It is that if one enters any of the old City gates and proceeds following only a rule that requires you to take the longest line available at any time (without going back on yourself) then in each case from somewhere on the second line a line opens up from which the Bank interchange (the old centre of the City) can be seen. Again, we find a simple two-line logic underlying apparent complexity, and again we need have no doubt about its functional implication. It accesses the stranger to the heart of the city. An automaton could find the centre – so a stranger could.

However, when we compare the two levels at which we find this two-line logic, there is a geometric difference which we can summarize in a simple principle: the longer the line the more likely it is to strike a building facade at an open angle; the shorter the line, the more likely it is to strike a building at a right angle. This is exactly the opposite of the current rather pompous urban fashion to end major axes at right angles on major building facades. Historically this usually occurs where urban space is taken over for the symbolic expression of power, whereas the City's urban space structure is about the movement required to create a dense encounter field. The right angle relation of facade to line is used in the City, as it were, to illuminate the smaller-scale and spatially more complex areas, and to make them visible from the larger-scale grid. Thus we begin to see not only that there is an interior logic to the city's apparently disorderly grid, but that this inner logic is fundamentally about movement, and the potential that movement gives for creating copresence. We see that many of the properties of urban space that we value aesthetically are a product of this functional shaping of space.

These consistencies in spatial patterning show how the City is put together locally, and how it therefore works as a series of experiences. But the city also acquires a global form. To understand this, and why it is important, we must begin to formalize our understanding a little. It will turn out that the line pattern of the city is the most important to its global structure, and we must therefore begin by examining this if we wish to move the focus of our analysis from the local to the global. We may begin by a simple observation: that to go from any line to any other one must pass through a certain number of intervening lines (unless of course the origin line directly intersects the destination line). Each line thus has a certain minimum line 'depth' from another, which is not necessarily a function of distance. It follows that each line has a minimum average line 'depth' from all other lines in the system. Because lines will always be shallow from some lines and deep from others, one might expect that this would average itself out. The surprising thing is that it does not. There are substantial differences in the mean depth of lines from all others, and it is these differences that govern the influence of the grid on movement in the system: roughly, the less depth to all other lines, the more movement; and the more depth the less movement.

These configurational pictures of the City from the point of view of its constituent lines can be measured exactly through the measure of 'integration'. The 'integration value' of each line reflects its mean linear 'depth' from all other lines in the system. We can then map these integration values, and produce a global integration map of the whole of a city, as in Fig. 28.4a. We can also produce another highly informative map, one in which we calculate integration only up to three lines away from each line in every direction, and which we therefore call 'local integration', or radius-3 integration, in contrast to 'global' or radius-n integration (Fig. 28.4b).

Integration values in line maps are of great importance in understanding how urban systems function because it turns out that how much movement passes down each line is very strongly influenced by

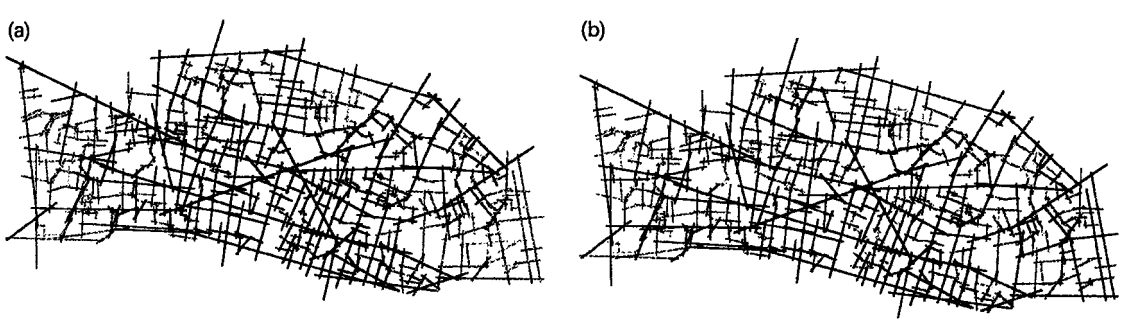

FIGURE 28.4