

Flexible Office Space

Is it possible to create a kind of space, which is specifically tuned to the needs of people working, and yet capable of an infinite number of spatial arrangements and combinations within it?

Every human organization goes through a series of changes. In offices, the clusters of work groups, their size and function, are all subject to change—often unpredictably. How must office space be designed to cope with this situation?

The standard approaches to the problem of flexibility in office spaces are: 1. Uninterrupted modular space with modular partitions (full height or half height partitions); and 2. Entire floors of uninterrupted space with low ceiling and no partitions (known as "office landscape").

Finally, it is in the nature of office space, that certain informal, semi-permanent arrangements grow more

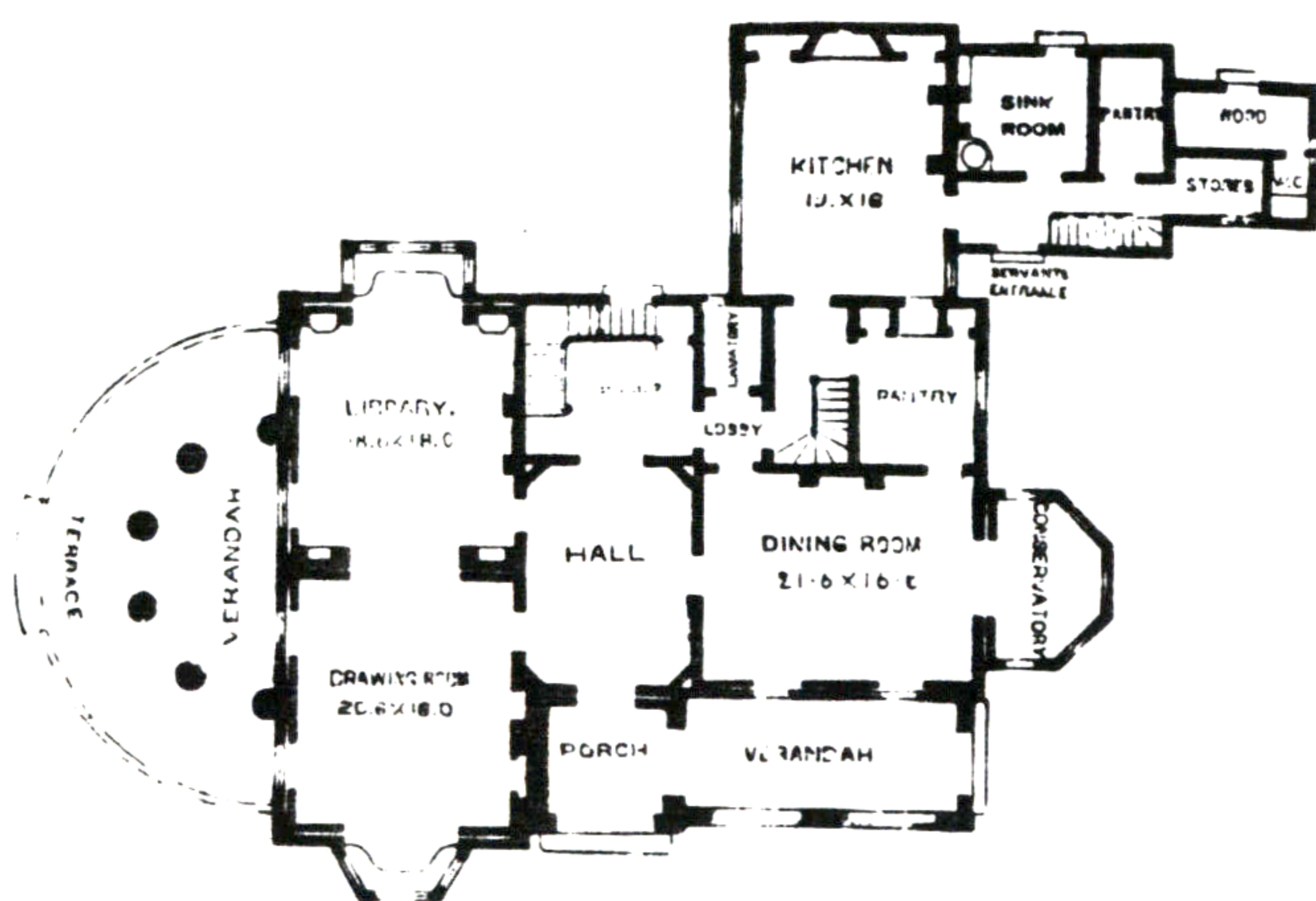
permanent over time (e.g., furnishings, filing systems "ownership" of special spaces or windows). This makes the occupants resistant to change. Though they may be willing to move when the growth of their own working group is at stake, they will resist moving strongly, as part of any general office re-shuffle, caused by the expansion or contraction of some other working group.

The modular partition system fails because the partitions become, in effect, ordinary walls; yet they are less useful than real walls for defining territory and sound insulation; what's more, the partitions don't necessarily satisfy the need for a semi-enclosed workspace, discussed in the pattern, *Workspace Enclo-*

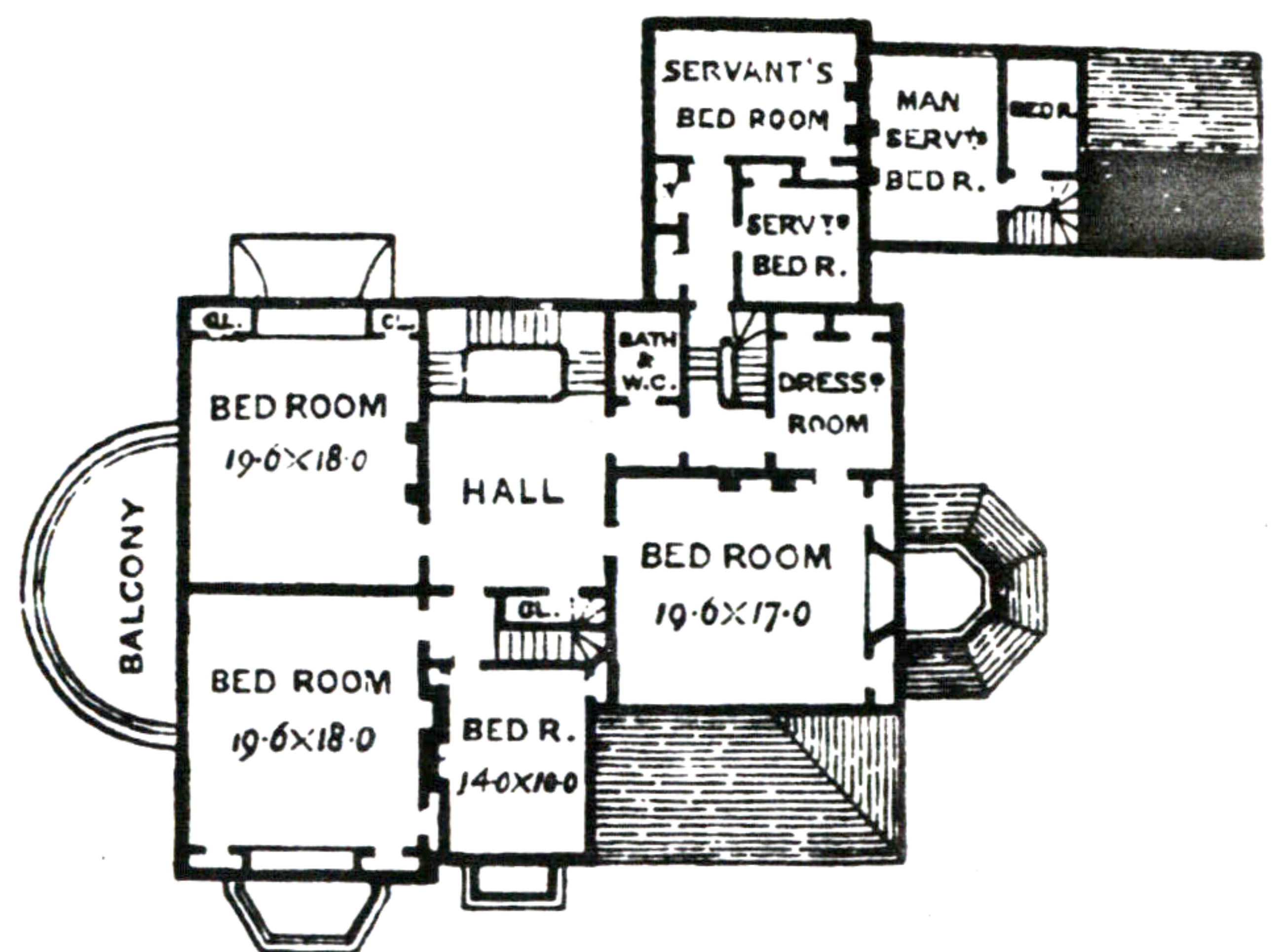
sure. It is clear then, that systems of movable partitions don't really solve the problem.

The office landscape solution, since it has no partitions, is more genuinely flexible. However, this system is only suitable for types of work which require neither a high degree of privacy, nor much internal cohesion within individual working groups. Moreover, extensive studies by Brian Wells, have made it clear that office workers strongly prefer small workspaces to larger ones. (*Pilkington Research Unit, Office Design: A Study of Environment, Department of Building Science, University of Liverpool, 1965.*)

(continued over)



Lower Floor



Upper Floor

Therefore: Create a variety of spaces throughout the office – comparable in variety to the different sizes and kinds of space in a large old house. Give these spaces sufficient interconnection so that it is possible to group and regroup them in a huge number of ways.

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Problem (continued)

He shows that, when given a choice among different sized offices, people choose desks in small offices rather than large ones. (The small offices contain 10 to 30 desks, the larger offices contain 60 to 100 desks, *op. cit.*, pp. 118-121.) And he shows that working groups in small offices are much more cohesive (defined by a larger percentage of internal sociometric choices), than the working groups in large offices (*op. cit.*, pp. 113-118).

It is clear then, that the office landscape, though it solves the problem of flexibility for relatively uncohesive working groups, is not suitable for an office whose working groups must be cohesive. It is never well-adapted to any particular work groups; it never meets the need for social cohesion among a handful of workers, discussed in the pattern, *Small Work Groups*.

We discuss the partition solution first. In a naive sense, it seems obvious that the problem can be solved by movable partitions. However, in practice there are a number of serious difficulties.

1. If partitions are made easy to move, they become lightweight, and provide inadequate acoustic insulation.
2. If the partitions are both easy to move and acoustically insulated, they are usually very expensive.
3. The actual cost of moving a partition is usually so high that even in highly "flexible" and "modular" systems, the partitions are in fact very rarely moved.
4. Most serious of all: It is usually not possible to make minor changes in a partition system. At the moment when one working group expands, and needs more space, it is only by rare accident, that the

working group next door, happens at this same moment to be contracting. In order to make room for the expanding group, a large part of the office must be re-shuffled, but this causes so much disruption that many office managements adopt the simpler solutions—they leave the partitions as they are, and move the people.

Neither the flexible partitions nor office landscape, really works. Neither creates space that is both well-adapted to specific work arrangements *and* truly flexible. A clue to an altogether different approach to flexibility, comes from the fact that organizations which use converted houses as office space, have no difficulty with this problem at all. Indeed, it appears that these old buildings actually provide more real flexibility, than the apparent flexibility of modular partition offices. The reason is simple. Since there are many small rooms, a few large rooms, and many partially defined spaces, in these old houses, usually interconnected in a variety of ways, it is possible to distribute and redistribute spaces, without going to any expense at all. The system is truly flexible—since changes in connections can be made in a few minutes,

at no cost. Yet the acoustic characteristics are excellent—since most of the walls are solid, often load bearing walls. (For indirect reference to the popularity of one-time houses as office accommodation, see *Peter Cowan, et al., The Office: A Facet of Urban Growth, Joint Unit for Planning Research, University College, London, 1967, pp. 90-96.*)

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This pattern is tentative. If you have any evidence to support or refute its current formulation, please send it to the Center for Environmental Structure, P.O. Box 5156, Berkeley, California 94705; we will add your comments to the next edition.