JOURNAL OF SOCIAL ISSUES
VOLUME 33, NUMBER 3, 1977

Privacy as a Concept and a Social Issue: A Multidimensional Developmental Theory

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If we are to understand privacy as a future as well as a contemporary social issue, we must understand privacy as a concept. Individuals' concepts of privacy are tied to concrete situations in everyday life. These situations are described in terms of three dimensions: self-ego, environmental, and interpersonal. In combination with the dynamic of time, both developmental and sociohistorical, this situational analysis helps us to understand individual perceptions of privacy and privacy invasion, to predict potential privacy or invasion experiences, and to see the potential effects of the absence of certain privacy-related experiences.

The history of the idea of privacy in Western thought is one essential point of departure if we are to understand the concept in behavioral research or the social issues raised by current privacy debates. Analyses from this perspective (Westin, 1967) indicate that the spheres of privacy, the forms that privacy takes, and the role of the law and those global aspects of privacy that make it an explicit social issue depend on the specific social, historical, political, and economic contexts. If we are to understand privacy as a future as well as a contemporary social issue, we

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The findings of our interview study with 900 children and adolescents aged 5–17 (Wolfe & Laufer, 1974) and studies by our colleagues (Wolfe & Golan, Note 1; Golan & Justa, Note 2) have contributed to the perspective presented here.

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must understand the concept of privacy from the individual as well as the social-historical perspective. What does "privacy" mean, to whom, in what situations? Based on our own research and the research of our colleagues (Laufer, Proshansky, & Wolfe, 1974; Wolfe & Laufer, 1974; Laufer & Wolfe, Note 3; Wolfe, Schearer, & Laufer, Note 4; Wolfe & Golan, Note 1; Golan & Justa, Note 2), we have begun to analyze the roots of individual ideas about privacy and privacy invasion, the range of situations in which maintaining or achieving privacy becomes problematic, the differential role of privacy for different segments of society, and the ultimate effects of the individual's socialization experience on his/her perception of privacy rights and needs.

Basic Assumptions and Perspectives

To articulate a theory of privacy we begin with the sources of privacy in personality and social structure, that is, the management of interaction and information. We ask: Would it be possible to create a society in which there could be total disclosure among individuals? We conclude that total disclosure is impossible. One would have to have access to the subconscious or unconscious layers of thought as well as to all behavior; one would have to have knowledge of the reconstruction and construction of meanings assigned to events and experiences, much of which is unavailable even to the actors in a given situation. If we agree that disclosure at this level is unattainable, we have to accept the existence of unavailable knowledge and feelings.

On a behavioral basis, societal survival even in the most simply organized group requires a division of labor. This necessarily separates people from each other, even if only for a limited time. In those moments some experiences occur that remain the property of a limited number of actors, rather than the entire social network. These separations of experiences occur in simple and in complex societies.

Where there is individual or collective awareness of the unknown, the stage is set for attempts to control it. Much of the concern about devilry and witches revolves around this point. What is hidden from us either individually or collectively can be potentially harmful. In the behavioral setting, separation from the collective creates the prospect for conspiracy, deviance, and intimacy. In each instance the critical point is the loss of shared experience. Thus, the conscious and unconscious fears of undisclosed knowledge are generic to personality and social structure.

We also ask: Is it possible for more than one human being to exist without limits on interaction with the social/physical environment? The nature of the birth process in human beings is one of physical separation. The mother's limitation as a food-producing organism means that eventually the offspring is not only physically separate but, indeed, must finally end the symbiotic aspects of the relationship. This is one basis for assuming that there is a limit on human interdependence. If the birth process is one force moving the human organism toward separateness, the need for sleep also requires withdrawal from active interaction with the external environment, including the human elements within it. Since human physiology and biology place limits on continuous interaction, they provide a basis for the development of values which are translated into needs and desires for managing social interaction (Lee, 1959). These values will differ in different societies and under different sets of environmental circumstances. Out of the problems of undisclosed knowledge and the limits on social/physical interaction there evolves in every society a set of values that govern the issues of privacy and invasions of privacy.

In formulating a social psychological theory of privacy our aims are to specify how the sources of privacy in human relationships are given form and feeling in everyday life and to clarify the basis for the distinctions between the varieties of meanings encountered in the public discussions of privacy and invasion of privacy. However, in the English language the word *privacy* is a catchall concept incorporating a multitude of meanings and evoking a wide range of human emotions. Privacy as it touches the unknowable is fraught with danger; as it promises mutuality and sharing, it touches profound needs; and as it threatens exclusion, it raises fears. Moreover, privacy as a concept exists in legal-political traditions and is developing in the behavioral sciences. In both law and social science the question arises as to whether privacy is to be viewed from an individual or societal perspective. There is, as Westin (1967) points out, an historic dialectic between the views of privacy from the standpoint of the individual and from the standpoint of the state. The individualistic tradition is based on Greek, Protestant, and common-law views, while the Roman and Catholic traditions emphasize the priority of the state's right of intrusion. If we move away from political-legal history toward the behavioral science concerns with privacy, the same dialectic is evident. Some social scientists approach the privacy issue phenomenologically from the vantage

point of individual experience, while others are primarily concerned with the social and cultural rules of privacy and privacy invasion. In our analysis, the individual and normative aspects of privacy are interdependent. Time provides the dynamic basis for the interdependence. The individual experiences time as growing or aging, while within the sociocultural system time is manifest as historical and technological development. Thus, we present a developmental theory of privacy that relates the individual's understanding and experience of privacy and invasion of privacy to his/her growth and life, over time, within a particular sociohistorical environment.

The interdependence of the phenomenological and normative aspects of privacy means that concepts of privacy and invasions of privacy are strongly tied to or defined by the experience of given situations. Privacy experiences are tied to the modes of consciousness available for conceptualizing concrete situations. These modes of consciousness evolve from the individual's transactions with the world he/she lives in, acts in, and has to comprehend. Thus, situationality necessarily reflects the historical traditions of the society, the society's technology, the individual's ecological setting, the stage of the individual's life cycle, the individual's sense of self, and the nature of the individual's interpersonal relationships. Personal experiences are tied to concrete situations and events. They affect the individual's perception and labeling of given situations as privacy related and affect his/her ability to predict whether or not a given situation or event will be experienced as invasive. For instance, the labeling of present or future situations as privacy related may be a direct result of experiencing invasions of privacy (Fischer, 1971).

This situational perspective provides the structural aspect of our theory. We describe the elements of situations that must be taken into account to understand the individual's perception and experience of privacy and invasions of privacy. We have combined these elements into *environmental, interpersonal,* and *self-ego* dimensions of privacy. This multidimensional structure enables us to understand perceived privacy and privacy invasion as well as to predict the types of situations that can potentially create privacy or invasion experiences. In combination with the dynamic of time, this structure helps us to understand why a given situation may be perceived as invasive by some people and not others. The theory also helps explain why certain individuals may not consciously be aware of and hence do not demand or seek certain privacy rights or experiences, even if they are affected

by the absence of these privacy-related experiences.

Before describing the dimensions of privacy, it is essential to consider the idea of control/choice. While control/choice is clearly relevant to any conceptualization of privacy (Altman, 1975; Proshansky, Ittelson, & Rivlin, 1970; Westin, 1967), it is equally apparent that this idea is at the heart of many other issues in Western society and is of special significance in a highly individualistic society such as ours. The general experience of control/choice plays a decisive role in the development of autonomy, which we see as the single most important expression of the evolution of a sense of self. In turn, the control/choice an individual believes he/she has and actually does have in a given situation is a function of the contemporary cultural and historical interpretation of personal dignity at each stage of the life cycle.

The general cultural significance of autonomy has led us to conceptualize control/choice as a mediating variable in the privacy system. This means that a situation is not necessarily a privacy situation simply because the individual perceives, experiences, or exercises control/choice. Conversely, the individual may not experience, perceive, or exercise control/choice, yet the environmental and interpersonal elements may create a privacy experience for him/her. Specific situational elements define control/choice as a privacy-related concept. Thus, we must understand the dimensions of privacy and the elements that can affect its meaning and experience before we can relate control/choice to the privacy issue.

The Dimensions of Privacy

Any privacy situation can be described in terms of three dimensions: self-ego, environmental, and interpersonal. The meaning and experience of privacy in any specific situation can be circumscribed by the interaction of these dimensions and the elements within them.

Self-Ego Dimension

The self-ego dimension refers to a developmental process that, in our society, focuses on individuation (autonomy) and, by implication, personal dignity. Major developmental theorists agree that the development of the self is the process of the separation of the individual from the social and physical environment. This separation necessarily requires that the child experience aloneness (psychological and physical) and develop the ability to

function in aloneness in one form or another. Yet at early ages aloneness is not necessarily volitional, and our research shows it can be a negative or at least an ambivalent experience precisely because it is enforced and not chosen and because the child may initially fear an inability to function alone.

The significance of nonchosen aloneness should not be overlooked. The experience of aloneness (psychological or physical) can itself became a determinant of future experience sought, expected, or defined as private. This means that certain experiences, although not defined by the environment as private, nor initially experienced by the individual as private, have the potential to define future privacy situations. The same point is relevant to the experience of invasion. In addition, a situation that involves a particular kind of privacy experience can, because of elements within it, expand our experience. The child, left alone, has the opportunity to experience privacy in ways other than physical aloneness, that is, as quiet, as thinking alone, as being able to do what he/she wants.

The developmental experience of being capable of functioning independently adds a critical aspect to the relationship between the self and privacy: volition—the choice of aloneness when capable of functioning in aloneness. The choice of aloneness, then, becomes a statement of the autonomy of the self. Our data (Wolfe & Laufer, 1974) support this assertion. Children in explaining why situations they described as private were experienced as private give reasons connected with autonomy: "I felt independent," "I could do what I wanted to do," "I could have my own opinions." Furthermore, as children and adolescents get older, being left alone at home is much more likely to be experienced positively as it becomes associated with the freedom to "do or think whatever I want." The relationship between autonomy, privacy, and privacy behavior can be described in terms of the freedom to choose one's own movement across the boundary that distinguishes one's self as being and functioning alone versus one's self as a separate individual interacting and functioning with others.

There is another sense in which the self is critical to the understanding of privacy. Any array of reasons given by individuals for seeking and maintaining their privacy reveals attempts to protect, nurture, extend, and enhance the self. Privacy behavior is simply another form of behavior which can be judged or evaluated by the self and others. Individuals will be positively reinforced for appropriate expressions of privacy (Fry & Willis,

1971). These experiences with privacy will influence the individual's sense of self-esteem, identity, and behavior. As a consequence, the individual will act differently and is likely to be perceived and reacted to differently.

Since our culture places a high value on privacy as an expression of personal dignity, the removal of opportunities for various types of privacy behavior has been used as a way of breaking down the self (Goffman, 1959). In addition, research (Aloia, 1973) has shown that the individual's perception of limited privacy options is connected with perceptions of low self-esteem.

Environmental Dimension

Environmental elements critically influence the individual's ability to perceive, have, and use available options. The environmental dimension is composed of a series of elements that act as boundaries of meaning and experience. The elements of the environmental dimension are cultural meanings, the interaction between the social arrangements and the physical settings, and the stage of the life cycle.

Each of these elements has a temporal component. The cultural element is most resistant to change over time. The sociophysical element is subject to modifications as a function of the level of technological development of the society. One's life cycle, of course, brings an individual into contact with privacy in a differential fashion over time. Life cycle stages are also subject to alteration as a result of technological development, which in turn affects the types of privacy experiences possible at the same age in different societies or in the same society at different points in history (Aires, 1962).

Cultural element. The mores of a community transmitted through language, tradition, and values constitute boundaries of consciousness about privacy. Altman (1975) and others (Hall, 1966; Roberts & Gregor, 1971) have shown that different cultures have different patterns and forms of privacy. In many ways, these norms limit the perceived options available to any given person or group within the culture. In addition, the range of options (in form and quantity) is always different and relative to the individual's or group's position within the community. Even in highly complex societies, however, the dominant perspectives of the community play a decisive role in the way an individual defines privacy situations.

Concrete experiences with privacy are transmitted through the institutional fabric of a society. Privacy options are a function

of the ecological and physical properties of the environmental settings that circumscribe human behavior. The available technology (doors, indoor plumbing, personality tests, computers), the types of tasks required, the numbers of people and their relation to one another, and specific ritualistic activities reflect as well as influence the kinds of activities and environments that are considered private.

Sociophysical element. If we examine physical settings, it is clear that they evoke and sustain behaviors and experiences that are private in character. How does this happen? First, we assume that whatever the form of human privacy, some physical settings and their physical properties will be more congruent with this form than others. If a physical setting fits, it can evoke and will continue to evoke and support a related and relevant form of human privacy. Yet structure alone can be deceiving, the "fit" of spaces also depends on the ecology of groups. For instance, it is a common belief that the bathroom is a privacy setting. It has been found, however, that for children and adolescents the bathroom is only cited as a private place in families with few members or with a relatively low number of occupants per room (Ladd, 1972; Parke & Sawin, Note 5; Wolfe et al., Note 4). In other words, the presence or absence of a group may increase or decrease the fit of a physical setting.

Moreover, space or place is more than a matter of structure or ecology of groups. By design, activity, and meaning, a physical space achieves its privacy character. Through socialization the person learns to accept, identify, and indeed feel private in certain places and spaces over others. In a children's psychiatric hospital (Wolfe & Golan, Note 1), we found that one of the only places for privacy as physical aloneness was an uncomfortable seclusion room where children were sent when they "acted out." Nevertheless, because it permitted solitariness, some children said they feigned emotional upset to have access to the room. The stigmatized room, thereafter, was redefined by the children as a privacy center given the dearth of alternatives, and a private place was defined by them as a place "to be alone and deal with emotional upset."

There are experiences in and with places that contribute to the development of self over time. Places have specific meanings for self: They may enhance, threaten, or simply define, and in this respect we internalize a lot of privacy settings. Aloia (1973) found a differential relationship between perceived privacy options and self-esteem depending on the type of place in which his

elderly respondents lived (apartments in the community, senior citizens' homes, or convalescent homes). Our analysis of the children's psychiatric facility demonstrated children's limited experiences with physical and psychological separateness. Patients' descriptions and definitions of privacy were almost devoid of references to these types of experiences, while children living in ordinary home settings consistently associated privacy with these experiences. Experience with social and psychological separateness is considered essential in the outside world for "healthy" autonomous development.

Finally, the physical environment may unintentionally instigate and create a specific understanding, form, or pattern of privacy. The design and availability of physical settings may create desires for specific types and amounts of privacy. If we consider cities, suburbs, and rural areas, respectively, the types of housing prevalent, the means of transportation, and the level of stimulation from people and other things also alter the essential means and conditions of privacy situations. In a study of children's and adolescents' concepts of private places (Wolfe et al., Note 4), we found that suburban/rural children and adolescents frequently named the outdoors as a private place, and it was more often mentioned by respondents who shared a bedroom and lived in a household with more than seven occupants. The outdoors was a possible place for privacy and became an alternative when home environment conditions may have made certain forms of privacy difficult. Suburban/rural respondents associated a private place with the autonomy made possible with physical distance—"No one knows where I am." By contrast, urban respondents hardly mentioned outdoor places. They named a variety of rooms in the house and, as they become older, added a wishful statement, "My own apartment would be private." Available types and amounts of space and people can set limits on the behavior and experience possible.

However, associating a specific sociophysical element with one's conception of privacy need not always reflect long term environmental experience. The individual's connection of privacy with certain situations or elements within situations may be created by a dramatic experience that, though infrequent and perhaps unintentional, provides so great a contrast to everyday experience that it raises the individual's awareness of what could be.

Technological changes can have unintended consequences for our understanding of what constitutes privacy or for perceived privacy options. To illustrate: If the manufacture of doors sud-

denly stopped in a culture that conceived of "being behind a closed door" as part of the experience and definition of privacy as physical aloneness, then some other mechanism would have to be found to support privacy as physical aloneness. If no substitute could be found, the entire experience of physical aloneness might no longer be possible. If privacy as physical aloneness had served an integral social function within that culture, the absence of doors might change the entire system or style of social interaction. Obviously the cultural and sociophysical elements are related. Roberts and Gregor (1971) describe a community whose physical design is so open that all activities are visually accessible. Under these conditions, the forms of privacy are more perceptual than physical.

The task and ritual demands that a society makes on its individual members represent two additional sociophysical elements. Ritualistic privacy activities (i.e., sexual and bathroom activities) can be so taken for granted that it is only when the traditional settings are absent that we become aware of them (Wolfe & Golan, Note 1). Task demands seem to operate in a more complex way. If the task one is doing must be done alone, the situation may not be experienced as private but as having a simple, functional component of aloneness; under these circumstances, privacy may become "freedom from distraction." Alternatively, if a task requires that one be available to others, the presence of others may not be viewed as invasive because it may not be experienced as privacy related (Golan & Justa, Note 2). Nevertheless, employee perceptions of situational privacy rights and desires can be shaped by the range of work environments that exist for a given job and by the definition of their jobs. Thus, while many employees may not consciously perceive these elements as privacy related, they may nevertheless be affected by the absence of the possibility for certain forms and types of privacy experiences.

Life cycle element. The life cycle element also contributes to the environmental dimension. Perhaps the key to understanding privacy is in relation to the individual from birth to death. Cultural and sociophysical environmental limits on possible privacy experiences will apply differentially to individuals at various stages of the life cycle. Furthermore, even the properties of the life cycle are not static. Periods of time devoted to specific activities (i.e., childbearing and child-raising, employment) will vary as a function of changing technology, changing sociocultural patterns, and historical environment.

Privacy is related to several characteristics of the life cycle.

First, at various developmental stages and ages individual needs, abilities, activities, desires, and feelings change, and thus the concept and patterns of privacy should also change. Indeed, we have evidence that the individual's conception of privacy is a developmental one (Wolfe & Laufer, 1974).

Second, the individual takes on different roles throughout life, and these roles allow for, inhibit, or expose the individual to new privacy situations. These roles include the obvious social roles of youngster, adult, wife, husband, mother, and so on. The woman who is at home with young children for major parts of her day is basically "on call"; she may find few opportunities for privacy as physical aloneness and may use the opportunities that do arise for relating to other adults (Smith, Downer, Lynch, & Winter, 1969). There are also less obvious changes in roles and role demands. For example, elderly persons who had been self-supporting find themselves in the role of welfare recipients, applying for medical assistance, food stamps, or other social services for which they previously paid. In return for public payment for these services, information once considered private is now defined as accessible to the public or their representatives.

Finally, as the individual progresses through the life cycle, society continually changes and patterns of privacy learned at one point conflict with emergent life styles, mores, and technologies. In the context of rapid social and technological change, patterns have to be changed or they become an impediment to ordinary functioning.

In sum, the environmental dimension (cultural, sociophysical, and life cycle) circumscribes any privacy situation by delimiting the quantity and form (a) of privacy granted and (b) of privacy that might be consciously desired and/or exercised.

An important implication is that we have to understand the impact of situational experience in order to understand where privacy can be an issue even if the individuals affected do not, themselves, label it as such. There are potential personal costs of being in a situation in which certain forms of privacy are unavailable. Altman (1975) and Holahan and Slaikeu (Note 6) have shown that when certain forms of privacy behavior are not possible within a given situation, other behaviors may be substituted. Thus, psychological withdrawal may be substituted for physical withdrawal. However, substituted behaviors can become sources of friction or even undermine the goals of a setting. In a children's psychiatric facility, because there were no doors on bedrooms and bathrooms, children and staff defined the privacy issue as

the absence of "privacy for undressing." Their focus on this specific taken-for-granted daily activity led them to ignore the relationship between the general lack of privacy and the compensatory mechanisms adopted by the children—psychological withdrawal and/or acting out—which were thwarting the therapeutic goals of the facility (Wolfe & Golan, Note 1).

Interpersonal Dimension

The individual's concept of privacy rights and rules, reflective of and reflected by the environmental dimension and evolving out of and being fed back into the self-ego dimension, is substantially played out on a daily basis in the interpersonal dimension of given situations. Although often equated with an individual's or group's "aloneness," privacy remains an interpersonal concept. Privacy, in whatever form, presupposes the existence of others and the possibility of a relationship with them.

The acting out of this relationship has two elements, information management and interaction management. Our study of children and adolescents (Wolfe & Laufer, 1974) demonstrates that the interpersonal dimension constitutes the core of the privacy phenomenon as it is experienced in daily life. The four most frequent meanings of privacy were: aloneness, controlling access to information, controlling access to spaces, and "no one bothering me." Three of these meanings are primarily connected with the management of interaction; the fourth is specifically concerned with the management of information. These elements may be linked: Describing their experience of invasion of privacy, the overwhelming majority of the respondents mentioned situations in which they had lost control over interactional boundaries and thereby lost control over information (Laufer & Wolfe, Note 3).

The management of information and/or interaction is not viewed by all our respondents or by us as a defensive maneuver, that is, as a way of hiding wrongdoing. Thus, of the four major clusters of meanings of "private places" given by children (Wolfe, et al. Note 4), only one of these was, in the most usual sense, related to the hiding of forbidden activities. Two others we viewed as autonomy related and one reflected the relationship between the management of interaction and the possibilities provided for self-reflection, thinking, and engaging in activities without distraction.

The relationship between informational and interactional management influences the experience of invasion of privacy (Laufer & Wolfe, Note 3). The family dwelling is the most common

location for privacy invasion among our childhood and adolescent respondents. The source of the problem with personal disclosure is the inability of the individual to manage interaction with family members, either parents or siblings. Thus, in this instance, the inability to manage interaction is decisive for the information invasion experience.

Environmental elements of the privacy situation can make the informational and interactional elements more or less independent. Wolfe et al. (Note 4) found that the availability of the outdoors as a private place for suburban/rural children and adolescents meant that surveillance and invasion were less likely to occur. It also meant that experiences in managing interaction were not always tied to experiences in managing information about behavior in these settings. In urban areas the focus on the indoor home environment as the only available private place meant that invasion was more likely to occur and, more crucially, that the management of social interaction was likely to be intimately connected with the management of information.

Interaction management. Privacy as interaction management is actually a form of noninteraction with specified other(s), including the nonhuman environment. The centrality of chosen physical aloneness among our youngsters' definitions of privacy, their descriptions of their experiences with invasion, and their view of private places suggests that the management of social interaction is quite often problematic.

The sociophysical environment is one source of constraint on the management of interaction. The availability of spaces—how many, what type, and where located (indoors, outdoors)—and the number and relationship of others who are or who potentially could be present can make the difference between privacy as an experience of autonomy and privacy as an experience of regrouping. It can account for the differential use of physical aloneness versus other noninteractive mechanisms (psychological withdrawal). It can also make invasion experiences more or less likely to occur (Wolfe et al., Note 4).

A second source of constraint on the management of interaction is the role of the individual in the immediate group or in the larger social system. The management of interaction is related to the rights and privileges ascribed to the role. Children in general are given limited opportunities in this regard. Interestingly the inability to manage interaction stands out as the single most common experience of invasion among our respondents (Laufer & Wolfe, Note 3). The most significant point about these invasion

experiences was that intruders were most often siblings, that is, were of like status within the family system. Our respondents reported anger at invasion; they used such terms as "awful," "hurt," "afraid," "very upset." Nonetheless, they did not resort to higher authority (parents) to stop intrusion, even when these intrusions were judged to be deliberate or malicious. Indeed, intrusions took place in the face of closed doors, signs saying "keep out," locks on the door, and other obstacles. How can we explain our respondents' hesitance to resort to higher authority? First, the simple act of seeking recourse would mean the continued interruption of the privacy situation itself and would require interaction with an additional person. Second, asking for adult help might lead to questions about their reasons for needing physical separation. They might be afraid that they would be suspected of wanting to conceal something rather than merely wanting physical separation; or, if in fact they were using the physical separation to conceal something, they might be forced to reveal what they originally desired to conceal. Thus, achieving solitariness through physical separation is called privacy when being alone is intentionally sought or after it has been invaded (Laufer & Wolfe, Note 3).

Through interpersonal processes a sensitivity is developed to the uses of interactional management in everyday life: The individual develops a sense of himself/herself as separate from others, recognizes the conditions under which to seek aloneness or interaction, and learns the uses of interaction management for self-enhancing or regrouping.

Information management. Much of the emphasis in current thinking about privacy as a psychological and social issue relates to the disclosure or nondisclosure of personal information. Concern over and difficulty with the management of personal information begins very early in our lives (Wolfe & Laufer, 1974). There is a large literature in psychology concerning the conditions under which individuals are willing to disclose information and what types of information people are willing to disclose (Cozby, 1973). There is also growing concern over the individual's inability to manage personal information because of advanced computer technology (Rule, 1974). Too often this literature ignores the issue we find critical for an understanding of privacy as a social issue, that aspect of information management we call the "calculus of behavior" (Laufer et al., 1974). Simply stated, in many instances the individual has to ask himself/herself: If I am seen engaging in this behavior or that behavior or am seen with this person

or that person, what are the consequences for me in the future, in new situations, and so on?

There are at least three significant aspects to the calculus of behavior. First, individuals may engage in various behaviors believing that they can manage the information in new and later situations and thus minimize the potential consequences. However, under certain circumstances the attempt to manage information conflicts with situational requirements. Some therapeutic endeavors support total sharing of one's feelings and other information and, in fact, may insist on this mode; yet, the revelation of personal information by a patient in a psychiatric institution may give the staff reason to continue institutionalizing him/her (Goffman, 1959). Thus, the patient must learn what to disclose or not disclose based on the institution's definition of appropriate behavior. This example illustrates not only the importance we attach to managing personal information but also the difficulty in determining what should be managed.

The act of disclosure or nondisclosure does not automatically imply that the situation or event is perceived as private or invasionary. An individual may submit to personality testing and disclose a large amount of intimate personal information if the person believes the testing is beneficial. Such situations are not judged as invasionary (Simmons, 1965). The critical question is: What makes the person perceive the situation as beneficial? If a job is at stake, or if remaining in school is at issue, are we dealing with an adequate conceptualization of the situation as lacking invasionary implications? Thus, the person may submit to assessment but use protective modes of responding (defensiveness, hostility) that then are attributed to her/him as personality characteristics or problems (Fischer, 1971).

Second, individuals may simply not do certain things because the ability to manage the information at some later, even distant, point is unpredictable, or because even at the present moment the publicness or privateness of the act is ambiguously defined. This includes behavior that may have no immediate negative consequences. For example, individuals may not join political or social organizations that are presently acceptable because, as the McCarthy era showed with respect to membership in the Communist party, present membership may become the basis for future reprisals.

Third, the calculus of behavior is related to the emergence of new technologies and the stage of the life cycle. The person has to decide the probable future consequences of current behavior

in terms of the type of recording and communication devices that exist—are they verbal, are they written, will records be seen and by how many others? The presence of computerized data banks and the use of social security numbers as personal identifiers for all sorts of transactions mean that at some point a mass of information about an individual can be compiled by unknown persons for unknown purposes. Furthermore experience with record-keeping and communication technologies during the early stages of the life cycle seems to us to affect the calculus of behavior. Regardless of when one grows up in a technological society, there is the inevitability of new forms of record keeping. Thus, to the extent the elderly are less able to recognize the potential consequences of emerging technologies, they will be at a disadvantage in managing information relative to this technology.

The crucial element of information management in terms of the calculus of behavior is that the individual is often unable to predict the nature of that which has to be managed. Changes in the sociohistorical context and in technology are often unpredictable; in fact, in advanced industrial societies there is a growing certainty about the unknowableness of the future.

Control/Choice and Privacy

Privacy and invasion of privacy always involve a balancing of normative and individual interests. The issue of control/choice as a mediating variable reflects an emphasis on the ambivalent attitude toward privacy in society, and especially in Western societies. The ability to exercise choice is experienced in any privacy situation as the ability to choose how, under what circumstances, and to what degree the individual is to relate to others (animate or inanimate) or separate himself/herself from others. Yet choice as an active assertion of individual will develops out of a complex relationship between the evolving sense of self in interaction with the environment (in its broadest sense) through experience in specific situations. The ability to perceive options and to exercise choice among options is related to one's stage in the life cycle. At the same time, developing technical capabilities and shifting societal objectives create new perspectives about the range of situations in which choice is possible or desirable. As a consequence, everyday life creates experiences with privacy that change the way an individual perceives the choices available.

The possibility of consciously choosing to manage interaction or information between self and other involves an awareness of

the situation as actually or potentially involving privacy. Often it is only in hindsight that a situation is perceived in terms of privacy potentialities or invasions of privacy (Fischer, 1971). In these instances there is a perception of the loss of control or an attempt to gain control over what is retrospectively experienced as a privacy situation. At the same time, there is a potential desire for or need to exercise choice in the future. This aspect of choice is of special significance because over the life cycle there is constant exposure to unanticipated situations, especially among the young.

At early ages children have little or no choice of privacy situations. Interaction management is very limited. Information management first becomes possible when the child gives up a notion that authority is omnipresent (Freud, 1923/1962; Piaget, 1966). When the child has been successful in his/her first lie or first hidden behavior, the child develops an awareness, finally, that things are not known until volitionally revealed (Tausk, 1933). Once children are aware that they can control their revelations, information management becomes possible. However, the child's experiences with interaction management are more likely to occur as a result of his/her intrusions into the adult world.

Entering school and spending larger portions of time away from home give children greater choice of ways in which to manage interaction and expand the possibility of managing information. From adolescence on, the range of privacy options vis-à-vis the family generally increases because there is more freedom from supervision. Yet, there may be a greater need to exercise choice in this and other situations because of greater demands for interaction, more complex roles, and increased information to manage. With the onset of old age, once again the need for constant care begins to erode control over choice.

Throughout the life cycle there is the problem of limited empathic understanding of a situation until it is experienced personally. At each stage of the life cycle, the degree of choice and the perception of choice will always be a function of the specific role the individual plays and the goals he/she is seeking to achieve within these roles.

Control over choice also varies depending on the nature of the interpersonal context. Privacy in a monadic situation allows as much choice as is possible in the human situation. In the dyad a certain degree of sharing and/or withholding must occur. Choice involves setting up boundaries between the self and other. In situations of three-or-more persons, group boundaries become the focus of attention. Information and interaction management

move toward the concerns and purposes of the group and away from the interpersonal concerns characteristic of the dyad. Collective norms begin to govern choice over the degree, form, and extent of information and interaction management. The larger the group, the more individual choice becomes limited by the distinct characteristics and purposes of the group. Also, when we move from the interpersonal to institutional level, each individual's ability to choose varies with position in the social structure. In truly large organizations, ability to choose is sharply limited for all but a very few at the very top.

Privacy experiences also involve control over access to some aspect of the person relevant to the situation. It is not until long after the child has learned that he/she has choice that he/she can control access to himself/herself in a way that makes choice meaningful. Depending on the situation, control over access may be related to distraction, interruption, or observation of activities, one's thoughts, or one's information. Control over access might take the form of a locked door, a private diary, or a secret. Control over access is also a fundamental aspect of personal autonomy in a situation. Children are subject to perpetual intrusion because they are defined as dependents. As long as they continue in this role, they are viewed as, at best, semi-autonomous. Only when they establish their own domicile are they in a better position to exercise control over access to their person.

Control over access relates in large measure to the ecological environment in which certain forms of privacy are achieved or experienced. There are a variety of stimuli that the individual relates to privacy and seeks to manage—noise, people, visual stimulation. Control over access does not necessarily mean the elimination of stimulation. It may involve directing and choosing the type and intensity of stimulation desired, consistent with or relevant to other needs.

In sum, control/choice influences and is influenced by the situation. As such, it is an important variable in the analysis of privacy. However, the dimensions of the privacy phenomenon are conceptually distinct from control/choice, which is a mediating variable. This distinction must be maintained if we are to understand the issues of privacy and invasions of privacy.

Implications

The present approach has several implications for understanding privacy as a social issue. First, while the current focus

on privacy as a social issue is concerned with information management, our theory and research would point to interaction management as an equally salient issue. Indeed, issues of interaction management lead to a consideration of individual rights and needs vis-à-vis living space and the potential human costs, in terms of human well-being and dignity, of certain types of living conditions.

Second, one must understand the individual and social-historical basis of expressed desires for privacy. Privacy is not context free. If people submit to personality testing, credit card information searches, the intrusion of government agents into their homes in exchange for social-service assistance, we must not necessarily accept the submission as proof that the experience was regarded as noninvasive. We must seek to differentiate voluntary from coerced revelations and the circumstances under which such action occurs.

A third implication highlights the Catch-22 nature of many prevailing legal conceptualizations of the rights of individual privacy. These are based on the individual's right to challenge invasion, rather than the institutions' responsibility to avoid potential or actual invasion. Such legal approaches are not adequate protection for the individual. Some individuals may not be aware that they have the right to certain forms of privacy, or they may not have the sense of self-identity and autonomy necessary to bring the challenge. By focusing on existing legal protection against invasions the individual may be forced to reveal exactly the information he/she sought to conceal.

Fourth, we must try to understand the costs stemming from loss or lack of privacy, even those costs of which the individual is not aware. Writers have talked about the strain of continual interaction or forced disclosure. We must begin to look for stronger supporting evidence. For example, D'Atri (1975) found that prisoners who had a roommate, as opposed to those with their own cell, had significantly higher levels of blood pressure. This suggests that there are costs associated with not having some opportunities for aloneness in the context of institutional life. Wolfe and Golan (Note 1) found that the absence of certain opportunities for being alone seems to support exactly the types of "inappropriate" behaviors that keep children institutionalized.

Chapple (1976) described the random monitoring of calls and the constant visual surveillance of directory assistance operators at Pacific Telephone and Telegraph:

> Monitoring caused an uproar in California . . . because the public

> did not realize that routine calls were being overheard. . . . A month ago it was discovered . . . that sexy phone calls and calls between public figures were being hooked into a loudspeaker system for the amusement of technicians. *Pacific Telephone expressed horror at this transgression of free communication, of course, but monitoring of employees is viewed as necessary procedure by the company because it allows management to judge performance accurately* [italics added]. (p. 35)

What are the effects on employees of this type of surveillance? What of other types of work conditions and employment practices that limit certain forms of privacy? These types of questions relative to the privacy issue should be investigated.

REFERENCE NOTES

1. Wolfe, M., & Golan, M. B. *Privacy and institutionalization.* Paper presented at the meeting of the Environmental Design Research Association, Vancouver, B.C., May 1976.
2. Golan, M. B., & Justa, F. C. *The meaning of privacy for supervisors in office environments.* Paper presented at the meeting of the Environmental Design Research Association, Vancouver, B.C., May 1976.
3. Laufer, R. S., & Wolfe, M. *The interpersonal and environmental context of privacy invasion and response.* Paper presented at the Fourth International Architectural Psychology Conference, Strasbourg, France, June 1976.
4. Wolfe, M., Schearer, M., & Laufer, R. S. *Private places: The concept of privacy in childhood and adolescence.* Paper presented at the meeting of the Environmental Design Research Association, Vancouver, B.C., May 1976.
5. Parke, R. D., & Sawin, D. B. *Children's privacy in the home: Developmental, ecological and child-rearing determinants.* Paper presented at the Biennial Conference of the International Society for the Study of Behavioral Development, Guilford, England, July 1975.
6. Holahan, C. J., & Slaikeu, K. A. *Invasion of privacy and self-disclosure in a social dyad.* Paper presented at the meeting of the Environmental Design Research Association, Vancouver, B.C., May 1976.

REFERENCES

Aires, P. *Centuries of childhood: A social history of family life.* New York: Vintage Books, 1962.

Aloia, A. Relationships between perceived privacy options, self-esteem, and internal control among aged people (Doctoral dissertation, California School of Professional Psychology, 1973). *Dissertation Abstracts International,* 1973, *34,* 5180B. (University Microfilms N. 74-7922)

Altman, I. *The environment and social behavior: Privacy, personal space, territory, crowding.* Monterey, CA.: Brooks/Cole, 1975.

Chapple, S. Pa Bell's plan for us all. *Mother Jones,* 1976, *1,*33-37.

Cozby, P. C. Self-disclosure: A literature review. *Psychological Bulletin,* 1973, *79,* 73-91.

D'Atri, D. A. Psychophysiological responses to crowding. *Environment and Behavior,* 1975, *7,* 111-126.

Fischer, C. T. Toward the structure of privacy: Implications for psychological assessment. In A. Giorgi, W. G. Fischer, & R. Von Eckartsberg (Eds.), *Duquesne studies in phenomenological psychology* (Vol. 1). Pittsburgh: Duquesne University Press, 1971.

Freud, S. *The ego and the id* (J. Strachey, Ed., and J. Riviere, trans.). New York: Norton, 1962. (Originally published, 1923.)

Fry, A. M., & Willis, F. N. Invasion of personal space as a function of the age of the invader. *Psychological Record,* 1971, *21,* 385–389.

Goffman, E. *Asylums.* Chicago: Aldine Press, 1959.

Hall, E. T. *The hidden dimension.* New York: Doubleday, 1966.

Ladd, F. Black youths view their environments: Some views on housing. *Journal of the American Institute of Planners,* 1972, *28,* 108–116.

Laufer, R. S., Proshansky, H. M. & Wolfe, M. Some analytic dimensions of privacy. In R. Kuller (Ed.), *Architectural psychology: Proceedings of the Lund Conference.* Stroudsburg, PA: Dowden, Hutchinson & Ross, 1974.

Lee, D. Are basic needs ultimate? In D. Lee (Ed.), *Freedom and culture.* Englewood Cliffs, N.J.: Prentice-Hall, 1959.

Piaget, J. *The moral judgement of the child.* New York: Basic Books, 1966.

Proshansky, H. M., Ittelson, W. H., & Rivlin, L. G. Freedom of choice and behavior in a physical setting. In H. M. Proshansky, W. H. Ittelson, & L. G. Rivlin (Eds.), *Environmental psychology: Man and his physical setting.* New York: Holt, Rinehart & Winston, 1970.

Roberts, J. M., & Gregor, I. Privacy: A cultural view. In J. Pennock & J. Chapman (Eds.), *Privacy.* New York: Atherton Press, 1971.

Rule, J. B. *Private lives and public surveillance.* New York: Schocken Books, 1974.

Simmons, D. D. Invasion of privacy and judged benefit of personality-test inquiry. *Journal of General Psychology,* 1965, *79,* 77–81.

Smith, R. H., Downer, D. B., Lynch, M. T., & Winter, M. Privacy and interaction within the family as related to dwelling space. *Journal of Marriage and the Family,* 1969, *8,* 559–566.

Tausk, V. On the origin of the "influence machine" in schizophrenia. *Psychoanalytic Quarterly,* 1933, *2,* 519–556.

Westin, A. *Privacy and freedom.* New York: Atheneum, 1967.

Wolfe, M., & Laufer, R. S. The concept of privacy in childhood and adolescence. In D. H. Carson (Ed.), *Man-environment interactions: Evaluations and applications* (Part II, Vol. 6: S. T. Margulis, Vol. Ed.). Washington, D.C.: Environmental Design Research Association, 1974; and Stroudsburg, PA.: Dowden, Hutchinson & Ross, 1975.