#### Body, Personal Relations, and Spatial Values

evoking a sense of patriotic fervor partly through the insistent use of "this," which is identified with "we the English." "This happy breed of men, this little world, this precious stone. . . . "

A distinction that all people recognize is between "us" and "them." We are here; we are this happy breed of men. They are there; they are not fully human and they live in that place. Members within the we-group are close to each other, and they are distant from members of the outside (they) group. Here we see how the meanings of "close" and "distant" are a compound of degrees of interpersonal intimacy and geographical distance. It may not be possible to decide which sense is primary and which derivative.36 "We are close friends" means we are intimate with each other, we see each other often and live in the same neighborhood. Being close combines the two meanings of intimacy and geographical proximity. As the friend moves farther and farther away geographically, emotional warmth also declines: "out of sight, out of mind." Of course, there are numerous exceptions. Social distance may be the inverse of geographical distance. The valet lives close to his master but they are not close friends. Psychologically, absence (spatial distance) can make the heart grow fonder. Such exceptions do not disprove the rule.

We have indicated that certain spatial divisions and values owe their existence and meaning to the human body, and also that distance—a spatial term—is closely tied to terms expressive of interpersonal relationships. This theme is easily expanded. We may ask, for instance, how space and the experience of spaciousness are related to the human sense of competence and of freedom. If space is a symbol for openness and freedom, how will the presence of other people affect it? What concrete experiences enable us to assign distinctive meanings to space and spaciousness, to population density and crowding?

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# Spaciousness and Crowding

pace and spaciousness are closely related terms, as are population density and crowding; but ample space is not always experienced as spaciousness, and high density does not necessarily mean crowding. Spaciousness and crowding are antithetical feelings. The point at which one feeling turns into another depends on conditions that are hard to generalize. To understand how space and human number, spaciousness and crowding are related, we need to explore their meaning under specific conditions.1

Consider space. As a geometrical unit (area or volume), it is a measurable and unambiguous quantity. More loosely speaking, space means room; the German word for space is raum. Is there room for another crate of furniture in the warehouse? Is there room for another house on the estate? Does the college have room for more students? Although these questions have a similar grammatical form and all use the word "room" appropriately, the meaning of "room" differs in each case. The first question asks whether more objects can be put in, and the answer calls for simple and objective measurement. The second and third questions show that room can mean more than physical space; it suggests spaciousness. The question is not whether a house can be fitted physically into an estate, but



whether the site is sufficiently spacious. And a college must have not only adequate classrooms and facilities, but it should feel commodious and liberating to students who go there to enlarge their minds.

Spaciousness is closely associated with the sense of being free. Freedom implies space; it means having the power and enough room in which to act. Being free has several levels of meaning. Fundamental is the ability to transcend the present condition, and this transcendence is most simply manifest as the elementary power to move. In the act of moving, space and its attributes are directly experienced. An immobile person will have difficulty mastering even primitive ideas of abstract space, for such ideas develop out of movement—out of the direct experiencing of space through movement.

An infant is unfree, and so are prisoners and the bedridden. They cannot, or have lost their ability to, move freely; they live yin constricted spaces. An old person moves about with increasing difficulty. Space seems to close in on him. To an energetic Michild, a flight of stairs is a link between two floors, an invitation to run up and down; to an old man it is a barrier between two floors, a warning for him to stay put. The physically vitalchildren and athletes—enjoy a sense of spatial expansiveness little known to office-bound workers, who listen to tales of physical prowess with a mixture of admiration and envy. Eric Nesterinko, a hockey player with the Toronto Maple Leafs, described how even as a child winning was secondary to the joy of movement. "When I was a kid," he recalled, "to really move was my delight. I felt released because I could move around anybody. I was free." As a middle-aged man of thirtyeight Nesterinko retained his delight in spatial freedom. He recalled how on a cold, clear, and crisp afternoon, he saw a huge sheet of ice in the street. Unthinkingly he drove his car on the ice, got out and put on his skates. The hockey player said: "I took off my camel-hair coat. I was just in a suit jacket, on my skates. And I flew. Nobody was there. I was as free as a bird. . . . Incredible! It's beautiful! You're breaking the bounds of gravity. I have a feeling this is the innate desire of man."2

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Tools and machines enlarge man's sense of space and spaciousness. Space that is measurable by the reach of one's outstretched arms is a small world compared with one that is measured by the distance of a spear throw or arrow shot. The body can feel both measures. Size is the way a person feels as he stretches his arms; it is the experience of the hunter as he throws his spear, feels it shoot out of his hand, and sees it disappear into the distance. A tool or machine enlarges a person's world when he feels it to be a direct extension of his corporeal powers. A bicycle enlarges the human sense of space, and likewise the sports car. They are machines at man's command. A perky sports car responds to the driver's slightest wish. It opens up a world of speed, air, and movement. Accelerating over a straight road or swerving over a curve, momentum and gravity—these dry terms out of a physics book-become the felt qualities of motion. Small aircrafts of the kind in use during the 1920s are capable of extending man's freedom, his space, as well as putting the human being into a more intimate relationship with the vastness of nature. The French writer and pilot Antoine de Saint-Exupéry expressed it this way:

The machine which at first blush seems a means of isolating man from the great problems of nature, actually plunges him more deeply into them. As for the peasant so for the pilot, dawn and twilight become events of consequence. His essential problems are set him by the mountain, the sea, the wind. Alone before the vast tribunal of the tempestuous sky, the pilot defends his mails [sic] and debates on terms of equality with those three elemental divinities.3

When the Paleolithic hunter drops his hand ax and picks up a bow and arrow, he takes a step forward in overcoming space and yet space expands before him: things once beyond his physical reach and mental horizon now form a part of his world. Imagine a man of our time who learns first to ride a bicycle, then to drive a sports car, and eventually to pilot a small aircraft. He makes successive gains in speed; greater and greater distances are overcome. He conquers space but does not nullify its sensible size; on the contrary, space continues to open out for him. When transportation is a passive experience,

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however, conquest of space can mean its diminishment. The speed that gives freedom to man causes him to lose a sense of spaciousness. Think of the etliner It crosses the continent in a few hours, yet its passengers' experience of speed and space is probably less vivid than that of a motorcyclist roaring down a freeway. Passengers have no control over the machine and cannot feel it as an extension of their organic powers. Passengers are luxury crates—safely belted in their seats—being transported passively from point to point.

Space is a common symbol of freedom in the Western world. Space lies open; it suggests the future and invites action. On the negative side, space and freedom are a threat. A root meaning of the word "bad" is "open." To be open and free is to be exposed and vulnerable. Open space has no trodden paths and signposts. It has no fixed pattern of established human meaning; it is like a blank sheet on which meaning may be imposed. Enclosed and humanized space is place/ Compared to space, place is a calm center of established values. Human beings require both space and place. Human lives are a dialectical movement between shelter and venture, attachment and freedom. In open space one can become intensely aware of place; and in the solitude of a sheltered place the vastness of space beyond acquires a haunting presence. A healthy being welcomes constraint and freedom, the boundedness of place and the exposure of space. In contrast, the claustrophobe sees small tight places as oppressive containment, not as contained spaces where warm fellowship or meditation in solitude is possible. An agoraphobe dreads open spaces, which to him do not appeal as fields for potential action and for the enlargement of self; rather they threaten self's fragile integrity.4

Physical environment can influence a people's sense of size and spaciousness. On the small Melanesian island of Tikopia, which is only three miles long, the islanders have little conception of landmass size. They have wondered whether any land exists from which the sound of ocean waves cannot be heard. China, in extreme contrast, stretches over a continent. Its people have learned to envisage vast distances and to think of them in dread, for they can mean the separation of friends and

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lovers. Early Chinese literature used the expression, one thousand li, to evoke a sense of great distance. By the Han dynasty "ten thousand li" came into fashion. Poetic hyperbole required adjustment as geographical knowledge increased. Moreover, as geographical knowledge increased, poets could use contrasting natural environments to evoke a sense of distance and of separation. The following lines from a poem written during the Han period illustrate a sentiment and the method employed to heighten it:

On and on, going on and on, away from you to live apart, ten thousand li and more between us, each at opposite ends of the sky. The road I travel is steep and long; who knows when we meet again? The Hu horse leans into the north wind; The Yueh bird nests in southern branches; day by day our parting grows more distant . . . 6

Hu is a term for the area north of China extending from Korea to Tibet; Yueh designates the area around the mouth of the Yangtze River. Thus an abstract hyperbole of distance, ten thousand li, is fleshed out with the imagery of two specific regions and their contrasting ecologies.

Is the feeling of spaciousness identifiable with particular kinds of environment? A setting is spacious if it allows one to move freely. A room cluttered with furniture is not spacious whereas a bare hall or a public square is, and children let loose in either of them tend to respond by rushing about. A broad treeless plain looks open and expansive. The relationship of environment to feeling seems clear; but in fact, general rules are difficult to formulate. Two factors confuse the issue. One is that the feeling of spaciousness feeds on contrast. For example, a house is a compact and articulated world compared with the valley outside. From inside the house the valley beyond looks broad and lacking in definition, but the valley is itself a well-defined hollow compared with the plain onto which it in turn opens. The second factor is that culture and experience strongly influence the interpretation of environment. Ameri-

cans have learned to accept the open plains of the West as a symbol of opportunity and freedom, but to the Russian peasants boundless space used to have the opposite meaning. It connoted despair rather than opportunity; it inhibited rather than encouraged action. It spoke of man's paltriness as against the immensity and indifference of nature. Immensity oppressed. Maxim Gorky wrote:

The boundless plain upon which the log-walled, thatch-roofed village huts stand huddled together has the poisonous property of desolating a man's soul and draining him of all desire for action. The peasant may go beyond the limits of his village, take a look at the emptiness all about him, and after a while he will feel as if this desolation had entered into his own soul. Nowhere are lasting traces of toil to be seen. . . . As far as the eye can see stretches an endless plain, and in the midst of it stands an insignificant wretched little man, cast away upon this dreary earth to labor like a galley slave. And the man is overwhelmed by a feeling of indifference which kills his capacity to think, to remember past experience, and to draw inspiration from it.<sup>7</sup>

The problem of how environment and feeling are related comes to a head with the question, can a sense of spaciousness be associated with the forest? From one viewpoint, the forest is a cluttered environment, the antithesis of open space. Distant views are nonexistent. A farmer has to cut down trees to create space for his farmstead and fields. Yet once the farm is established it becomes an ordered world of meaning—a place—and beyond it is the forest and space.8 The forest, no less than the bare plain, is a trackless region of possibility. Trees that clutter up space from one viewpoint are, from another, the means by which a special awareness of space is created, for the trees stand one behind the other as far as the eyes can see, and they encourage the mind to extrapolate to infinity. The open plain, however large, comes visibly to an end at the horizon. The forest, although it may be small, appears boundless to one lost in its midst.

Whether forested mountains or grassy plains serve as image of spaciousness depends, at least in part, on the nature of a people's historical experience. In the period of vigorous European expansion in the nineteenth century migrants moved generally from forests to grasslands. The grasslands of North America at first

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provoked dread; they lacked definition compared with the reticulated spaces of the settled and forested East. Later, Americans interpreted the plains more positively: the Eastern seaboard might have finely ordered places but the West claimed space and freedom. In contrast with the American experience, in China the old centers of population were located in the relatively open country of the subhumid and semiarid North. The movement of the people was to the hilly and forested South. Could the Chinese have associated the forested South with a sense of spaciousness? At least some of them did. Poetry of the Han period, for example, described the wildernesses of the South with awe; there, uprooted officials from the North encountered a vast and seemingly primordial world of mist-wrapped mountains and lakes. It was in South China that nature poetry and landscape painting reached their highest development: both arts contrasted spacious nature, a world of shifting light and of peak behind mountain peak fading into infinity, with the closed and formal world of man.9

Space is, of course, more than a complex and shifting viewpoint or feeling. It is a condition for biological survival. But the question of how much space a man needs to live comfortably has no simple answer. Space as resource is a cultural appraisal. In the Orient a farm family can live contentedly on a few intensely worked acres; in the United States, in 1862, a guarter section or 160 acres was judged the proper size for a yeoman's homestead. Level of aspiration clearly affects one's sense of spatial adequacy. Aspiration is culturally conditioned. Traditional China, for instance, had many small landlords who were content to live off their rents and enjoy their leisure rather than work and invest their income in enlarging their holdings. In capitalist Western societies, aspiration and the entrepreneurial spirit have been and are much stronger. To the truly acquisitive the goods that are owned seldom seem quite enough. Space, fully satisfactory for present operations, still may not feel sufficient. Biological appetites soon reach their natural limits, but ultrabiological yearning—which readily takes the perverted form of greed—is potentially boundless. Tolstoy was led to ask, in exasperation, "How much land does a man need?"—the title of an eloquent fable in which he gave his answer. Although Tolstoy's question

sounded matter-of-fact, his answer and those offered by others usually veiled profound political and moral commitments.

Space is a resource that yields wealth and power when properly exploited. It is worldwide a symbol of prestige. The "big man" occupies and has access to more space than lesser beings. An aggressive ego endlessly demands more room in which to move. The thirst for power can be insatiable—especially power over money or territory, since financial and territorial growths are basically simple additive ideas that require little imaginative effort to conceive and extrapolate. The collective ego of a nation has made claims for more living space at the expense of its weaker neighbors; once a nation starts on the road of successful aggrandizement it could see no compelling limit to growth short of world dominion. For the aggressive nation as for the aggressive individual, the contentment that goes with the feeling of spaciousness is a mirage that recedes as one acquires more space.

Space, a biological necessity to all animals, is to human beings also a psychological need, a social perquisite, and even a spiritual attribute. Space and spaciousness carry different sets of meaning in different cultures. Consider the Hebraic tradition, one that has had a strong influence on Western values. In the Old Testament, words for spaciousness mean in one context physical size and in others psychological and spiritual qualities. As a physical measure spaciousness is "a good and a broad land, a land flowing with milk and honey" (Exodus, 3, 8). Israelites were concerned with the size of the promised land. They could not themselves take up arms and enlarge it at their neighbors' expense, but God could sanction their venture. "For I will cast out nations before you and enlarge your borders; neither shall any man desire your land" (Exodus, 34, 24). Psychologically, space in the Hebraic tradition means escape from danger and freedom from constraint. Victory is escape "into a broad place." "He brought me forth into a broad place; he delivers me, because he delighted in me" (Psalm 18, 19) In Psalm 119 the language of spaciousness is applied to the intellectual enlargement and spiritual freedom of the man who knows the Torah. "I will run in the way of thy commandments when those enlargest my understanding" (verse 32). On the spiritual plane, space connotes deliverance and salvation.10

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Thus far we have explored the meaning of spaciousness without regard to the presence of other people. Solitude is a condition for acquiring a sense of immensity. Alone one's thoughts wander freely over space. In the presence of others they are pulled back by an awareness of other personalities who project their own worlds onto the same area. Fear of space often goes with fear of solitude. To be in the company of human beings—even with one other person—has the effect of curtailing space and its threat of openness. On the other hand, as people appear in space, for every one a point is reached when the feeling of spaciousness yields to its opposite—crowding. What constitutes crowding? We may say of a forest that it is crowded with trees and of a room that it is crowded with knick-knacks. But primarily people crowd us; people rather than things are likely to restrict our freedom and deprive us of space.

As an extreme example of how others can affect the scale of our world, imagine a shy man practising the piano in the corner of a large room. Someone enters to watch. Immediately the pianist feels spatial constraint. Even one more person can seem one too many. From being the sole subject in command over space, the pianist, under the gaze of another, becomes one object among many in the room. He senses a loss of power to order things in space from his unique perspective. Inanimate objects seldom produce this effect, although a man may feel ill at ease in a room full of ancestral portraits. Even a piece of furniture can seem to possess an obtrusive presence. Things, however, have this power only to the degree that people endow them with animate or human characteristics. Human beings possess this power naturally. But society can deprive them of it. Human beings can be treated as objects so that they are no more in one's way than are bookshelves. A rich man is surrounded by servants, yet they do not crowd him, for their low status makes them invisible—part of the woodwork.

Crowding is a condition known to all people at one time or another. People live in society. Whether one is an Eskimo or a New Yorker, occasions will arise when he has to work or live closely with others. Of the New Yorker this is obviously true, but even Eskimos do not always move on the broad open stage of the

Tundra; in the course of many dark and long nights they have to bear with each other's company in ill-ventilated huts. The Eskimo, though less often than the New Yorker, must on occasion screen the stimulus of other people by turning them into shadows and objects. Etiquette and rudeness are opposite means to the same end: helping people to avoid contact when such contact threatens to be too intense.

A sense of crowding can appear under highly varied conditions and at different scales. Two persons in one room, we have noted. can constitute a crowd. The pianist stops playing and leaves. Consider the large-scale phenomenon of crowding and migration. In the nineteenth century many Europeans abandoned their small farms, crowded dwellings, and polluted cities for the virgin lands of the New World. We rightly interpret the migration as motivated by the desire to seek opportunities in a freer and more spacious environment. Another major flow of people in both Europe and North America was from the countryside and small settlements to the large cities. We tend to forget that rural-urban migration, like the earlier movement across the ocean and into the New World, could also be motivated by the impulse to escape crowding. Why did country people, especially the young, leave their small hometowns for the metropolitan centers? One reason was that the hometown lacked room. The young considered it crowded in an economic sense because it did not provide enough jobs, and in a psychological sense because it imposed too many social constraints on behavior. The lack of opportunity in the economic sphere and of freedom in the social sphere made the world of the isolated rural settlement seem narrow and limited. Young people abandoned it for the jobs, the freedom, and—figuratively speaking—the open spaces of the city. The city was the place where the young believed they could move ahead and better themselves. Paradoxically the city seemed less "crowded" and "hemmed in" than the countryside of diminishing opportunities.

Crowding is an awareness that one is observed. In a small town people "watch out" for one another. "Watch out" has both the desirable sense of caring and the undesirable one of idle—and perhaps malicious—curiosity. Houses have eyes. Where they are

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built close together the neighbors' noises and the neighbors' concern constantly intrude. Where they are isolated privacy is better preserved—but not guaranteed; such is human ingenuity. On Shetland Isle, off the coast of Scotland, cottages are spaced far apart. Visual intrusion nonetheless persists. According to the sociologist Ervin Goffman, cottagers of seafaring background use pocket telescopes to observe their neighbor's activities. Distance notwithstanding the Shetlander can, from his own home, keep a neighborly eye on who is visiting whom.<sup>11</sup>

Trees or boulders may be dense in a wilderness area, but nature lovers do not see it as cluttered. Stars may speckle the night sky; such a sky is not viewed as oppressive. To city sophisticates nature, whatever its character, signifies openness and freedom. Human beings, if they are engaged in earning a livelihood from nature, blend into the natural scene and do not disrupt its solitude. In the densely peopled rice lands of the Orient the farmers rhythmically at work are barely visible to the outside observers, so much do they seem to belong to the earth. Is Java crowded? Its average population density of more than a thousand persons per square mile makes it one of the most crowded regions in the world. Yet here is the ambivalent response of the environmental psychiatrist Aristide Esser. While Esser recognizes the objective fact of Java's high population density, he says of the island in which he was born: "The beauty of its landscape and the relaxed, open mind of its people produced in me images of freedom on an unlimited beautiful world." In contrast. Holland—the country that gave Esser his schooling—looked "ridiculously petite" and "oppressive." 12

Whether nature retains its air of solitude or not may bear little relation to the number of people living and working in it. Solitude is broken not so much by the number of organisms (human and nonhuman) in nature as by the sense of busy-ness—including the busy-ness of the mind—and of cross-purposes, actual and imagined. Mary McCarthy observed that an awareness of being "at one" with nature itself begins to constitute an intrusion: "Two fishermen pulling in a net on the seashore appear natural, but two poets brooding side by side on the same strand would be ridiculous—one solitude too many." 13

People are social beings. We appreciate the company of our own kind. How physically close we tolerate or enjoy the presence of others, for how long, and under what conditions vary noticeably from culture to culture. The Kaingáng Indians of the Amazon basin like to sleep in groups, locked limb to limb. They like to touch and fondle each other; they seek physical (nonsexual) intimacy for comfort and reassurance.<sup>14</sup> In another sparsely settled part of the world, the Kalahari desert, the !Kung Bushmen live under crowded conditions. Patricia Draper noted that in a Bushman camp the average space each person has is only 188 square feet, which is far less than the 350 square feet per person regarded as the desirable standard by the American Public Health Association. Space in a Bushman camp is arranged to ensure maximum contact. "Typically huts are so close that people sitting at different hearths can hand items back and forth without getting up. Often people sitting around various fires will carry on long discussions without raising their voices above normal conversational levels." 15 The desert does not lack space. Bushmen live close by choice, and they do not show symptoms of biological stress.

In Western industrial society, working-class families are known to tolerate a much higher residential density than do middle-class families. And the reason is not simply because workers have little choice. Proximity to others is desired. Suburban retreats, each sitting on its own half-acre of lawn, are not necessarily the envy of working-class families accustomed to the bustle and color of an older neighborhood. Such families view the middle-class suburb with suspicion; it seems cold and exposed. Human proximity, human contact, and an almost constant background of human noises are tolerated, even welcomed. In a new housing project in Chile, for example, the working-class residents shifted furniture from their living rooms into the hall so that they could be together, as was their custom. In England, it is true, a study of families who moved from old crowded dwellings to a new relatively spacious housing estate showed that the families benefited from the change; they were less tense because privacy was more readily available. On the other hand, at least for a time bedrooms were shared unnecessar-

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ily, and by choice homework and other tasks were done in company.<sup>16</sup>

A crowd can be exhilarating. Young and old, from all levels of society, know this. <sup>17</sup> One group differs from another largely in the desired period of exposure, the occasion, and the preferred setting. What do English workers and their families do during their summer holidays? Large numbers flock to the beach. They escape their cramped quarters in industrialized cities for the milling crowds of Blackpool and Southend. The crowd at the seaside, far from being a nuisance, is a major attraction. What is a parade, a state fair, a charity bazaar, a revival meeting, or a football game without the multitudes?

Young Americans from well-to-do families are often strong partisans of nature and of the wilderness experience. At the same time they seem to like crowds. Protest marches against social injustice and war arise out of true indignation; yet the young marchers surely also enjoy the camaraderie, the sense of group solidarity in a righteous cause, and the sheer pleasure of swimming in a sea of their own kind.

Outdoor rock festivals capture the essential ambivalence of the young. On the one hand there is the outdoor setting, the bra-less freedom, and the nudity; on the other the enormous crowd—more densely packed than any street in Manhattan and the blare of electronically amplified music. On July 28, 1973 some 600,000 youngsters attended the outdoor rock festival at Watkins Glen, New York. The fans were packed shoulder to shoulder on a 90-acre grassy knoll. "From the air," the New York Times reported, "the fence-enclosed concert site looked like a human ant hill surrounded by acres of meadows packed with cars and brightly colored tents. The knoll was so clogged with people that one nineteen-year-old girl from Patchogue, Long Island, reported that a trip to a portable toilet and back several hundred yards away had taken three hours."18 When we consider the baking sun, the human swarm, the poor toilet facilities, and the high intake of beer and wine, it is reasonable to expect acute physical and mental stress, pent-up frustration, outbursts of anger, and fisticuffs. In fact the crowd was even-tempered and well behaved. The absence of serious inci-

dents surprised both local residents and the police. Music was clearly not the sole attraction of the festival—the crowd was its own entertainment.

People crowd us but they can also enlarge our world. Heart and mind expand in the presence of those we admire and love. When Boris Pasternak's heroine Lara enters a room, it is as if a window were flung open and the room filled with light and air.19 When people work together for a common cause, one man does not deprive the other of space; rather he increases it for his colleague by giving him support. "The more angels there are, the more free space," said the erudite scientisttheologian Swedenborg (1688-1772), for the essence of the angel is not the use of space but its creation through selfless acts.20 On the other hand people are a common cause of our frustration: their will thwarts ours. People often stand in our way, and when they do they are rarely presumed innocent, like tree stumps and furniture that cannot help being where they are. Inside a packed stadium other humans are welcome; they add to the excitement of the game. On the way home, driving along the clogged highway, other humans are a nuisance. When a car ahead is stalled, we feel almost as though the driver had intended mischief. The stadium has a higher density of people than the highway, but it is on the highway that we taste the unpleasantness of spatial constraint.

Conflicting activities generate a sense of crowding. In a small city apartment, a harassed mother tries to cook, feed the infant, scold the toddler who has spilled food on the floor, and answer the doorbell, all at the same time. A work-weary father returns home and cannot find a quiet corner to himself, away from his bumptious and loquacious children. If such a family were to move into adequate quarters, tension would no doubt decline and family contentment increase. However, human beings are so adaptable that under certain favorable conditions they can wring an advantage even from residential crowding—namely, a kind of indiscriminate, gregarious human warmth. Working-class people have sometimes achieved this warmth, as writers of working-class background—notably D. H. Lawrence and Richard Hoggart—have observed. In the con-

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gested home of an English worker's family, it is difficult to be alone, to think alone, or to read quietly. Not only things but people are shared. Mother is "our mom," father is "our dad," and the daughter is "our Alice." Hoggart captured the jumbled yet intensely human world of acceptance and sharing with this living room scenario:

There is the wireless or television, things being done in odd bouts, or intermittent snatches of talk . . . ; the iron thumps on the table, the dog scratches and yawns or the cat meaows to be let out; the son dries himself on the family towel near the fire, whistles or rustles the communal letter from his brother in the army which has been lying on the mantelpiece behind the photo of his sister's wedding; the little girl bursts into a whine because she is too tired to be up at all.<sup>21</sup>

Out of the crowded room a haven of warmth and tolerance is created. What is the loss? What is the cost of this successful adaptation to crowding? The cost appears to be a chance to develop deep inwardness in the human personality. Privacy and solitude are necessary for sustained reflection and a hard look at self, and through the understanding of self to the full appreciation of other personalities.<sup>22</sup> A man is not only a miner, he is not just "our dad," but also an individual with whom prolonged exchange—opening up worlds in sustained conversation or common enterprise—ought to be possible. Spatial privacy does not, of course, guarantee solitude; but it is a necessary condition. Living constantly in a small, close-knit group tends to curtail the enlargement of human sympathy in two antipodal directions: toward one pole, an intimacy between unique individuals that transcends camaraderie and kinship ties; and toward the other, a generalized concern for human welfare everywhere.23

The world feels spacious and friendly when it accommodates our desires, and cramped when it frustrates them. Frustration differs in seriousness. Among the affluent it may be no more than being tied up in traffic or having to wait for a particular table at a favorite restaurant. To the urban poor frustration often means shuffling in long and slow lines before the welfare or employment official's desk. There is also frustration at the most fundamental level: the awareness that land and resources

are limited and too many stomachs remain unfilled. The mass of mankind has known this kind of deprivation, this sense of crowding. Thomas Malthus's insight into the relationship between resource and population commands special respect for its precision; the awareness of crowding in the Malthusian sense, however, has long been commonplace and widespread. It has existed in areas of both high and low population densities, in India, southeast Asia, and Europe as well as in the sparsely settled parts of North America.<sup>24</sup> Folklore and legends from such lands relate the theme of the overcrowded earth in varying detail and degree of explicitness. A Malthusian tale commonly begins with a world in which death was unknown. Human beings bred until the earth could no longer support them and there was great suffering. The story might then continue like this. God commanded an angel to kill people after they had reached a certain age. The angel demurred because he did not relish human curse; so God allowed the angel to hide his deeds behind a screen of diseases, accidents, and wars. Here is another Malthusian tale. According to the Iglulik Eskimos, death did not exist in the earliest times. The first humans lived on an island in Hudson Strait; they multiplied rapidly but none ever left home. Eventually so many people crowded the island that it could not support them and began to sink. An old woman shouted: "Let it be so ordered that human beings can die, for there will no longer be room for us on earth." And her wish was granted.25

Eskimos hunt in small groups over the broad open spaces of the Arctic coast. Urban crowding and stress, as in the crush of humanity during rush hours, are wholly alien to Eskimo experience, yet Eskimos are no strangers to crowding and stress. They experience crowding at the tragic level of starvation in times of scarcity. 6

Spatial Ability, Knowledge, and Place

nimals can move. Agility, speed, and range of motion vary greatly among different species and are largely innate. A newborn ewe, after a few tottering steps, is able to follow its mother about the pasture, managing its four legs so that they do not get in each other's way. Newborn mammals quickly learn to walk. The human young is the well-known exception. A human infant cannot stand or crawl. Even his small bodily movements are rather clumsy. An infant does not quite know where his mouth is, and his first efforts to put his finger in it are a trial-and-error experiment. At a later stage he learns to crawl more or less on his own, but standing and walking—these characteristically human activities—require \$\forall 1 encouragement and coaching from adults. Spatial ability develops slowly in the human young; spatial knowledge lags further behind. The mind learns to grapple with spatial relations long after the body has mastered them in performance. But the mind, once on its exploratory path, creates large and complex spatial schemata that exceed by far what an individual can encompass through direct experience. With the help of the mind, human spatial ability (though not agility) rises above that of all other species.

Spatial ability becomes spatial knowledge when movements