

*A seminar room won't work if the group is too large, or too spread out, or if you can't see everyone's face.*

1. When people sit down to talk together they try to arrange themselves in a circle. Empirical evidence for this has been presented by Margaret Mead ("Conference Behavior", *Columbia University Forum*, Summer 1967, pp. 15-19), and by Paul Byers ("The Idea in the Middle of the Table", *Columbia University Forum*, Summer 1967, pp. 20-25).



One of the reasons for the circle

as opposed to other forms, is the fact that people like to sit at an angle to one another, not side by side. (Robert Sommer, "Studies in Personal Space", *Sociometry*, 22, September, 1959, pp. 247-260.) In a circle, even neighbors are at a slight angle to each other.

2. Maximum eyeball to eyeball distance for comfortable group discussion is somewhere around 9'; derived as follows: People in the seminar should be able to talk casually, without raising their voice; should be able to see details of one another's face; should be able to pass objects around among themselves; should be close enough together so that clear vision includes one head, but not two, of the people furthest away, thus focussing on person to

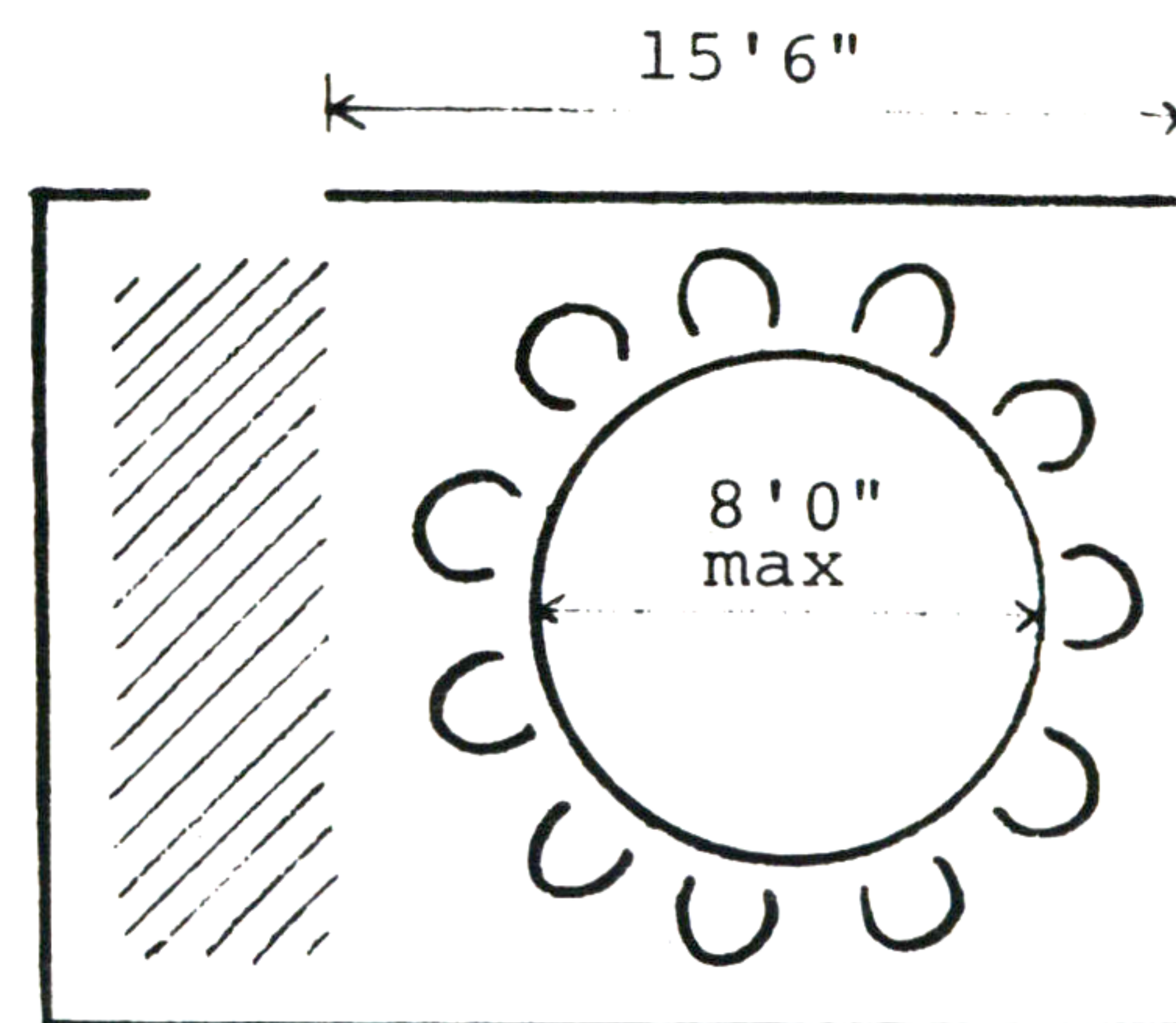
person communication. Edward Hall has established: the upper range for full casual voice is about 8'; a person with 20/20 vision can see details of facial expression up to 12'; two people whose heads are 8-9' apart, can pass an object if they both stretch; clear vision (i.e. macular vision) includes 12 degrees horizontally and 3 degrees vertically—which includes one face but not two, at distances up to about 10'. (See Hall, *The Silent Language*, Doubleday, NY, 1959, pp. 163-4; and *The Hidden Dimension*, Doubleday, NY, 1966, pp. 118-9.)

Thus a small group discussion will function best if the members of the group are arranged in a rough circle, with a minimum diameter of 8'. (continued over)

## *Square Seminar Rooms*

*Therefore: Make the seminar room about as broad as it is long; it may be square or round or irregular or slightly off square. Make it large enough to contain a round table 6'8" in diameter; thus about 15'6" across.*

*Also create a small area in the room, tangent to this 15'6" area, with the entrance in this second area. Let the seats around the table be as informal as possible — individual chairs, sofas, etc.*





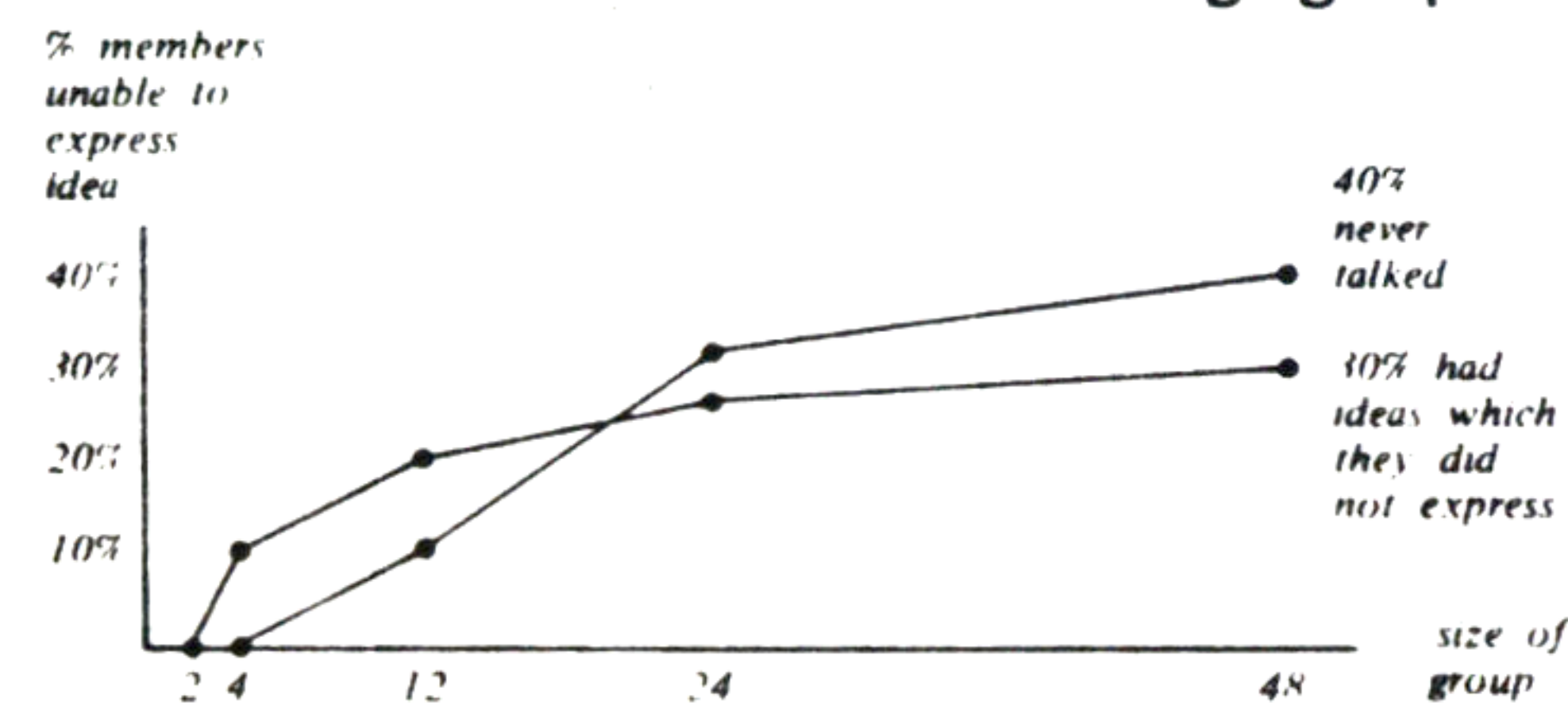
# Square Seminar Rooms

## Problem (continued)

3. We now go on to discuss the details of a seminar situation. At this diameter, the maximum circumference of the circle will be 25.1 feet. It is known that people seated at a table, require 27 inches each for comfort, (*Time Saver Standards, Fourth Edition, McGraw and Hill, NY 1966, p. 15.*), so there can be no more than 12 people round the circle.

This figure gets additional support from an experiment reported in Bernard Bass (*Organisation Psychology, Allyn, Boston, 1965, p. 200*). It has been shown that the number of people in a group influences both the number who never talk, and the number who feel they have ideas, which they have not been able to express.

The results of this experiment are shown in the following graph.



There is no particularly natural threshold for group size; but it is clear that the number who never talk climbs very rapidly. In a group of 12, one person never talks. In a group of 24, there are six people who never talk.

4. The quality of discussion in a small group improves if the arrangement of chairs is informal.

The following quotation from Byers (*op.cit.*, p. 23) gives evidence for this view:

"This conference was later divided into small workshop groups of about 15 people each. Some groups met in small lounges furnished for relaxation in a social setting. One group, however, was given a large classroom where student desk chairs had been arranged in a circle.

The groups meeting in the lounges reported having warm, interesting, fruitful discussions. The group that met in the classroom and had to sit in the desk chairs reported, on the other hand, that they had difficulty keeping the discussion alive.

"... two photographs ... show the group in the desk chairs. Other ... photographs (show) different groups meeting in lounges. One can see at once that the variation of posture is far greater in the lounges than in the classroom. In each case the identity of the group and the quality of the participants is signaled by the circle, the basic arrangement. But in the lounges the circle is one that allows individuality: ... the participants felt free to move chairs around, and as their relation to the group or the discussion changed over time, they could and did change their postures and positions.

"For the group in the circle of desk chairs, however, the spacing of people in relation to one another was dictated by an exact placement of chairs in a circle, and the postures of the participants were, in turn, dictated by the chairs ... The arrangement in the classroom was so rigid that the participants did not even try to create a more informal atmosphere by rearranging the chairs."

There is some doubt about the validity of this result. In the photographs, it looks as though the people in the lounge have arranged themselves 2 deep, with the result that the diameter of the lounge circle is about 9 feet, while the diameter of the classroom circle seems to be about 15 feet. On the basis of the argument above, this alone would account for the success of the lounge group, and the failure of the other.

In any event, it will not always be possible to put lounge type fur-

niture into discussion rooms, partly because people may need a table to write on, in which case they will need upright chairs.

Finally, there are the following points to be made:

5. Although, in theory, a long narrow room could house the kind of group which has been described, in practice such a room will invite a long narrow table (many available tables are long and narrow)—especially since people may tend to use the biggest table which the room can hold. It is therefore important that the room be near to square, as specified.

6. The chairs will stick out 15" from the table edge; and 30" will be required beyond that, for circulation. An eight foot table therefore requires a disc of diameter  $8'0'' + 2(45'') = 8'0'' + 7'6'' = 15'6''$ .

The smallest table which could be useful for such a room would be a 6 foot table (capable of seating 8 persons). In this case the minimum diameter circle required would be  $6'0'' + 7'6'' = 13'6''$ .

7. There should be an area at one end of the room which has space for groups of two and three to stand and talk after a meeting, for people to take off coats, scarves, etc., in cold weather, and which contains the door(s).

## Context

Any space where face to face group meetings or seminars are to take place.

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