COMMENTARY

MUSINGS ON THE FAT CITY: ARE OBESITY AND URBAN FORMS LINKED?[1]

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> One has to know the size of one's stomach.
> All prejudices come from the digestion.
>
> —Frederic Nietzsche, *Ecce Homo: How One Becomes What One Is,* p. 79.

> After all, what could signal to us more effectively the limitations of our concern with the young and fit, ideally feminine or masculine body than the brute facts of its thickening waistline, sagging flesh and inevitable death?
>
> —Chris Shilling, *The Body and Social Theory,* p. 7.

HAVENS FOR THE HEAVY

Earlier last year, residents of Houston won a dubious distinction that hit them right at their waistlines. For the second year in a row, Houston has been ranked "America's Fattest City," according to the fourth annual report on the rankings of U.S. fat cities in *Men's Fitness* magazine, published Jan. 8, 2002. Among the "fat cities," Houston ranks first, followed by Chicago, Detroit, Philadelphia, and Dallas (Table 1). Using a similar methodology, this group of researchers commissioned by *Men's Fitness* also comes up with a list of the fittest cities in the United States (Table 1).

To arrive at their findings, the researchers evaluated the nation's 50 largest cities between July, 2001, and September, 2001. Cities were assessed in 16 commensurate cat-

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TABLE 1. THE TOP TEN FATTEST VS. FITTEST CITIES IN THE UNITED STATES

Fattest cities	Fittest cities
1. Houston, TX	1. Colorado Springs, CO
2. Chicago, IL	2. Denver, CO
3. Detroit, MI	3. San Diego, CA
4. Philadelphia, PA	4. Seattle, WA
5. Dallas, TX	5. San Francisco, CA
6. Columbus, OH	6. Virginia Beach, VA
7. San Antonio, TX	7. Honolulu, HI
8. Fort Worth, TX	8. Sacramento, CA
9. St. Louis, MO	9. Albuquerque, NM
10. Indianapolis, IN	10. Boston, MA

Source: Men's Fitness magazine (www.mensfitness.com) for the criteria, data, and methodology used in this ranking.

egories, using data specific to each city. In addition to percentage of overweight/sedentary residents, the study also used indicators, risk factors, or relevant environmental factors affecting fitness, obesity, and health. Sample categories included: sports participation; smoking, drinking, air and water quality, length of commute, and availability of parks/ open spaces, etc. These 16 different indicators are comprehensive measurements of how well city residents fare with regard to nutrition, exercise, and sports participation, and to what extent they embrace poor health choices such as smoking, drinking, and excessive television-watching. To figure out each city's fat content, researchers also tallied the number of fast food outlets per city and checked out the average length of commutes (they found that the longer the ride, the greater the chance of excess fat). The study also examined air and water quality and explored the use and distribution of parks and other recreational facilities.[3] With all things considered, I believe that this ranking of "fat cities" represents credible research which merits not only attention by the media but also scholarly reflection, especially since the obesity epidemic has become so rampant in the United States that even Uncle Sam has made obesity-related treatment a tax-deductible expense this year.

FAT CITY OR FAT PEOPLE?

As an urban geographer living about 100 miles from Houston, I am amused that Houston has been ranked as the fattest city in the United States for two consecutive years. It also surprises me that two other Texas cities rank in list of the top ten fattest cities in the United States. "Yeah, everything in Texas is big!"—one of my friends teased me with the conventional wisdom after I shared this news with him. But such a folklore-based explanation is unsatisfactory to me. I cannot resist asking the following question: Are there any

[3] Interested readers can consult www.mensfitness.com for the data, methodology, and results of this study.

characteristics of Texas cities that potentially make Texas urban residents more prone to be overweight/obese? Or, more generally, do certain urban forms contribute to, if not cause, the obesity of urban residents? Are obesity and urban forms somehow linked? If so, what are the implications for urban geographic research in general and for the design and planning of cities in particular?

Admittedly, to answer these questions, more extensive, rigorous research is needed. There has been a long history of studying the human body and the city from a public health perspective (Power and Sheard, 2000) and it is well known among medical geographers that place and health are closely linked in many different ways (Gesler et al., 2001). Several recent studies have tried to make an explicit link between obesity and urban sprawl, although such arguments have been hotly contested (Jackson and Kochtitzky, 1995; Hayward, 2000; Frank et al., 2001; Thoreau Institute, 2002). Although I am weary of the fact that urban sprawl has been used as a convenient all-purpose scapegoat for all major problems in society (Gillham, 2002), possible links between obesity and urban form definitely deserve urban geographers' attention. And yet, so far, urban geographers have been silent on this issue. Here, I would like to offer a few preliminary thoughts to open discussion among urban geographers on this topic.

Until recently, the fat city has a different meaning in the scholarly literature. Neologism to describe urban development patterns after World War II is abundant: megapolis, gigalopolis, edge city, exploding metropolis, extended metropolis, galactic metropolis, desokota regions, splintering urbanism, exopolis, post-metropolis, and the limitless city—all implicitly or explicitly indicate increasing largeness of size or cities. Among the most interesting of all metaphors which capture the sprawling trend of American cities is the idea of the "Fat City." Urban geographer John Sommer (1975) was the first to use this anthropomorphic metaphor in the scholarly literature to discuss issues related to urban sprawl. Inspired by Leonard Gardner's (1969) novel *Fat City* (later a movie with the same title), Sommer (1975) used the metaphor "fat city" to capture the basic characteristics of the sprawling U.S. metropolis after World War II. According to Sommer (1975), fat cities formed the major portions of a Hedonopolis whose sole purpose is ego-satisfaction or consumption. Most recently, in the context of the national debate on urban sprawl and the new urbanism, Nivola (1998) further invoked the fat city metaphor (without referencing Sommer, though) to recapture the public imagination on the different dimensions of urban sprawl.

By all accounts, the fat city is not a bad metaphor to describe issues related to urban sprawl. Years of medical research have produced credible evidence that obese/overweight people are more likely to suffer diabetes and heart problems. By analogy, sprawling (fat) cities such as Houston and Los Angeles suffer traffic congestion and inner-city problems, with a declining tax base, deteriorating schools, and disproportionate concentrations of poverty and crime. In other words, fat cities have "heart" problems. A fat body has to circulate blood through pounds of useless electricity, not to mention people, through hundreds of relatively unproductive square miles, again doing extra work simply to exist. Whether we can solve inner-city problems by playing what David Rusk (1999) called the Inside/Outside game remains to be seen.

Society measures each individual human body against an unspecified, yet apparently desirable "norm" (Mirzoeff, 1995). Although being fat is not a sin (Bovey, 1989) there is pressure to present our bodies and to perform in a manner that we and others are "com-

fortable with." Many people have tried a variety of different approaches, ranging from diet, to exercise, and all the way to surgery to get their bodies into shape. Although social pressures for the normal size of cities are not as high as those for individual bodies, planners have nonetheless tried different approaches to get cities into better shape. From the City Beautiful movement to recent new urbanism strategies such as Smart Growth initiatives, new regionalism, urban growth boundary, etc., planners are essentially attempting to make cities "leaner"—to reduce the fat in urban growth.

All the "fat cities" on the list of the fattest cities in the United States (Table 1) suffer symptoms of sprawl to some degree, whereas most of the fittest cities tend to have more rigorous growth management programs and control policies. Casual observation seems to suggest that fat (sprawling) cities tend to have more fat (obese) people. An estimated 300,000 Americans die of obesity-related causes each year, and obesity and inactivity account for nearly 10% of all health care expenses. Direct medical costs of obesity alone top $100 billion annually, and the price tag continues to skyrocket. If fat cities and fat people are indeed somehow lined, then these sad facts prompt me to think that Jane Jacob's (1961) depiction some 30 years ago of *The Death and Life of Great American Cities* is to a large extent about the life and death of Americans today.

On a larger scene, these spotlighted cities are not alone. According to the Federal Centers for Disease Control, 56.4% of American adults are overweight, and the number jumps to 65.5% for males only. The root causes of obesity are not difficult to understand. Except in some rare cases of genetic obesity, most people gain weight by *eating more (and more) and exercising less (and less).* Cities built after World War II are obviously not helpful in these two aspects. The McDonaldization of society (Ritzer, 1995) has essentially led to the emergence of what Schlosser (2000) called the fast food nation. The fast lifestyle encouraged by automobiles has further mechanized people's dietary habits.

But diet alone will not necessarily make people gain weight.[4] We are not what we eat, as Bell and Valentine (1997) argued, as long as we are physically active enough to burn all the calories we ingest. The troubling trend is that cities built around the automobile have deprived residents of physical activities. In America between 1977 and 1995, trips made by walking decreased from 25% to 10%, while trips by auto rose from 84% to 90%. Columnist Neal Pierece (2001) perceptively observed that

> We sit in cars. We don't walk to the store in the corner. We ride the lawnmower instead of pushing it; residents often live on curvy, dead-end streets (often cul-de-sacs) that feed into high-volume highways leading to segregated uses—shopping malls, office parks, government centers. Traditional street grids encouraged walking and biking by facilitating shortest-possible travels between two points. Contemporary suburban development does just the opposite. Sidewalks are often missing. Roadways are designed for vehicular 'throughput' and make foot or bike traffic downright dangerous.

[4] American diets are no fatter than those of the French or Italian, but cardiovascular diseases among the French or Italians are much more rare—so called the French Paradox. Public transit perhaps plays a more important role than drinking red wine. There are some disturbing international comparisons. In Italy, 54% of trips are by walking or bicycling; in Sweden (where it is cold and dark much of the year), 49%. In this gloriously hailed "land of the free and home of the brave," we walk or cycle just 10% of the time (Pierece, 2001).

If there exist the so-called "Body Ballets," as Seamon (1979) asserted, obviously they are not spinning hard enough.

Nobody can deny that the auto-dependent way of living is expanding our paunches—and imperiling our health. Now, kids are beginning to fall into the same trap. One-fourth of American children ages 6 to 17 are overweight, 11% seriously so, according to the Center for Disease Control (CDC) figures. Not only have school sports and physical education programs declined, but in today's spread-out suburbia of roaring freeways and highways, only a tiny percentage of kids actually walk to school.

It is ironic, almost to the point of being hilarious, that most automakers have named their latest models of sport-utility vehicles (SUVs) to invoke mental images of physical activity, including 4Runner, Land Cruiser, Explorer, Expedition, Trailblazer, and Pathfinder. This truth is that physical activity has declined dramatically among most Americans, with especially drastic reductions in walking and the concomitant loss of what Adams (2001) called the peripatetic sense of place. A recent CDC study showed that 7 of 10 adults are not physically active. Unless one has resources to purchase the services or products of the "keep-fit industry" (and one must have the discipline to exercise on a regular basis), the net result of such a lifestyle is quite obvious.

In fact, fat city is not an overnight phenomenon. Each chapter of Richard Sennett's (1994) fascinating volume *Flesh and Stone: The Body and the City in Western Civilization* is a pit-stop in history, to display the condition of the flesh in response to the stone of the city. Sennett's thesis is that the continual acceleration of life due to, in part, forces of capitalism, has made man a passive player in life. Some 80 years ago, Robert Park (1916) also pointed out that a city's functional, tangible character would ultimately reveal the cultural and ethical possibility of life in it. Essentially, escalating levels of obesity parallel our technology and our automated society. We've literally engineered physical activities such as walking and dishwashing out of our lives. Now, with the diffusion and growth of Gold's Gyms and the billion-dollar exercise equipment industry, we are obviously trying to reengineer physical activities back into our lives.

It is almost a cliche nowadays to say that we shape our cities and our cities will shape us. But the truth of such a cliche is clearly manifested by the relationship between obesity and urban sprawl. The city and its people in general, urban forms and the well-being of urban residents in particular are closely linked. So long as we continue to build more parking lots instead of parks, neither obesity nor urban sprawl can be mitigated significantly.

Although it is difficult to quantify the relationship between the expanding waistlines of a city's residents and its ever-sprawling boundaries, there is no doubt in my mind that the two are linked. Such possible linkages are clearly reflected and extensively theorized in recent social theoretic literature (Bordo, 1993; Butler, 1993; Brook, 1999).

THE BODY AND THE CITY: THEORETICAL THREADS

Although causation of obesity at the individual level can be sufficiently understood by analyzing a person's food intake vs. his/her daily physical activities, the obesity epidemic at the societal level results from far deeper social and cultural reasons. Contemplating the issues related to the fat city makes me rethink the recent sociotheoretic literature on the body. In fact, the relationship between the body and the city has been quite extensively

discussed and theorized by social theorists (DiProse and Ferrell, 1991; Featherstone et al., 1991; Grosz, 1995; Butler, 1997). To better understand the linkages between obesity and urban forms, the fat city must be placed in context of the theoretical literature on the body and the city.

Ever since the ancient Roman military engineer Vitruvius (31 B.C.–A.D. 14) discussed the relationship between the body and architecture in his classic, *Architecture,* a persistent and recurring theme has been to reflect the human body as the measure of all things in Western philosophy (Spickler, 1970; Gallop, 1988) and urban planning (Rapoport, 1977). Leading 20th century theorists, from Friedrich Nietzsche and Franz Kafka to Michel Foucault and Gilles Deleuze, have all argued strenuously that bodies should be considered primary objects of inscription surfaces, on which values, morality, and social laws are inscribed. Short (1996) has further contended that "the phallic symbolism of high-rise tower blocks; the modern skyline of many big cities is often a solid metaphor for male virility and masculine strength (p. 392). As one of nature's most basic forms, the human body has acted as a powerful template for imagining the city (Vidler, 1993).

Indeed, Pile (1996, p. 208) forcefully theorized that "the body and the city are mirrored one in the other." Grosz (1994) goes even further by arguing that "The city is made and made over into the simulacrum of the body, and the body, in turn, is transformed, 'citified,' urbanized as a distinctively metropolitan body" (cited in Soja, 1995, p. 112). Grosz further articulated that corporeality in its biological specificity may be seen as the material condition of subjectivity and that the city plays a vital role in the social production of gendered and racialized corporeality.

The constitutive and mutually defining relationship s between corporeality and metropolis most clearly manifest themselves in the fat cities. To probe even further, we might ask why the body and the city could possibly have such an intimate relationship. The answer, I think, lies in the body's complex ties to space, place, and society. Due to limited space, I can delineate only some broad contours here to show how the body and the city interact with each other via space, place, and society. Hopefully, this exercise can help us to explore more broadly and deeply the social and cultural causes of the obesity epidemic and of the sprawling metropolis. I hope that in the process we can also bring the flesh back into the often discursive and abstract theorizing about the body.

First, from the perspective of the body and space, the body is spatially produced, and space is bodily created. According to Lefebvre (1974)

> There is an immediate relationship between the body and its space, between the body's deployment in space and its occupation of space. Before producing effects in the material realm (tools and objects), before producing itself by drawing nourishment from that realm, and before reproducing itself by generating other bodies, each living body is space and has space: it produces itself in space and it also produces that space (p. 170).

David Harvey (2000) elaborated further on the embodiment of space by arguing the body as accumulation strategy. Harvey developed his thesis even further by closing the loop of the body (micro) and globalization (macro) images. Recent literature on the body and the body politic could be put in a whole new perspective when we try to link it to the growing

obesity epidemic in the developed world and growing hunger and starvation in other parts of the world.

Second, from the perspective of the body and place, each body has its place, and each place is embodied. According to philosopher Casey (2001)

> But the body not only goes out to reach places, it also bears the traces of the places it has known. These traces are continually laid down in the body, sedimenting themselves there and thus becoming formative of its specific somotagrophy. A body is shaped by the places it has come to know and that have come to it—come to take up residence in it, by a special kind of placial incorporation that is just as crucial to the human self as is the interpersonal incorporation so central to classic psychoanalytic theory. The reverse is also true: places are themselves altered by our having been in them (p. 688).

Casey argued further "thanks to the inscriptive tenacity and expressive subjection of the body, places come to be embedded in us; they become part of our very self, our enduring character, what we enact and carry forward … they (places) are in us—indeed, are us—thanks to their incorporation into us by a process of somatization." What stronger philosophical justification do we need to link obesity and urban form? The volume co-edited by Nast and Pile (1998), *Places through the Body,* provides further empirical evidence on the links between the body and place.

Third, from the perspective of the body and society, the body is socially produced, and social practices are inscribed in the body. Societies, especially in the developed world, have been characterized by heightened attention to the body, expressed in the changing relation of individual identity to health, sexuality, and bodily image (Scott and Morgan, 1993; Synnott, 1993). Developments in areas as diverse as diet, genetic engineering, reproductive technologies, plastic surgery, and sports science have made the body increasingly a site of social alternatives and individual choices. The rise of "body" in consumer culture as a bearer of symbolic value has been reflected in the emergence of embodiment as a fundamental issue for both society and the academy (Turner, 1996).

For most social theorists, the body echoes the contours of social power and of cultural stratification. Bodies are not simply flesh and bones, but are maps of power and identity (Haraway, 1991, p. 222). Making the body an organizing principle for social theory, sociologist Bryan Turner (1992) even coined the term "somatic society" to describe how in modern social systems the body has become the principal field of political and cultural activity. According to Lowe (1995, pp. 174–175), "the body, a historical materiality, is neither a body-in-itself for a body-for-itself, but always an embodied being-in-the-world, constructed and realized within social practices to satisfy changing needs." He argued further that "this body referent is in the fact that the referent of all referents, in the sense that ultimately all signifieds, values, or meanings refer to the delineation and satisfaction of the needs of the body" (p. 14).

Unfortunately, many recent discussions on the body and social theory tend to be so abstract that they are lost in the deep space of social construction. In other words, current discussions on the theory of the body are almost completely disembodied. By relating the obesity epidemic to these bodily based social theories, we can perhaps make these theoretical discussions stand firmly on their feet in reality. Obviously, bodies cannot be

reduced to either the "social" or the "natural," rather they are simultaneously symbolically constructed *and* real. In the case of understanding the phenomenon of the fat city, both an essentialist *and* a constructionist approach are useful, as both shed light on different aspects of the problem.

The body denied is, in a real sense, the body out of control. Artificial means of control are devised, such as dieting, but the body remains out of control. Just as the individual can not respond to his or her desire to leap up and run about, instead spending hours at a stretch behind a desk, the individual becomes powerless over his or her body, which puffs and balloons as a visible sign of out-of-controlness. Ironically, this is the physical indication of a life thoroughly subordinated to the pseudocomfort of immobility. Whether in the form of the automobile, the remote control device, or the desk job, immobility still carries the prestige of *privilege.* Meanwhile, the suburb where the fat body lives is the expression of a desire for perfect control, a life purified of unexpected contacts and all real cultural diversity (Sennett, 1994). To get to this suburb one sits (in a car, truck, or van), and when one is there one sits some more (in front of a television). As a post-industrial city, Fat City depends on the fatness of the body since this is the body of a coordinator: a data processor, businessperson, real estate agents, or urban planner, not the manual laborer which made up the industrial city. And the fatness of the body depends on the fatness of the city, since it develops as a result of the automobile-dependent, privatized spaces of the fat city. The excess circulation of the city (roads) allows isolation of the person, which transforms again into excess circulation (blood vessels to the fat tissue). If the fat body becomes an obsession for health reasons and narcissism alike, it cannot be returned to a more sustainable size and shape as long as the city remains outside of theories of health. A healthy city is not just a city where people are healthy, but rather a city where the impulse to escape has been counterbalanced by social cohesion, so that city life still means movement rather than the virtual movement of the automobile.

In summary, we have to go back to the dual root meanings of the word "city"—*urbs* (buildings) and *civitas* (people). The term "fat city" has inherited the dual meanings of the word "city." In the scholarly literature, fat city has been used as a metaphor to signify the city's ever-expanding boundaries *(urbs).* Most cities are too big. Obesity-related research has given "fat city" a more literal meaning: the expanding waistlines of its residents *(civitas).* Obesity and urban forms are indeed linked. Perhaps Shakespeare said it best in *Coriolamus* (Act III): "What is the city but the people? True, the people are the city."

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