the noninvaded subjects answered in the affirmative. When asked what bothered them, nine of the invaded subjects gave responses relating to the spatial invasion. Subjects in the non-invasion conditions were concerned with the confederate's appearance and other unrelated phenomena.

Degree of differentiation. The results concerning the subjects' cognitions of the confederate are shown in the accompanying tables. As can be seen in Table 1, there was a significantly higher degree of differentiation for subjects in the invasion conditions than in the noninvasion conditions. Invaded subjects listed, on the average, 9.75 characteristics as compared to 7.70 for invaded subjects. Table 1 also indicates the degrees of differentiation for physical and nonphysical characteristics considered separately. There was a significant difference for the former but not for the latter.

Concerning the substantive nature of the characteristics listed, subjects mentioned such physical traits as the confederate's race, color of hair and eyes, height, beard, moustache, color of shirt, neat appearance, and good looks. For the nonphysical category they described him, among other things, as friendly, outgoing, intelligent, interesting, and nice. These traits, in general, were mentioned by both invaded and noninvaded subjects. There was, however, one important difference. While six of the noninvaded subjects considered the confederate shy and introverted, none of the invaded subjects did. It may be that the spatial invasion made the confederate seem more extroverted.

Degree of intensity. As predicted, subjects in the invasion conditions showed a higher degree of intensity for all characteristics and

TABLE 1

Differentiation, Intensity, and Direction

by Distance Condition

Dimension	Mean Score		SD		t	df	p
	Invasion	Noninvasion	Invasion	Noninvasion			
Differentiation							
All Characteristics	9.750	7.700	3.832	3.620	1.695	38	<.05
Physical	2.900	1.700	3.032	2.052	1.429	38	.09*
Nonphysical	6.850	6.000	3.692	2.530	0.825	38	>.10
Intensity							
All Characteristics	3.679	3.361	0.759	0.512	1.516	38	.07*
Physical	4.429	4.306	0.580	0.378	0.610	25	>.50
Nonphysical	3.409	3.092	0.760	0.583	1.442	38	.08*
Direction							
All Characteristics	5.379	5.856	0.833	0.678	-1.937	38	<.05
Physical	4.982	5.458	1.041	1.007	-1.154	25	>.20
Nonphysical	5.552	5.947	0.941	0.658	-1.500	38	.07*

* approximate significance level

for nonphysical characteristics than did noninvaded subjects. There was no significant difference for physical characteristics.

Direction. It was noted above that invaded subjects felt that the confederate stood too close to them and that they were uncomfortable because of this. It appears that this affected their evaluation of the characteristics which they listed for the confederate. As predicted, direction was significantly more negative in the invasion conditions for all characteristics and for nonphysical characteristics. No significant difference was found for physical traits.

Degree of salience. To determine if the degree of salience was affected by the direction of cognitions, the median direction score was calculated for all subjects. Subjects were placed into "favorable" or "unfavorable" categories depending on whether they scored above or below the median.[1] It was found (see Table 2) that the degree of cognitive salience was indeed significantly lower for subjects listing "unfavorable" characteristics ($t = 3.105$, $p < .005$).

TABLE 2

Mean Salience Scores by Direction and Distance Conditions

	Direction					
	Negative		Positive		Total	
Distance	Mean	N	Mean	N	Mean	N
Invasion	3.446	12	3.961	8	3.652	20
Noninvasion	3.251	8	3.878	12	3.627	20
Total	3.368	20	3.911	20	3.640	40

It was mentioned above that the need to discover a person's "true self" would be more important to invaded than to noninvaded subjects. Invaded subjects should, therefore, have higher salience scores in both direction categories. Results indicated that while the trends were in the predicted direction, the differences were not significant.

Table 3 reports the mean salience scores for physical and nonphysical characteristics considered separately. Contrary to hypothesis 6c, a significant difference was found for physical characteristics; there was no significant difference for nonphysical characteristics. The unexpected finding seems to be due to two subjects in the noninvasion conditions who rated the typicality of the confederates' physical traits very low. One subject listed only one physical trait so that his rating on that trait was his mean salience score. For the other subject, characteristics such as height and build, which subjects, in general, rated as "very typical of the other subject in his everyday life" were considered only slightly characteristic. It can only be concluded that the subject misunderstood the instructions concerning the salience question and did not respond appropriately.[2]

These results give support to all of the hypotheses except 6c as mentioned above. In general, subjects who were invaded had more to say about the other person, were more confident about what they said, and were more negative in their impressions than subjects who were not invaded.

Race and Sex. A three-way analysis of variance yielded three significant relationships between race and sex and the impression formation variables. Race had a strong independent effect on differentiation ($F = 6.587$, $p = 0.015$). Subjects who interacted with the black confederate

TABLE 3

Mean Salience Scores for Physical and Nonphysical

Characteristics by Distance Condition

Level of Inference	Mean Salience Score		SD		t	df	p
	Invasion	Noninvasion	Invasion	Noninvasion			
Physical	4.364	3.861	0.552	0.847	1.791	25	.09*
Nonphysical	3.383	3.478	0.568	0.722	-0.451	38	> .25

* approximate significance level

listed significantly more characteristics than those interacting with the white confederate (10.20 and 7.25, respectively). This may be due to the fact that interacting with a member of another race is a more unusual situation for people than interacting with a member of the same race. In a cross-race situation, therefore, the participants may be more interested in determining what the other person is like.

Sex had a strong independent effect on intensity ($F = 5.489$, $p = 0.026$). Females were more confident in their impressions of the confederate than were males. The mean intensity scores were 3.746 and 3.294, respectively. One possible explanation for this result is that females have a greater need for affiliation than males and thus "try harder" to know the other person. Another possible explanation is that there is more interest in a member of the opposite sex than in one of the same sex.[3]

Finally, sex interacted with distance on the dimension of intensity ($F = 3.254$, $p = 0.081$). The mean intensity score for invaded females (4.079) was considerably greater than those for invaded males (3.279), noninvaded males (3.309) and noninvaded females (3.413) which were relatively similar. The cross-sex situation and the close distance seem to have reinforced each other with regard to confidence in impressions.

These findings indicate that the nature of impression formation depends upon the status characteristics of the social actors. Further research utilizing different types of status characteristics is needed.

CHAPTER IV

DISCUSSION

As discussed above, invaded subjects saw the confederate as standing significantly closer to them than did noninvaded subjects and overwhelmingly felt that he was too close. These results, although interesting, are to be expected in our culture. More intriguing, however, is to determine what subjects think is the "correct" or normative interaction distance in the experimental situation. Subjects were asked the following question: About how far do you feel the other subject should have stood from you in this experimental situation? Results indicated that the normative distance was significantly closer for invaded than for noninvaded subjects. The mean distance for the former was 3'4" while it was 4'3" for the latter ($t = 2.616$, $p < .01$).

This finding is extremely interesting for it points to the notion that situational factors may be influential in the formation of norms. The occurrence of the spatial invasion actually affected the invaded subjects' ideas of what was the correct interaction distance. It would seem then that a person's conception of the size of his "personal space" is not fixed but varies by situation. That the normative distance is shorter for invaded subjects is not an obvious finding. Quite to the contrary, a reverse trend might be expected. It could be argued that invaded subjects, being disturbed by the norm violation, would feel that the

confederate should have stood further away from them than subjects not bothered. It is clear, however, that the invasion had the opposite effect.

The cause of a norm violation, as noted above, may be seen as originating with the other person, i.e., in his intentions and dispositions. Although this notion has received some support in this study, when asked why they thought the confederate stood too close to them, invaded subjects perceived several "loci of causation." Five subjects saw the cause in the confederate. Examples of this are the following statements: "He seemed a sociable type; he's probably had close relations with others;" "It could be the way he usually stands: a habit;" "He was nervous." Three subjects thought that they were responsible for the invasion: "Maybe I wasn't talking loud enough. My mother told me this;" "Maybe because I was backing up." For another three subjects, the cause of the invasion was connected with some aspect of the experimental situation: "Because he knew we were on camera and wanted to make sure the camera was getting it all;" "He overreacted to the experimenter who said we had to stand close because of the camera." Four subjects suspected that the experiment might have been "rigged,"[4] and finally, five gave "miscellaneous" reasons for the invasions.

These results demonstrate that people's interpretations of spatial invasion are indeed numerous. The cause of a norm violation is not explained merely by the other person's personality. Rather, the "victim" and the situation are also salient factors which need to be considered. More attention should be paid to the interpretations people give of norm violations.

CHAPTER V

SUMMARY AND CONCLUSIONS

The cognitive effects of spatial invasion were examined in a laboratory setting. In a two-person situation, subjects interacted with confederates who either maintained what was considered to be a "normal" interaction distance for strangers or moved extremely close to the subjects. Other manipulations were the race of the confederate and the sex of the subject. Impressions made of the confederate by the subject were scored on four dimensions: differentiation, intensity, direction, salience.

Results indicated that, in general, invaded subjects listed more cognitions for the confederate, were more confident of their impressions, and held more unfavorable impressions than did noninvaded subjects. Cognitions were also separated into physical and nonphysical categories and examined along the four dimensions. Finally, the role of status characteristics in impression formation was ascertained by determining the relationship between race and sex and the four dimensions. It was concluded that physical distance is a factor which affects the nature and quality of social interaction and which must receive continued attention from social scientists.

FOOTNOTES

[1]Since less than 10 percent of the characteristics listed by the subjects were actually rated as unfavorable (choices 1, 2, or 3 on the direction scale), "favorable" and "unfavorable" characteristics were determined in the fashion stated.

[2]The general finding of no difference in the degree of salience between invaded and noninvaded subjects is given further support from a series of questions asked subjects about the confederate. On five point scales, subjects were asked: 1) How much do you think you would like having the other subject as a personal friend? 2) How much would you like participating in another experiment with the other subject? and 3) In general, how impressed would you say you were with the other subject as a person? The scales ranged from 1) not at all to 5) very much. Examination of the distribution of responses on each scale using the Kilmogorov-Smirnov test indicated no differences between the invasion and noninvasion conditions. While invaded subjects, then, rated the confederate more unfavorably in the present study, they did not, it appears, dismiss him as an "undesirable" under more general conditions.

[3]In order to test these notions, it would also be necessary to compare the intensity scores of male and female subjects who interacted with a female confederate.

[4]The person perception responses of suspicious subjects were carefully examined to determine if they were comparable to those of the general sample. If they were, they were retained in the sample.

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APPENDIX A

Confederate's Script: Phase One

I was born in Cleveland, Ohio, but my family moved to Detroit when I was five years old. My father is a foreman at Chrysler and my mother is a housewife. She spends most of her time taking care of my new brother who is three months old. He's really quite a baby! I also have another brother who is fifteen and a sister who is eight. My brother is in high school and is spending the summer working as a clerk in the supermarket near our home. It's his first summer job and he's enjoying it a lot. My sister is going into the third grade this fall. Her latest hobby is painting. When I went home during vacation I found about a dozen paintings of hers all over the house!

While I was in elementary school I was a boy scout which was a very rewarding experience for me. I was always busy doing somethings with my friends and we had a lot of good times. The weekend trips were especially enjoyable. I was also quite interested in science and participated in the school science fairs. My friend and I won second prize one year for a project on plant photosynthesis.

In high school I took a college prep program and was on the varsity baseball team. Our team had a winning record in my junior and senior years and broke even when I was a sophomore. I was also in the orchestra. I played the trumpet. We gave several performances during

the school year. The best one was always the Spring Concert which was held in May. This always drew big audiences and in my senior year we gave three performances instead of the usual one. I was also in the annual play in my junior year. We put on "Arsenic and Old Lace." It turned out to be pretty successful and we all enjoyed doing it.

Although my extra-curricular activities were time-consuming I was able to maintain a good average throughout high school. Senior year, I guess was the hardest since I wanted to get good grades for college and still be on the team and play with the orchestra. I also went out quite a bit with my girlfriend which cut into my studying time, but I was accepted by M.S.U. and things worked out fine.

Confederate's Script: Phase Two

I came to State in the Fall of 1966. During freshman and sophomore years I wasn't sure what I wanted to major in so I remained "no pref." I liked this since it gave me a chance to take courses in several fields. In addition to the University College program, I took courses in psychology, economics, and history. During sophomore year I began to realize that the field of business administration might be an interesting one to go into so I took more courses in this area. I found them very interesting and by the beginning of junior year I decided I wanted to major in business administration. This term I'm taking a couple of economics courses. Next year I'll be able to take more electives and I think I'd like to concentrate on psychology.

As far as extra-curricular activities go, I didn't do too much during freshman year since I studied quite a bit. I wasn't sure how

hard State would be. But after having a good year I saw that it was possible to take more time out. In sophomore year I began to play intramural basketball and baseball which I enjoy doing alot. I also got a part-time job working in the library. The extra money came in handy and the experience was good. Also, since my girl friend transferred to State last year we've been going out quite a bit.

This is the first summer I've stayed at school. All the other years I worked at my uncle's gas station but since my girl lost some credits in transferring and had to take some courses this summer, I decided to stay too. My roommate and I got an apartment for the summer. We really enjoy living off-campus and will probably stay off next year.

As far as future plans are concerned, I think it will be important to have a Master's degree in order to do well in the business world so I plan to go on to graduate school. I've got a few schools in mind and will be writing to them soon for information. If possible I'd like to get an assistantship to help me through school. After my girl graduates we hope to get married and raise a family.

APPENDIX B

COMPLETE SCALES FOR INTENSITY, DIRECTION, AND SALIENCE

Intensity:

HOW CERTAIN OR CONFIDENT ARE YOU THAT EACH CHARACTERISTIC IS A CORRECT DESCRIPTION OF THE OTHER SUBJECT?

1. I am not certain at all that this is a correct description of the other subject.
2. I am not very certain this is a correct description.
3. I am fairly certain this is a correct description.
4. I am certain this is a correct description.
5. I am extremely certain this is a correct description of the other subject.

Direction:

HOW FAVORABLE OR UNFAVORABLE IS EACH CHARACTERISTIC AS A DESCRIPTION OF THE OTHER SUBJECT?

1. I think this characteristic is a very unfavorable description of the other subject.
2. I think this characteristic is moderately unfavorable.
3. I think this characteristic is only slightly unfavorable.
4. I do not think this characteristic is either favorable or unfavorable.
5. I think this characteristic is only slightly favorable.
6. I think this characteristic is moderately favorable.
7. I think this characteristic is a very favorable description of the other subject.

Salience:

HOW CHARACTERISTIC OR TYPICAL IS EACH FACTOR OF THE OTHER SUBJECT IN HIS EVERYDAY LIFE?

1. I think this factor is not at all characteristic of the other subject in his everyday life.

2. I think this factor is only slightly characteristic.

3. I think this factor is fairly characteristic.

4. I think this factor is generally characteristic.

5. I think this factor is very characteristic of the other subject in his everyday life.