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Response to Intrusion Into Waiting Lines

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This research explored the relation between the unique spatial configuration of the queue and the means by which its integrity is defended. Following Mann (1969), the queue is viewed as a social system susceptible to experimental analysis. Confederates intruded themselves into 129 naturally occurring waiting lines; the defensive reactions of the queuers were noted. Queuers following the point of intrusion were more likely to object than those who preceded it; two intruders provoked more reaction than a single intruder; and buffers (passive confederates standing in line) dampened the queue's response to the intruders. The results suggest that the underlying structure of the queue is composed of replicated segments and that defense of the queue is local rather than systemic.

It is generally agreed that the queue constitutes a small scale social system that possesses three distinguishing features: first, its function is to regulate the sequence in which people gain access to goods or services; second, the ordering is given a distinctive spatial form; and third, maintenance of the line depends on a shared knowledge of the standards of behavior appropriate to this situation (Cooley, 1902/1964; Mann, 1970; Mann & Taylor, 1967; Milgram & Toch, 1969; Moles & Rohmer, 1976; Schwartz, 1975).

Liebowitz (1968) offered one analysis of why queues develop. Consider the situation where there is a commodity in unlimited supply. If customers were to arrive at the service point (e.g., ticket window) at equal intervals, and the transaction period was fixed, no queue would evolve as long the service interval (i.e., transaction time) did not exceed the arrival rate.

But the arrival patterns of clients are seldom fixed; customers often reach the service point in a random manner, and, as a consequence, individuals encroach upon the service time of others. In addition to the sporadic nature of new arrivals, service time is not always uniform. The combination of these two factors oblige the new arrivals to wait. Queues constitute an organization of waiting on an egalitarian principle. The only means by which queues can be eliminated from these situations is by significantly increasing the number of service personnel. This solution is economically unsound because it requires a large service staff on a continuous standby basis in order to cope with occasional overload.

From a formal point of view, a person does not have to stand in line to be part of a queue (Liebowitz, 1968; Saaty, 1961). Any ordering of people's access to a point of service, whether through numerical assignment (as in stores where patrons take numbers) or appointment (as at restaurants, doctors' waiting rooms, etc.), constitutes a formal queue. But the waiting line is of particular interest to social psychologists for two reasons: It is the type of the queue we encounter most often in everyday life; and beyond this, it is more than an abstract ordering—it is a social occasion and, thus, governed by general sociopsychological rules.

If we probe more deeply into the psychological response to a queue, we observe that it contains two contradictory elements. On the one hand, the queue is an impediment to individuals who wish immediate satisfaction of goals. They cannot buy tickets, pies, or sausage because others stand between them and the service point. On the other hand, it is a social mechanism that protects individuals from those who arrive later. As in the case of most social arrangements, people defer to the restraints of the form, but they are also its beneficiary. The queue thus constitutes a classic illustration of how individuals create social order, on the basis of a rudimentary principle of equity, in a situation that could otherwise degenerate into chaos.

As with any social arrangement, the queue has a potential to break down. This may result from pressures that arise from within the waiting line or outside it. Here we shall concentrate on the latter. People arriving with urgent time pressure may choose to violate the queue by rushing up to the service window or inserting themselves at midqueue. What prevents this from happening? Sources of control inhere at the levels of facilities, roles, and norms. First, physical barriers to intrusion, such as rails or ropes, force people to line up one behind the other and constitute impediments to intrusion. Schwartz (1975, p. 99) termed such facilities *ecological supports.* At the level of roles, specific personnel (e.g., a bank guard or usher) may be designated to enforce observance of the queue's rules. At the normative level, two factors operate: People may not break into a queue because they feel it is wrong to do so; they have internalized the norms appropriate to this social form. Normative control implies its usual complementary side: Those already standing in line may play a role in enforcing the norm.

Charles Cooley highlighted the normative character of the queue when he wrote in 1902:

> Suppose one had to stand in line at the post office, with a crowd of other people, waiting to get his mail. There are delay and discomfort to be borne; but these he will take with composure because he sees that they are part of the necessary conditions of the situation,

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Stanley Milgram died of a heart attack on December 20, 1984, after this article was submitted for publication.

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> which all submit to alike. Suppose, however, that while patiently waiting his turn he notices someone else, who has come in later, edging into the line ahead of him. Then he will certainly be angry. The delay threatened is only a matter of a few seconds; but here is a question of justice, a case for indignation, a chance for anger to come forth. (pp. 281–282)

Cooley thus implied that it is not only the loss of position and time that inspires wrath among orderly queuers, but the violation of the rule, in and of itself, that is sufficient cause for angry feelings. In this article we shall examine experimentally the response by those standing in line to intruders.

Among the first to conduct empirical studies of waiting lines, Mann and Taylor (1967) made three observations on the problem of intrusion: The first was that the queue will seldom unite in any coordinated manner in order to dislodge a queue jumper. Second, although others may indicate disapproval, the responsibility for expelling an intruder falls on the person who stands just behind the intrusion point (Mann, 1970, p. 392); third, those individuals who precede the intrusion point are the ones least likely to object to a queue violation.

These observations, yet to be tested experimentally, point to the need for a deeper empirical and theoretical analysis of the queue. Theoretically, we must relate the defense of the queue to its most distinctive feature, namely the linear spatial disposition of its members. How does this unique spatial configuration affect the way in which the line defends its integrity?

In many social systems, the violation of norms is covert and cannot be easily observed. One of the attractive features of the queue, from a methodological standpoint, is that the propagation of effects is reduced to a highly visible, linear dimension, thus simplifying its description and measurement (in comparison with the occurrence of such effects in more inchoate social aggregates). The present study examines the response of the queue to intruders by having confederates break into naturally formed lines and noting how the lines respond to them. We shall then try to describe the underlying psychological structure that generates the results.

Method

Experimental Conditions

In the experiments described below, we studied intrusions into a total of 129 waiting lines that had spontaneously formed at railroad ticket counters, betting parlors, and other New York City locations. The lines had an average length of 6 persons, excluding experimental personnel.

Nature of the intrusions. A confederate calmly approached a point between the third and fourth person in line and said in a neutral tone, "Excuse me, I'd like to get in here." Before any responses could be made, the intruder injected himself (or herself) into the line and faced forward. If the experimental intruder was explicitly admonished to leave the line, he or she did so. Otherwise the intruder remained in the line for one minute before departing. Three female and 2 male graduate students served as intruders. An observer was stationed nearby to record physical, verbal, and nonverbal reactions to the intrusion.

Number of intruders. We reasoned that a greater number of intruders would impose greater temporal costs on those waiting in line and thus would elicit a greater number of objections. Accordingly, we introduced an experimental variation in which two intruders simultaneously broke into a waiting line.

The role of buffers. The buffer was a confederate who passively occupied a position between the point of intrusion and the next naive queuer. Use of buffers enabled us to determine if responsibility for objecting to the intruder would be displaced from the person immediately behind the point of intrusion to others in the line. In some experimental conditions, two buffers were used, standing behind each other immediately after the point of intrusion. (In conditions requiring buffers, the buffer[s] joined the tail end of the line, and intrusion was postponed until buffers moved up just behind the intended entry position.)

Summary of experimental conditions. The experimental design thus used two independent variables: number of intruders (one or two), and number of buffers (zero, one, or two) yielding a complete crossing of variables by level, resulting in six experimental conditions, as shown in Table 1.

Dependent Measures

For purposes of analysis the position of each person in line in relation to the point of intrusion was of primary interest. We designated the intrusion point as *0* (zero), with the persons following this point designated +1, +2, +3 . . . + n, whereas those preceding the point of intrusion were, with each remove from the intrusion point, designated −1, −2, −3 . . . − n, as shown below:

Head −2 −1 0 +1 +2 +3 +4 +5 End
Intrusion point

Following completion of our experiment, we learned of a study by Harris (1974) on the frustration–aggression hypothesis (Dollard, Doob, Miller, Mowrer, & Sears, 1939) that used experimental techniques similar to our own. In Harris's study the waiting line was the locus but not the object of study and, therefore, was geared toward different theoretical aims. Pertinent aspects of Harris's study will be taken up later.

Results

Qualitative Components

The responses of those standing in line ranged from physical ejection of the intruder to total indifference. A behavior coding scheme that encompassed the observed responses was prepared:

Physical action. Physical action against the intruder occurred in 10.1% of the lines. We counted any physical laying on of hands in this category. This included tugging at the sleeve or tapping the shoulder of the intruder or, in a few cases, pushing the intruder firmly out of the line. This type of response normally originated in the person standing immediately behind the intruder.

Verbal objections. Attempts to expel the intruder by verbal means were the most common form of reaction against the intruder. The comments ranged from the polite to the hostile, but all demanded that the intruder get out of the line or go to the back of the line. Typical statements included the following:

"Excuse me, you have to go to the back of the line."

"Hey buddy, we've been waiting. Get off the line and go to the back."

"No way! The line's back there. We've all been waiting and have trains to catch."

Generalized expressions of verbal disapproval (which did not, however, contain a specific statement that the intruder should leave the line) were also coded as verbal objections to the intruder. These expressions of disapproval were more tentative than those described above. Typical remarks were:

Table 1
Objections to Intrusions in Six Experimental Conditions

Condition	No. of lines	No. of intruders	No. of buffers	No. of lines in which objections occurred	% of lines in which objections occurred
1	22	1	0	12	54.0
2	24	1	1	6	25.0
3	20	1	2	1	5.0
4	23	2	0	21	91.3
5	20	2	1	5	25.0
6	20	2	2	6	30.0

"Are you making a line here?"
"Excuse me, it's a line."
"Um . . . are you waiting to buy a ticket?"

Together, these two types of verbal objection to the intruder occurred in 21.7% of the lines.

Nonverbal objections. Nonverbal objections to the intruder consisted of dirty looks, hostile stares, and gestures to the intruder to get to end of the line. They occurred in 14.7% of the lines.

For purposes of analysis, each of the above types of response was regarded as an attempt to expel the intruder and was consolidated into a single measure, which we termed *objections* to the intruder.

Quantitative Results

Objection rates had a very wide range, varying from a low of 5.0% in the condition in which there were two buffers and only one intruder to a high of 91.3% where there were two intruders and no buffers, as Table 1 shows.

The number of persons objecting to the intruder(s) according to the queuer's position in line is shown in Table 2. Of the 302 persons who occupied the four positions following the intrusion point, 18.2% exhibited some form of direct objection to the intruder compared with 8.0% of the 250 persons who occupied the two positions immediately in front of the intruder. These two percentages were significantly different by a chi-square test, indicating that those following the point of intrusion were more likely to object than those standing in front of the intrusion point ($M = 12.69$, $p < .01$), as Figure 1 shows.

To further examine the effects of the number of intruders and buffers on objection rates, logit models using number of intruders (one or two) and number of buffers (zero, one, or two) as independent variables and number of objections as the dependent variable were set up.

The application of logit models involves testing a series or hierarchy of models to determine which independent variables (or combinations or levels of these independent variables) significantly affect the dependent variable (i.e., number of objections or number of lines in which objections occurred).

The hierarchy of models is constructed so as to start with the simplest model (no effects) and end with the most complicated one (all independent variables and all interaction effects). At each step of the hierarchy an additional term is included. The model *accepted* is the first one (i.e., the simplest) that cannot be rejected by use of a chi-square likelihood ratio test.

The results for the possible logit models of the present study are given in Tables 3 and 4. Table 3 provides models for the number of persons who objected; Table 4 gives models for the overall number of lines in which objections occurred.

Examining the results for Hierarchy 1 in Table 3, we observe that the first model that cannot be rejected is Model 3 ($p = .24$, *ns*). This model contains one buffer (B1) and one intruder (I) (entered in the previous model, Model 2), which means that the number of intruders (one vs. two) and the presence of a buffer (vs. no buffer) significantly affect the objection rate. According to this model, the presence of two buffers (vs. one) had no effect and no interaction effects between buffers and intruders.

Observing the results for Hierarchy 2, the first model that cannot be rejected is Model 9 ($p = .19$, *ns*). This model specifies the significance of number of intruders (one vs. two) and number of buffers (zero vs. one and also one vs. two). Because Model 3 is more parsimonious (e.g., contains one less term) than Model 9, we accepted Model 3 over Model 9.

The results for total number of lines in which objections occurred, given in Table 4, are the same as those for the overall objection rate. Model 13, the simplest model accepted from Hierarchy 1, is chosen over Model 19, the one accepted from Hierarchy 2, because of its greater parsimony. This model once again specifies the significance of the number of intruders (one vs. two) and the presence of a buffer (vs. no buffer), this time on the total number of lines where objections occurred.

In sum, objections occurred more often in lines with two intruders than in lines with one intruder. Objections were more frequent when there were no buffers than when there was either one or two buffers. And there was no interaction between number of buffers and number of intruders.

Reactions of the Experimental Intruders

The several experimental confederates reported highly negative affect associated with the task of intruding into lines. Before

Table 2
Spatial Distribution of Responses to Intrusions: Percentage and Number of Persons Objecting According to Position in Line

	Position in line					
Condition	% − 2	% − 1	I	% + 1	% + 2	% + 3	% + 4
1	4.5 (1/22)	22.7 (5/22)		36.4 (8/22)	14.3 (2/14)	0.0 (0/9)	0.0 (0/7)
2	0.0 (0/22)	12.5 (3/24)		Buf	16.7 (4/24)	0.0 (0/15)	0.0 (0/9)
3	0.0 (0/18)	5.0 (1/20)		Buf	Buf	0.0 (0/20)	0.0 (0/18)
4	4.3 (1/23)	21.7 (5/23)		86.9 (20/23)	43.5 (10/23)	9.1 (2/22)	0.0 (0/20)
5	0.0 (0/18)	10.0 (2/20)		Buf	20.0 (4/20)	0.0 (0/15)	0.0 (0/4)
6	0.0 (0/18)	10.0 (2/20)		Buf	Buf	15.0 (3/20)	11.8 (2/17)
Total	1.7 (2/121)	14.0 (18/129)		62.2 (28/45)	24.7 (20/81)	5.0 (5/101)	2.7 (2/75)

Note. The figures in parentheses show the exact number of persons for each position on which the percentage figures are based. I = intrusion point. Buf = buffer (a confederate who passively occupied a position between the point of intrusion and the next naive queuer).

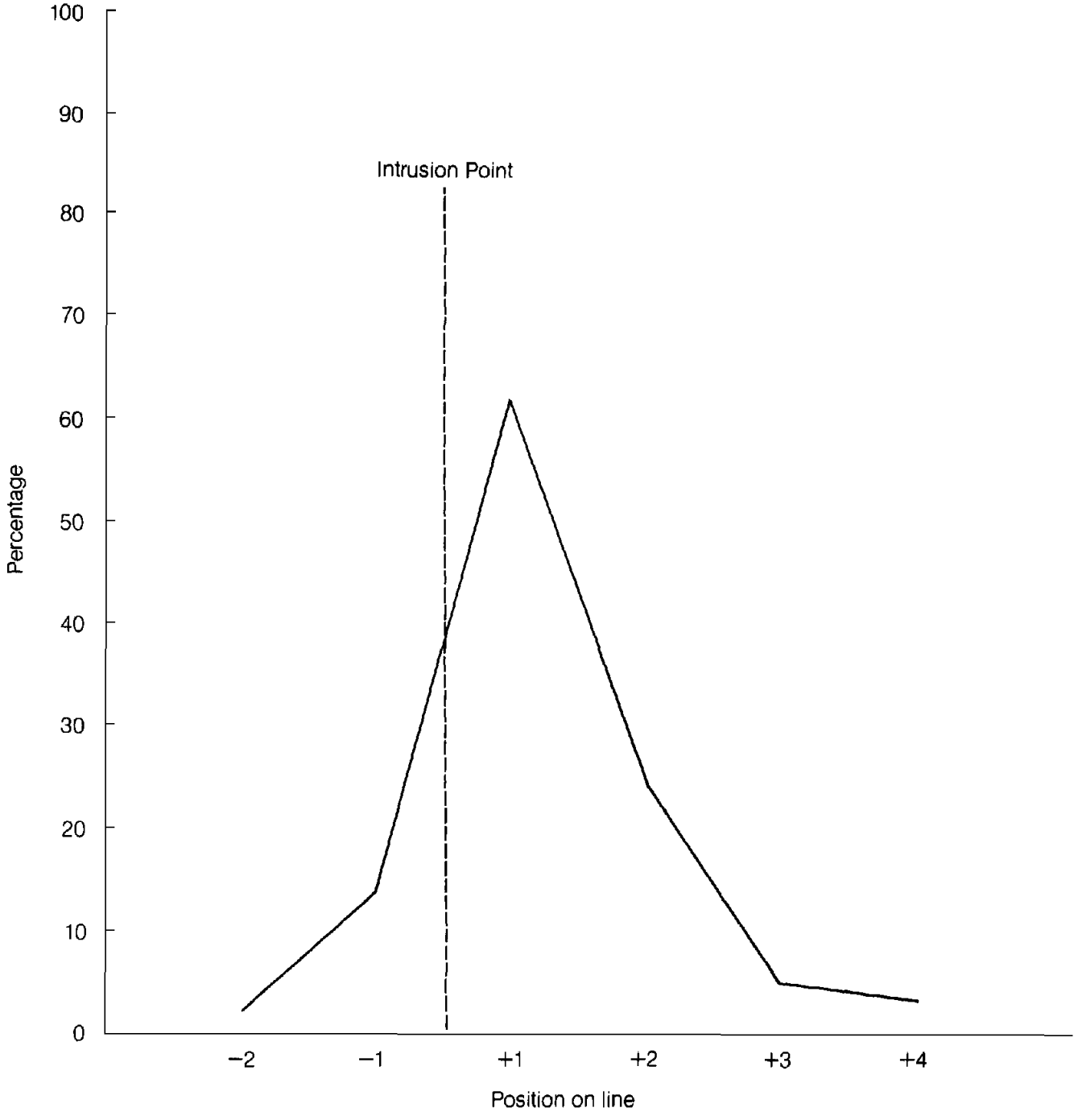

Figure 1. Percentage of persons objecting according to position in line.

each trial, many of the confederates procrastinated at length, often pacing nervously near the target area, spending as much as a half hour working up the "nerve" to intrude. For some, the anticipation of intruding was so unpleasant that physical symptoms, such as pallor and nausea, accompanied intrusions. Reactions of this type have been reported previously by Garfinkel (1964) and Milgram and Sabini (1978). They constitute the "inhibitory anxiety that ordinarily prevents individuals from breaching social norms" (Milgram, 1977, p. 5), and indicate that the internal restraints against intruding into lines play a significant role in assuring the integrity of the line.

Discussion

Cost Versus Moral Outrage

Cooley (1902) has indicated that it is not mainly the loss of position and time that angers the orderly queuers, but the violation of the social order that they have observed. Mann (1970), Moles and Rohmer (1976), and Schwartz (1978) emphasized the cost to the queuer.

Comparison of the responses of queuers standing behind the point of intrusion with those of queuers standing in front of

Table 3
Logit Models Fitted to Cross-Classification of Rate of Objection of Persons in Line

Model	Likelihood ratio statistic	*df*	*p*
	Hierarchy 1		
1. E	43.257	5	.0000
2. I	33.937	4	.0000
3. B1	4.164	3	.2443
4. B2	3.333	2	.1889
5. IB1	3.332	1	.0680
	Hierarchy 2		
6. E	43.257	5	.0000
7. B1	10.491	4	.0330
8. B2	9.784	3	.0205
9. I	3.333	2	.1889
10. IB1	3.332	1	.0680

Note. E = equiprobability model. I = intruders (one vs. two). B1 = buffers (none vs. one). B2 = buffers (one vs. two). IB1 = interaction term of intruders (one vs. two) and buffers (zero vs. one).

the intrusion point bears directly on this issue, for only those standing behind the intruder are displaced by the action and incur a cost. The results indicate that whereas 73.3% of all objections came from those standing behind the point of intrusion, only 26.6% came from those in front. Thus the cost factor, emphasized by Mann and others, played a larger role than sheer moral indignation in stimulating objections to the interloper. The condition that used two intruders further underscores the role of cost in stimulating objections. Two intruders double the delay for those standing behind them and also provoke twice as many attempts at expulsion as a single intruder.

Yet, Cooley's observation cannot be dismissed, for the data indicate that a small but measurable proportion of those in front of the intrusion point object to the intruder. Moreover, the fact that those standing behind the intruder incur a cost does not mean that they are not also responding in terms of their anger at a moral transgression, amplified by the fact that they suffer its consequences.

There is an additional, perceptual factor that may influence the greater volume of objections after the intrusion point: Those behind the intruder face the locus of the intrusion, whereas those preceding the intrusion point have their backs to the scene and, therefore, are less likely to notice the violation.

Beyond the Cost Factor

Thus far we have focused on differential rates of objection before and after the intrusion point. But even those standing behind the intrusion point did not all object. The volume of objection dropped off sharply with each remove from the intrusion point. Cost cannot explain this result. Every person behind the intrusion point incurs the same cost; each is equally displaced by an intruder. One might assume, therefore, that they would all have the same desire to remove the violator and would respond accordingly. But the results show this is not the case. Why did individuals beyond the +1 position so rarely object?

It is clear that the general reluctance to enter into a confrontation with another person, with its attendant risks, potential for embarrassment, and disruption of an orderly social scene (Goffmann, 1959, 1963), although it undoubtedly plays a general inhibitory role, cannot account for the differential participation of those closer or further from the intrusion point.

We have found it useful to analyze the problem from the standpoint of the Latané and Darley (1970) bystander intervention paradigm. The intrusion situation has two things in common with the bystander situation: First, some incident has occurred that calls for some sort of intervention. Second, the intervention is frequently not forthcoming, especially from those standing beyond the +1 position. We shall now focus on their situation.

First, following the Latané and Darley model, the individual must notice the incident. Those in the +1 position are in a better position to notice the intrusion than those further back in the line.

Once the person has observed the incident, he or she proceeds to the second level of the Latané-Darley paradigm, namely, interpreting whether the event is one that requires intervention. When a queuer sees someone entering the line, he or she must define it as an illicit intrusion before taking action. Unless the individual is physically close to the intrusion point, it may be difficult to distinguish between a *blatant intrusion* and the somewhat more legitimate practice of *placekeeping* (Mann, 1970). This ambiguity can lead to inaction. Thus in the present study, when those closest to the point of intrusion did not signal that something was wrong, those further down the line may have interpreted this as evidence of a legitimate entry.

Once having noticed the incident and decided it is illicit, the queuer must next, according to this model, decide whether he or she is responsible for taking action. Action is frequently inhibited, according to Latané and Darley, because of the diffusion of responsibility. On the queue, responsibility in the line is not so much different as focused on the person closest to the

Table 4
Logit Models Fitted to Cross-Classification of Rate of Objection of Lines

Model	Likelihood ratio statistic	*df*	*p*
	Hierarchy 1		
11. E	47.372	5	.0000
12. I	40.785	4	.0000
13. B1	6.056	3	.1089
14. B2	5.124	2	.0772
15. IB1	2.924	1	.0873
	Hierarchy 2		
16. E	47.372	5	.0000
17. B1	13.714	4	.0083
18. B2	13.009	3	.0046
19. I	5.124	2	.0772
20. IB1	2.924	1	.0873

Note. E = Equiprobability model. I = intruders (one vs. two). B1 = buffers (none vs. one). B2 = buffers (one vs. two). IB1 = interaction term of intruders (one vs. two) and buffers (zero vs. one).

intruder. As in the subway research described by Piliavin, Rodin, and Piliavin (1969), those closest to the disruptive event are felt to have a special obligation to deal with it. There may be reluctance on the part of people further back in line to do someone else's duty.

This analysis shows that cost alone cannot account for all our results; there is an underlying structure to the situation, linked to the linear spatial configuration of the queue. The experimental conditions using buffers further illuminate this point. Buffers were introduced to see if responsibility for removing the intruder(s) would be assumed by someone else in line in the event that the person immediately following the intruder failed to object. We found no such tendency. When a buffer (i.e., a passive confederate) occupied the +1 position, the objection rate of those in the +2 position was not higher than when this position was preceded by a naive queuer (indeed it tended to be lower). A similar effect was observed for those individuals in position +3, when two buffers were used. In other words, there was no displacement of the defensive response if it did not occur at the point of intrusion.

An alternative explanation offered by Harris (1974) is that the diminishing level of "aggression" to intruders in a line is due to a goal gradient effect. Her findings indicate that an intruder butting in closer to the service point evoked more aggression than one butting in further down the line. A general goal gradient effect may well be at work, but in our study the sharp increase in objections immediately after the intrusion point introduced a striking discontinuity in response that must be accounted for in its own right.

Harris's findings raise the question of goal gradient effects in interpreting the results of buffers. Our buffers did displace the subject one or two positions further from the goal. However, this displacement was minimal compared with the contrast points used by Harris (3rd vs. 12th position). Moreover, in our study the dampening effect of a single buffer was substantial, but did not differ significantly when an additional displacement was caused by a second buffer, thus pointing to the limited value of a goal gradient explanation within the range examined.

Limitations in the Results

There are two important limitations in the present data. First as a matter of experimental procedure, the intruder left the line whenever he or she was directly challenged for improper entry. We chose this procedure to avoid any serious conflicts that might have resulted if the intruder failed to comply with an explicit demand to leave the line. As a consequence, however, we do not know what would have occurred if the intruder had insisted on remaining in line. Perhaps others in the line would have joined in the attempt to remove the intruder.

A second limitation on the data concerns the nature of the item distributed at the service point. Several distinctions need to be made: The item distributed at the service point may be in limited or unlimited supply. If the item is scarce, the intruder may deny it to those behind him or her. Sometimes, there is no limitation in the supply of the item, but time may be in short supply, as at an airport. By encroaching on priority the intruder may cause a person to lose critical time and, thereby, miss his or her plane. People stand in lines to attain items and services that range from the trivial to the vital. Those standing in a food distribution line during periods of famine may display far less tolerance for intruders than our typical subjects in Grand Central Station. Thus, replication of the experiment for lines of widely varying utilities would provide a broader picture of the response to intruders.

Conclusion: The Psychological Structure of the Queue

We have referred to the line as a *social system,* and more needs to be said in justifying this designation. A line is a social system in that there is a shared set of beliefs governing the behavior of the individual participants, so that they no longer act in terms of purely personal wishes but instead, by reference to a common social representation. The force of this representation varies from one culture to the next; for example, travelers often report on the readiness of the English to form queues, in contrast with the peculiar resistance to queue formation in Latin cultures (Hall, 1959; Lee, 1966).

Any social system requires a means of defense, and in this study we deliberately initiated intrusions into the queue to observe how the queue protects its integrity. The type of defense we observed both results from the underlying psychological structure of the queue and gives us a clue as to the nature of that structure.

That each spatial arrangement has consequences for the resulting psychological structure is, of course, no surprise to social psychologists ever since Bavelas (1948) and Leavitt (1951) showed us the consequences for leadership, efficiency, and satisfaction in their analysis of artificially generated communication structures. Indeed, their analysis is applicable to an understanding of the queue, in that they demonstrated that in linear structures communication is most likely between those in adjacent positions, and this type of structure works against the emergence of centralized coordination. Thus, the fact that the intruder in our studies was addressed principally by those adjacent to him is consonant with a general theory of communication structures.

There are, additionally, several features particular to the waiting line that work against concerted action:

1. There is no prior history of communication among those standing in line. Indeed, the very spatial disposition of persons, in which no individual faces anyone else, discourages such group formation. Thus, when an attack on the line occurs, there is no previous group experience to draw upon. We may hypothesize that a line consisting of persons already known to each other (such as a group of classmates) would be more likely to act in concert against an interloper.

2. One of the difficulties in mounting a systemic attack on the intruder is that to do so requires that people lose their place in the line, and thus it disrupts the very form they are attempting to defend.

3. Moreover, a system's resilience depends not only on its capacity to defend against disturbances, but also its capacity to ignore, adjust to, and tolerate them. Although confrontation with the intruder would serve to maintain the physical order of the line, it may risk the escalation of a localized incident into a general fracas, threatening the disintegration of the entire system. By not challenging the intruder, the queue may protect the system against the appearance of disorder. As Schwartz has written, "the chaotic dissolution of the queue can be forestalled

not only by the default of deviance but also by its contingent toleration" (1975, p. 96).

4. Allowing the intruder to remain in line serves the system in another way, namely co-opting those who are a threat to its survival: Once an intruder is part of the line, she or he has an investment in its continued existence.

In addition to the forces that restrain individuals from objecting to violations of the norm of first come, first served, other factors are at play that determine how the queue is defended. We will now examine the precise nature of this defense.

First, we note that the defensive responses are primarily of a normative character: Appropriate standards are enunciated for the intruder as a means of reasserting the socially sanctioned character of the queue. Sometimes the assertions simply point to the social representation: "This is a line, here." At other times, they address the intruder's transgression: "No breaking in here." Or they may specify the appropriate action: "Get to the end of the line."

The second characteristic of the defensive response is that it is local rather than systemic. That is, the response occurs at the point of intrusion and diminishes rapidly with each remove from that point. The line as a whole does not respond to the intruder in a coordinated fashion. What is the significance of this datum? Quite clearly, it signals the character of the queue's underlying structure. A system will respond to threat in a coordinated fashion when it possesses a relatively high degree of system integration with centralized control of its disparate parts. Purely local defense, such as we have observed in the queue, signifies relatively weak integration of parts with an absence of differentiated functions or central coordination.

Indeed, we would argue that this is precisely the situation that obtains in the queue. What is the main bonding mechanism of the queue? It resides in replicated segments. The principal focus for each person in line is the space between himself or herself and the person standing just in front. This is the space the queuer will defend most vigorously, if the queuer is to defend the line at all. A willingness to object to intrusions quickly attenuates with positions further down the line. The queue will hold together if each member defends the space immediately in front, which the queuer often experiences as a zone of special responsibility.

The queue is thus articulated through a series of overlapping zones, each centering on the individual standing in line and extending a few removes forward and a remove behind. The queue is segmental in structure, as often occurs in systems of linear composition. Segmental structures are particularly likely to arise in short-lived systems formed through accretion of their constituent units, as in the case of waiting lines. With this analysis, we hope we have achieved one of our principal theoretical objectives; namely, to relate the type of defense observed in the queue to the unique spatial configuration of this social form.

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