

Spatial Ecology: Its Effects on the Choice of Friends and Enemies

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Received March 3, 1975

The present research examined relationships between physical distance, frequency of face-to-face contacts, and the probability that individuals would be chosen as friends or enemies. Consistent with previous research, the probability of being chosen as a friend increased as the distance between people decreased. There was also a positive linear relationship between the frequency of contact and the strength of liking. In contrast, the probability of being chosen as a disliked individual was even more dependent upon physical distance (more disliked than liked individuals lived close to the subjects), but the strength of disliking was unrelated to the frequency of face-to-face contact. Friends also tended to live farther away from the subjects the longer the latter had lived in their residences, but the distance that disliked individuals lived from the subjects did not depend upon time. The overall pattern of results was consistent with an "environment-spoiling" hypothesis which proposed that many negative interpersonal relationships primarily occur because the actions of specific others spoil one's living environment, whereas most positive interpersonal relationships result from frequent face-to-face contacts.

A number of spatial ecology studies have found that friendships are more likely to form between people living near each other than between people living far from each other (Deutsch & Collins, 1951; Festinger, Schachter & Back, 1950; Merton, 1948; Newcomb, 1961; Whyte, 1956). A widely accepted assumption guiding this research has been that the physical distance between people's living quarters controls the frequency with which they interact and the latter influences the degree of liking. In the same vein, early research on race relations and prejudice argued that residential proximity between people of different races would increase the probability that friendships would form and therefore reduce interracial hostility (e.g., Deutsch & Collins, 1951). In much of this research, the presence of *dislike* relationships was explained by noting that the differences between groups of people (in race, socioeconomic status,

This research was supported by a UCSD small grant and by NIMH No. MH 26069-01 to the first author. We would like to thank Mr. and Mrs. Duncan for serving as interviewers. Requests for reprints should be addressed to Ebbe B. Ebbesen, Department of Psychology, C-009, University of California at San Diego, La Jolla, California 92093. Glenn L. Kjos is now at the Department of Psychology, California State University, Fullerton.

and/or attitudes) were somehow exaggerated because the individuals involved rarely lived near, and interacted with, each other (Byrne, 1969).

While such factors as race and attitude similarity are obviously important, they cannot explain why dislike relationships form in relatively homogeneous populations, for example among people living in suburban middle-income housing. Dissimilarity of attitudes and perceived personality characteristics may account for some of the variance, but it seems improbable that stable dislike relations would result from the repeated face-to-face contacts necessary to establish how much dissimilarity actually existed. If face-to-face contacts were unpleasant, it seems reasonable that people would simply try to avoid them.

One intuitively plausible reason for disliking in such a homogeneous population is best described by the term "environment spoiling." A person might dislike another because of the unpleasant things the latter does to the former's living environment. In a suburban setting, for example, garbage might be left on one's property, a car might be frequently parked in front of a driveway, music might be played too loudly late at night, etc. If events such as these happened often enough and were associated with a particular person, they could lead to intense disliking even in the absence of face-to-face contacts.

While the above hypothesis implies that disliking may not require frequent face-to-face contact, it does predict that disliking should depend on residential proximity. A person's environment is presumably far more likely to be spoiled by someone living nearby. In fact, because people can travel to find friends, the environment-spoiling hypothesis leads to the paradoxical expectation that the formation of enmities may be even more dependent upon physical proximity than the formation of friendships. Thus, the present view argues that living distance should have a strong effect on the formation of both like and dislike relations, but for different reasons.

Several additional predictions about differences between like and dislike relations follow from the environment-spoiling hypothesis. If the formation of like relationships does depend upon face-to-face contacts, then the length of time that a person lives in a given location should have an effect on how far away his friends live. The longer an individual lives in one place, the more opportunities he or she should have to meet people, face-to-face, who live far away. If environment spoiling accounts for a reasonable portion of the variance in dislike relations, then face-to-face contacts (and passage of time) should have very little effect on how far away the disliked individuals live. No matter how long an individual lives in an area, disliked people must live close enough to be able to spoil the individual's living environment.

Evidence concerning the usefulness of the above model was obtained by conducting an extended replication of the Festinger et al. (1950) study.

People living in a housing development located the living quarters of the three individuals whom the (a) saw most often at social gatherings, (b) liked the most, and (c) disliked the most. The first item provided the opportunity for a direct replication of the earlier study in a new setting. The second item was included in an attempt to validate the Festinger et al. (1950) measure by determining whether people mentioned as being seen most often at social gatherings were in fact the same people who were liked the most. The third question was included to provide evidence concerning the comparative effects of proximity on the formation of like and dislike relationships. In an attempt to examine the utility of additional predictions made from the environment-spoiling model, subjects in the present study were also asked to rate each of their choices on "good-bad" personality dimensions, estimate the number of times per month that they saw each of their choices, and indicate the total time they had been living in their present homes.

METHOD

Setting and Population Characteristics

A middle- to upper-middle income condominium complex (University Park) near Irvine, Southern California, served as the living environment under investigation. A representative section of the community plan is presented in Fig. 1.

As can be seen, the area consisted of groups of attached townhouses, each group separated by walkways, roads, or "greenbelts." Several groups of townhouses were typically arranged in adjacent semicircular clusters. The center of each cluster usually contained an oval roadway with a greenbelt. In most cases, adjacent clusters were also separated by roadways which did not have greenbelt dividers, but instead led to parking areas and back patios. Each townhouse contained an enclosed front and rear patio, a small front yard, and a gate separating the front entryway from the access walk common to the cluster of attached

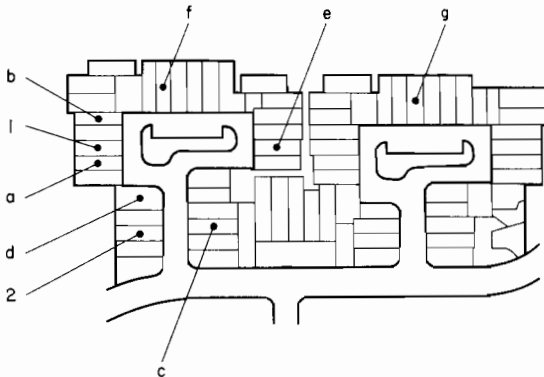


FIG. 1. Examples of the first seven distance categories are indicated by the letters a-g. The categories a, b, d, e, f, and g are placed in reference to the residence indicated by "1." The category c is in reference to the home indicated by "2." The remaining two distance categories, a nonadjacent cluster and another village, are not represented in this figure.

townhouses. The average distance between the front doors of two adjacent townhouses was 12 m.

University Park consists of three "villages" built at different times and containing a different number of townhouses. At the time of the study, the first village was 8 yr old and contained 378 homes, the second was 6 yr old and contained 293 homes, and the third was 4 yr old and contained 410 homes. The environmental designs of the villages were very similar, and no boundaries separated them.

Two-hundred townhouses, an approximately equal number from each village, were randomly selected from the entire University Park development. After two call-backs, 9% of the original sample was unavailable, leaving a total of 183 homes. All subjects were interviewed on weekdays during the afternoon hours by two trained interviewers who were blind to the purpose of the study. The interviews lasted approximately 10 min.

Ninety-eight percent of the people interviewed were married females. All of the interviews were carried out within 2 weeks in an attempt to avoid contamination by communication between the interviewees.

Interview and Questionnaire Material

The interview content was standardized by employing a questionnaire. Following a brief self-description, the interviewer introduced the questionnaire by saying that he/she was interested in how people get along with their neighbors and that the respondents' anonymity would be preserved. The front page of the questionnaire contained a similar description to that being given orally. The next page consisted of a map of University Park (from which Fig. 1 was taken). The location of the subject's townhouse was indicated on the map by a large red dot. This map was used by the respondents to indicate their choices of three people in University Park whom they saw most often at social gatherings, the three people they liked, and the three they disliked. It was thus a within-subjects design, counterbalanced for the type-of-choice order.

Other Measures

Each type of choice was made on a separate page of the questionnaire. Additional measures were included on each of these pages. The first of these asked the respondent to estimate how many times a month she saw each of her choices, without any reference to social gatherings. Subjects were also asked to rate each person on four seven-point "good-bad" personality trait scales: warm-cold, intelligent-unintelligent, sociable-unsociable, and considerate-inconsiderate. The questionnaire concluded by asking the subject to indicate the number of months she had been living in her present location. Before leaving, the interviewer requested that the subject not discuss the interview with any neighbors for 2 weeks.

RESULTS

Proximity and Liking

Do people's friends tend to live closer to them than one would expect by chance? An attempt to answer this question was carried out by first dividing all of the choices for the most-liked person into nine distance categories. The nine categories, from the closest to the farthest, were defined as follows: (a) next door; (b) not next door but in the same attachment; (c) in a home across an undivided street from the subject; (d) in an attachment adjacent to but on the same side of the street as the subject; (e) in a home in an attachment directly across a street divided by a

green-belt; (f) in a home in the same cluster of two or three attachments as the subject's, but in an attachment at a 90° angle to the subject's attachment; (g) in a home in an adjacent cluster of attachments; (h) in a nonadjacent cluster but in the same village as the subject; (i) in another village. Figure 1 contains visual representations of the first seven of these categories.

If the subjects were making their choices independent of living distance, then the percentage of people chosen as best friends in each distance category should match the proportion of people living in each category. A test of the effect that proximity had on friendship choices was made, therefore, by comparing actual choice proportions with possible choice proportions.¹ The first row of Table 1 contains the proportion of "best liked" choices in each distance category, and the bottom row contains the proportion of possible choices in the same categories. There were so many more actual choices in the near distance categories than would be predicted from the possible choice distribution that a significance test is unnecessary. About 62% of all the like-most choices lived in the same cluster as the subjects. This result is a complete replication of the previous work in the area. People's best friends live much closer to them than would be expected by chance.

Unlike previous research, the present data made possible an analysis of how the association between proximity and friendship varied with the intensity of the interpersonal relationship. The first three rows of Table 1 show that as the intensity of the like relationship decreased, proportionally more choices were made at greater distances. Comparisons of the most-liked with the second and third most-liked choices were both significant [$\chi^2(8) = 15.99$, $p < .05$, and $\chi^2(8) = 28.31$, $p < .01$, respectively], whereas a comparison of the second with the third most-liked was not [$\chi^2(8) = 10.72$].² Closer examination of the proportions

¹ The number of possible choices was computed by counting the number of homes in each category which could have been selected by a subject. For example, if a subject had lived at the end of an attachment, she would have had only one opportunity to choose someone next door. In addition, because of the location of some residences, some subjects had no opportunity to choose people living across a divided or undivided street (see Fig. 1). The total number of possible choices for a given category was obtained by summing the number of possible choices for only those subjects who made a choice. While the total number of possible choices changed with each type of choice (since the number of subjects who responded changed), the proportion of possible choices in each category was constant within three decimal places. Therefore, only one value per category is presented in Table 1 for all of the different choices.

² Because the present study used a within-subjects design in which many subjects were unable, even after considerable prodding, to answer all of the questions, some statistical tests could not be performed on the data without either violating the independence assumption or discarding much of the data. However, the nature of the statistics used should make most of our significance levels underestimates of the true values; regardless, the reported p levels should be treated with caution.

TABLE 1
 PROPORTION OF ACTUAL AND POSSIBLE CHOICES IN EACH DISTANCE CATEGORY

Type of choice	n	Distance categories								
		Same village								Diff. vil- lage
		Same cluster				Different cluster				
		Same attach- ment		Different attachment						
		a	b	c	d	e	f	g	h	i
Like most	181	.11	.22	.08	.04	.11	.06	.06	.15	.17
Like second	169	.04	.14	.10	.03	.08	.05	.11	.22	.23
Like third	156	.06	.04	.12	.04	.11	.09	.12	.21	.21
Most social contacts	179	.10	.20	.09	.04	.15	.05	.04	.14	.19
Second most social contacts	159	.04	.11	.08	.04	.11	.06	.11	.23	.22
Third most social contacts	130	.02	.08	.12	.03	.06	.09	.12	.22	.26
Dislike most	171	.07	.20	.16	.07	.12	.11	.10	.08	.09
Dislike second most	139	.03	.14	.13	.06	.14	.14	.14	.16	.06
Dislike third most	102	.05	.07	.12	.05	.13	.09	.14	.26	.09
Possible choices		.002	.005	.003	.002	.006	.009	.033	.274	.666

suggests that these differences were partly due to a reduction in the next-door and same-attachment choices and an increase in the nonadjacent-cluster and another-village choices as the intensity of liking decreased. In short, the distribution of friendship choices became more like (but not equal to) the expected distribution as the intensity of the liking relationship weakened.

As Table 1 shows, the results for the social-gathering choices were virtually identical (no χ^2 comparisons reached significance) to those for the liking choices. Because a separate analysis of the former data would be completely redundant, no further mention of these data will be made.

Proximity and Disliking

In order to examine the relationship between proximity and disliking, the same breakdown by distance categories was performed on the dislike choices. Examination of rows 7–9 in Table 1 shows that the dislike choices were indeed affected by proximity. Many more disliked individuals lived near the subjects than would be expected by chance. For example, over 70% of all the most-disliked choices were people who lived in the same

semicircular cluster as the subject, even though less than 3% of the possible choices lived in the same cluster.

The effect of intensity of disliking was examined by comparing the distributions for the three dislike choices. Comparison of the choice proportions for the most-disliked and the third-disliked individuals showed that as the intensity of disliking decreased, the choice proportions became more similar to the expected distribution. Relatively more people who lived far away from the subjects were chosen as third-disliked than as the most-disliked [$\chi^2(8) = 24.38, p < .01$]. The second-disliked distribution did not differ from either of the other two distributions [the largest $\chi^2(8) = 10.05, n.s.$].

Comparison of the Relationships between Proximity, Liking and Disliking

To determine whether the formation of the dislike relationships would be affected by proximity in the same manner as the like relationships, the three like choice distributions were compared to the three dislike distributions in Table 1. The most- and the second-most-liked choices were differently distributed over the distance categories than were the most and the second-most-disliked choices [$\chi^2(8) = 20.17, p < .01$; $\chi^2(8) = 25.31, p < .01$, respectively]. The two third-choice distributions did not differ from each other [$\chi^2(8) = 8.07$]. These differences resulted primarily from the facts that fewer of the disliked than liked individuals lived very far from the subjects, and that more disliked than liked individuals lived at moderate distances from the subjects. Another way of showing these differences is to compare the mean *straight-line physical distances* between subjects and their liked and disliked choices. The average physical distances between the subjects and the three liked choices were 236, 289, and 285 m, while the average distances between the subjects and the three disliked choices were much smaller, namely, 151, 157, and 187 m. Matched pairs *t* tests of these means indicated that there were no differences within the type of choice (like or dislike), but that all of the like means were significantly different from all of the dislike means.³ The smallest *t* value was between the like-most and the dislike-least choices [$t(102) = 1.99, p < .05$].

Thus, (a) the probability of the formation of both dislike and like relationships is higher the closer two people live, (b) the formation of dislike relationships seems to be even more constrained by living distance than the formation of like relationships, and (c) this greater constraint on

³ Because *ts* were computed for all possible comparisons, the conservative studentized range statistic (Winer, 1971) was used to determine the significance levels. This procedure was used in all cases where multiple comparisons were made.

dislike relationships is reduced as the intensity of the interpersonal feeling diminishes. These conclusions are consistent with the first prediction made by the environment-spoiling model: Proximity plays a more important role in the formation of dislike than like relationships.

Length of Time and Choices

Effects of the length of time that subjects had lived in University Park were also examined. Length-of-time categories were created by dividing the subjects into three approximately equal groups: less than 31 months, 31–50 months, and over 50 months. A comparison of the like choice proportions at each distance across these three length-of-time categories indicated that the most-liked individuals tended to live farther away from the subjects the longer the subjects had lived in their homes [<31 vs. >50 , $\chi^2(8) = 19.83$, $p < .025$]. The same was true for the second-most liked choices [<31 vs. >50 , $\chi^2(8) = 22.35$, $p < .01$], but not for the third-most-liked choices [<31 vs. >50 , $\chi^2(8) = 8.77$, n.s.].⁴ As predicted, the longer the subjects had been living in the area, the less important proximity became in determining where their *best* friends lived.

An identical analysis was performed for the dislike choices. In contrast to the like choices, the length of time subjects had lived in the area had no significant effect upon how far the most- and second-most-disliked people lived [<31 vs. >50 for most disliked, $\chi^2(8) = 13.69$, n.s.; <31 vs. >50 for the second-most-disliked, $\chi^2(8) = 11.66$, n.s.]. Thus, as would be expected if the reasons for disliking someone were tied to a person's living environment proximity was equally important in determining who would be disliked across all three time intervals.

Frequency of Mere Contact and Choices

Heimstra and McFarling (1974), among others, have suggested that proximity may exert effects on liking because the opportunity for face-to-face contact decreases as the distance between people increases. If so, there should be a positive correlation between the average frequency of seeing certain people and the probability of choosing these people as friends. The top panel of Fig. 2 shows the number of friendship choices (collapsed across the three intensities) divided by the number of available people to choose from, as a function of the average frequency of face-to-face contacts for each of the nine distance categories. There is almost a linear relationship between the friendship choice probability and mean frequency of contact. In addition, subjects reported seeing the most-liked person an average of 9.39 times per month, the second-most-liked person an average of 7.00 times, and the third-most-liked person an

⁴ These χ^2 s were based on truly independent observations.

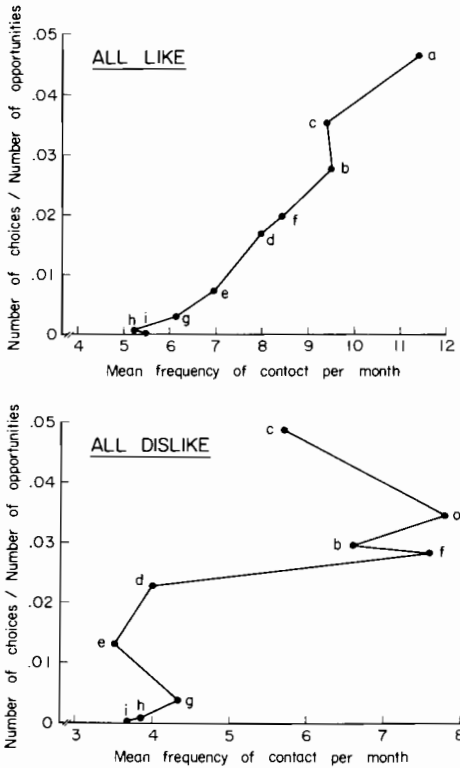


FIG. 2. The top panel presents the ratio of number of like choices to number of opportunities, for each distance category, as a function of the average number of face-to-face contacts with all of the like choices in each distance category. The data for the dislike choices, similarly obtained, are presented in the bottom panel.

average of only 5.26 times. Matched pairs *t* tests showed that all three means were different from each other (all *ps* < .001). Finally, the more frequently a choice was seen, the more positively that person was rated. The correlation coefficients between frequency of contact and the sum of the four good-bad trait ratings were .22 (*df* = 179, *p* < .01) for the most-liked choices, .21 (*df* = 167, *p* < .01) for the second-most-liked choices, and .09 (*df* = 154, n.s.) for the third choices. While causality cannot be determined from these various correlational relationships, these results are at least consistent with the frequency-of-contact explanation.

The bottom panel of Fig. 2 presents the relationship under consideration for the dislike choices. Disliked individuals who lived in the same semicircular court as the subjects (except those who lived across a divided street or in an attachment adjacent to the subject's) were seen more frequently than others. In fact, there appear to be two categories of disliked people: those seen six or more times per month and those seen less than

five times per month. Within each category, however, frequency of contact was unrelated to the probability of being chosen as a disliked person.

If frequency of contact were indeed unrelated to the strength of the dislike relationships, one would also expect the average frequency of contacts to be the same across the three intensities of dislike. The average frequency of contact was 5.24 per month for the most-disliked choices, 4.72 for the second, and 4.38 for the third-most-disliked choices. There were no significant differences between these three means (the lowest $p = .15$). In addition, frequency of contact should also be unrelated to the good–bad trait ratings within each type of choice. The correlation coefficients between the frequency of contact and the sum of the ratings on the four trait scales were $-.13$ ($df = 171$, n.s.) for the most-disliked choices, and $-.01$ ($df = 127$, n.s.) and $-.14$ ($df = 100$, n.s.) for the second- and third-most-disliked choices, respectively. In short, while a strong positive relationship between frequency of contact and intensity of liking was found, a similar relationship between frequency of face-to-face contact and strength of disliking was not. These results are also quite consistent with the environment-spoiling hypothesis.

Trait Ratings

The mean good–bad trait ratings for all of the like and dislike choices were computed. As expected, all of the disliked choices were rated more negatively than the liked individuals, $F(1,95) = 358.07$, $p < .001$. In addition, the most-liked person was rated more positively than the third-most-liked person on all four trait scales, $F(2,190) = 3.27$, $p < .05$. In contrast to the three liked choices, however, considerateness—a dimension which intuitively seems to be particularly relevant for environment spoiling—was the *only* scale on which the ratings of the most-disliked individuals tended to be significantly more negative than ratings of the third-most-disliked individuals ($p = .054$). (The p values for the remaining scales were all greater than $.15$.) However, this result was apparently due mainly to those disliked individuals living in the same semicircular cluster as the subject. The mean considerateness ratings for the three dislike choices living in the same cluster as the subject were (from first to third) 1.27, 2.19, and 2.44 [$t(100) = 4.22$, $p < .025$, for first vs. third], while the means for those choices living in different clusters were 1.43, 1.50, and 1.64 ($p > .25$). Thus, as would be expected if environment spoiling were a factor in disliking, the more disliked an individual, the lower considerateness rating, but only if the disliked person lived near enough (in the same cluster) to be able to spoil the subject's environment.

Reasons Given for Liking/Disliking

After the above data had been collected and analyzed, a third interviewer (also blind to the purpose of the study) questioned a newly selected random

sample of 94 female subjects from the same housing development. Using the same general introduction, the interviewer asked the subjects to think of the person whom they liked/disliked most in University Park. The subjects were then asked to list three different, *specific* reasons for the like/dislike. With their full consent, the subjects' answers were tape-recorded. A content analysis of transcripts of these tapes was performed by two independent coders who did not know the purpose of the study, or whether a subject was giving reasons for her like or dislike choices. The coders assigned the reasons to five different categories. The categories were defined as follows: (a) actions by the chosen person (or people associated with that person, e.g., children) which were directed at the subject, (b) actions by the chosen person (or associates) which were directed at (or had effects on) the subject's living environment, (c) actions by the chosen person (or associates) which were directed at the chosen person's own living environment, (d) personal characteristics of the chosen person, and (e) "other." Coders also classified the stated reasons in terms of whether they implied something good or bad about the person being described. The coders agreed on the category assignment and the good-bad dimension in the case of 82% of the statements. Where they disagreed, the statements were randomly assigned to one or the other category. Table 2 contains the results of the content analysis.

The greatest proportion of reasons given for liking someone was in the personal-characteristics category, while the greatest proportion of reasons given for disliking someone was in the actions-directed-at-the-subject's-environment category [$\chi^2(4) = 83.72, p < .001$]. Consistent with the environment-spoiling hypothesis, these results suggest that subjects liked people for different reasons than they disliked them, and that the most common reason for disliking someone had to do with actions which spoiled the subject's living environment.

TABLE 2
PERCENTAGE OF DIFFERENT REASONS GIVEN FOR LIKING/DISLIKING

Type of choice	Evaluation of reason	Personal characteristics of chosen person	Actions directed at			
			Subject	Subject's environment	Chosen person's environment	Other
Like (<i>n</i> = 269)	Good	42	22	18	11	3
	Bad	1	1	1	0	1
Dislike (<i>n</i> = 253)	Good	1	0	2	0	0
	Bad	19	16	55	4	3

DISCUSSION

A consistent finding in previous research has been that the probability of two people becoming friends increases the closer in space they live. This finding was replicated in the present research. Both when indicating people they liked and those whom they often saw at social gatherings, subjects chose people living much nearer to themselves than would be expected by chance. Also, the present study extended prior findings by showing that best friends and/or people most frequently seen at social gatherings tended to live closer to subjects than their second- and third-best friends. Not only are people more likely to become friends the closer they live, they also tend to be *better* friends.

The results were also consistent with the frequency of face-to-face-contacts explanation of the proximity effect. More-frequently-seen people were more likely to be chosen as friends, best friends were more often seen than second- and third-best friends, and the more frequently the best friend was seen the more positively she was rated. Of course, there are alternative explanations for these findings, but at the very least, the present results did not disconfirm the idea that the effect of proximity on liking is mediated by the frequency of interaction opportunities.

Disliking was quite a different matter. Whereas there was a very strong relationship between disliking and proximity (in fact, proximity appeared to be even *more* important in disliking than in liking), the more-frequently-seen people were not more likely to be chosen as disliked individuals, the most disliked individuals were seen equally as often as the second- and third-disliked individuals, and there was no relationship between frequency of contact and the rated intensity of disliking.

The above results are consistent with the idea that many dislike relationships in a homogeneous population may be due to environment spoiling. Frequency of face-to-face contact may play only a minor role because face-to-face confrontations with disliked individuals can be avoided. However, events which mar one's living environment, such as spots on one's lawn left by a neighbor's dog, cannot be easily avoided and depend to a great extent upon people living in close proximity. Thus, proximity may play a *direct* role in the formation of dislike relations, in that interpersonal contacts may not serve as a mediating variable.

Obviously, we are not suggesting that all dislike relationships are due to environment spoiling; however, it seems that aspects of spatial ecology, including architectural features (e.g., soundproofing, presence of dog runs, adequate parking facilities), may affect the formation of dislike relationships by influencing the probability that others' actions will be detrimental to one's environment. Conversely, like relationships may not depend upon the *lack* of environment spoiling, but rather require that people have frequent interpersonal contacts. It would be interesting to

examine the applicability of this hypothesis to lower-income housing units where even fewer adequate architectural features exist, yet because of crowded living conditions people probably see each other more often.

The differential effects of time on like and dislike relationships found in the present study are also consistent with the above view. The longer people live in a given location the more likely they are to have face-to-face contacts with people living far from them. Thus, people may have friends who live farther away as time passes: Old friends move away or new friends are better liked for some reason. In contrast, if dislike relationships depend primarily upon environment spoiling, the increased interpersonal contact with people living farther away as time passes should be irrelevant. The distant residential location of these new contacts would make it impossible for them to spoil the subject's living environment. The results of the present study supported this prediction.

The trait ratings and the reasons given for liking/disliking further supported the notion that positive relationships were formed by a different process than were the negative ones. The only trait scale which distinguished the most-disliked from the third-most-disliked person was considerateness, and even then only for people who lived fairly close to the subject. To the extent that the considerateness judgments were based on actions which spoiled the subject's environment, the results were consistent with the idea that dislike relationships form and are maintained by the environmental consequences of other people's proximity. Conversely, the fact that the most-liked person was distinguished from the third-most-liked person on all of the trait scales supports the idea that friendships are formed and maintained at least partly because of the frequent face-to-face encounters. In short, as the reasons subjects gave for liking vs. disliking indicated, friendships may be dependent upon many different personal characteristics of the liked individual, whereas the dislike relationships may depend upon specific, environment-spoiling actions of the disliked individual.

In conclusion, the present research supported the view that both liking and disliking depend upon proximity. However, while proximity has an effect on liking by controlling the frequency of interpersonal contacts, its effect on disliking seems to depend on the frequency that people's living environment will be abused by specific others. Liking and disliking are apparently not two sides of the same coin.

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