Spacing and Orientation in Co-present Interaction

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Abstract. An introduction to the way in which people arrange themselves spatially in various kinds of focused interaction, especially conversation. It is shown how participants may jointly establish and maintain a spatial-orientational system, referred to as an F-formation, which functions as part of the way in which participants in conversation preserve the integrity of their occasion of interaction and jointly manage their attention.

Keywords: Face-to-face interaction, interpersonal spacing, proxemics, posture, orientation.

I begin with a very elementary observation: behaviour of any sort occurs in a threedimensional world and any activity whatever requires space of some sort. There are three aspects to this requirement: first, any behaving organism requires space within which it can carry out its activities, whatever these may be. If a bird is to build a nest, there must be space available in a tree or bush or hole in the ground where it may do this. If a cat is to take a nap, there must be a space where it can lie down in whatever posture it might choose. Second, the spaces available must have physical properties that will allow the behaving organism to do what it needs to do: A cat seeking somewhere to sleep must at least have firm ground on which to rest – it cannot lie down on water - and it must have space enough in which to repose. Third, however, the space that is required and the possibilities for action it provides for must also somehow be differentiated from other spaces. There must be some way in which the behaving organism can distinguish between the space that is presently its use-space, and other space, which is irrelevant. This is because any line of activity that an organism engages in involves a highly selective relationship between the acts in which it engages and the information from the environment that, in some way or other, is being used in guiding those acts. Now an organism can actively select out what is relevant from what is irrelevant and so, in terms of where it can be seen to pay attention and in terms of its physical orientations and spatial movements, it can be observed to differentiate its present use-space from irrelevant space. However, whenever possible, it seems, advantage is taken of the differentiated features of the environment that are just about always present to assist it in doing this. Another way to put this is to say that an organism exercises control over what stimulation it deals with partly through selective attention but partly through selecting spaces in the environment that, because of their physical characteristics, shut out some kinds of stimulation, let in others and, within the space itself, make available what is needed.

Now since different kinds of activity involve different kinds of relationships between space from all these points of view, the nature of the use-space that an organism has varies according to what it is doing. The use space of the cat when sleeping in its basket in the sun in front of its favourite window is quite different from its use-space when it is eating and different again from when it is sitting before a mouse-hole waiting for the mouse to emerge. Likewise, the use-space of someone sitting at a desk before a computer is quite different from the use-space of the same person who gets up from the desk and stands before his bookcase searching for a book.

A further point to bear in mind is that activities are always hierarchically organized. Individual acts, moment to moment behavioural events, are not just concatenated together, one after the other, but are always under the guidance of a larger plan of some sort. Correspondingly, the space selected within which an activity sequence is carried out, is selected in such a way that the various elements within the activity system as a whole can all be accomplished. So, for a given project, a segment of the environment is demarcated and, so to speak, preserved for the duration of the project, notwithstanding the fact that at any given stage of the project not all of this segment

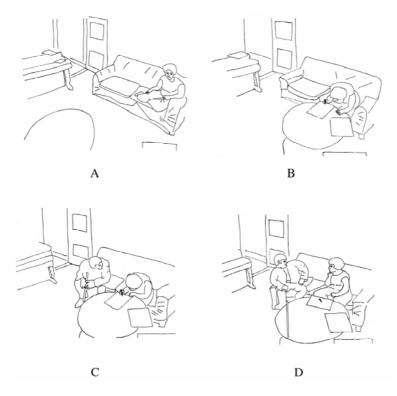


Fig. 1. A: W sits on sofa watching television. B: W at work colouring a drawing on the coffee table. C: H enters and sits beside W, watching her at work. D: H and W orient jointly to one another for conversation. (Drawings after stills from a video-tape made under the direction A. E. Scheflen, Project on Human Communication, Bronx State Hospital, Bronx, New York, c. 1970).

of space may be being used. I will now illustrate these points more specifically, turning from "behaving organisms" in general to human beings.

Consider someone engaged in watching television (Fig. 1 A). In order to do this a situation must be established where the person can remain in some comfort for a relatively extended period of time in such a way that they can have an unobstructed view of the television screen. Hence they claim for themselves, for the duration of this activity, a place where they can put their body and sustain it in comfort, and a space that permits them to maintain an orientation to the television set suited to the requirements of their vision. The result is that, within the wider space within which the television is kept, the television watcher, for the duration of this activity, through his behaviour, defines a segment of the environment which, as one might say, is taken up with, or consumed by the activity of watching television - and this segment of the environment extends from the place of sitting, in a sort of more or less narrow cone, outwards to the television set, possibly a little beyond, and possibly a little wider than would be required if the eyes were only to be focused on the screen.

Now such a space, which I have referred to as a *transactional segment*, comes into existence and is sustained only for the duration of given project. When a person changes his project, the way in which he organizes himself in relation to the space around him and the kind of space that is claimed for the line of activity he is engaged in, changes. Changes in spatial and postural orientation are, for this reason, excellent clues to major junctures in the flow of behaviour. So, as we may note, when the television watcher changes to doing something else (Fig. 1 B) as, in this case, she changes to engage in painting or colouring something on a piece of paper in front of her, we get a different kind of organization and a different kind of transactional segment.

It is of course common in any setting for several individuals to be co-present. How they orient and space themselves in relation to one another directly reflects how they may be involved with one another. Here (Fig. 1 C) someone enters the room and establishes himself in such a way that the activity of the first person becomes the object of his attention, much as television had been for the first person earlier. We see that this is so from the way in which he has positioned his body and oriented its various parts, especially from how he has oriented his face, so that, as far as we can judge, he is focusing his visual attention upon the activities of the hands of the woman who he has sat close to. Here, the second individual's transactional segment encompasses and includes the first individual. Note, however, that the first individual does not change her orientation nor the way her hands are directed toward the paper in front of her. She continues her activity as before and so maintains the transactional segment she had established for this before. Thus although we may say that the second individual has set up a transactional segment that overlaps the transactional segment of the first individual, the first individual does not include the other's transactional segment in her own.

Moments later, however, perhaps when she had come to the end of a particular segment in her painting, she changes her posture and orientation and now she *does* include the other in her transactional segment (Fig. 1 D) The second individual still includes the woman in his transactional segment, but he, too, has changed his posture, mirroring that of the woman. Now they include each other in their transactional segments, however, that they do this in a particular way. They now have a *shared_transactional segment*, a *common* space, within which their *common* activity - in this case exchanging spoken utterances - can be carried on.

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Note that, in this case, we may see how the shared space between them is created by a sort of reciprocation of upper body and head orientation, but that this also serves to establish what is *not* in the shared space. The very bodies of the participants, thus, can come to serve in the process of making and maintaining the boundary between the inner world of current engagement, that is between them, and the outer, irrelevant, *disattended* world beyond.

We notice, more generally, then, that when people engage together in talk with one another - what Erving Goffman distinguished as "direct engagement", which is characteristic of "focused interaction" - they very often enter into a distinctive spatial-orientational arrangement (Fig. 2), which is jointly sustained. By the way the participants are oriented in such an arrangement they make available a shared, inner space, which is distinct from an outer space.



Fig. 2. A conversational grouping showing a jointly sustained spatial-orientational arrangement

Note that this spatial-orientational arrangement is sustained through time and its maintenance requires the cooperation of all the participants. They cooperate together to keep up this arrangement and, indeed, if you watch a grouping of this sort over a period of time it is possible to see how, if one participant changes somewhat his spatial position or orientation, the others will adjust their spatial position or orientation to

compensate, so that the circular arrangement we see here is maintained. Spatial-orientational arrangements sustained over time in this manner, through the cooperation of the participants, will be referred to as *formations*. There are, in fact, a number of different kinds of formations that people enter into commonly, their spatial-orientational organization differing according to how the participants' attentional involvements are organized. This is governed, of course, by what it is the participants have gathered together to do. Some of the commonly occurring different types of formations will be illustrated briefly later.

The formation that is characteristic of a conversation of the sort we have just introduced in which, as we have seen, the participants organize themselves so that a *shared transactional space* is established and maintained, has been referred to as an *F-formation* and, as may be seen from Fig. 3, we can distinguish various functional spaces within it, functional spaces which are, as one might say, "generated" by the systemic relationships of the behaving individuals.

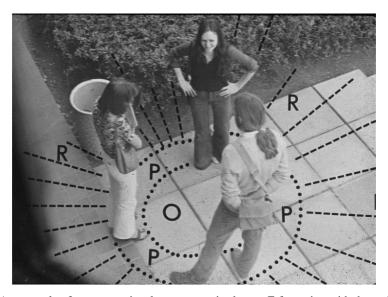


Fig. 3. An example of a conversational group organized as an F-formation with the main functional spaces indicated. For explanation see text.

The shared, inner space, called here the o-space, which the participants actively cooperate to sustain, is the space reserved for the main activity of the occasion. In conversation this is the exchange of utterances organized around a common theme. This space is surrounded by a narrower one, here called the p-space, which provides for the placement of the participant's bodies and also personal things such as briefcases, handbags, and the like, which are typically treated as in some way a part of a person, even though physically separate. To become a member of a formation of this sort, you have to be in the p-space and, if you come from outside an ongoing formation, and seek to join it, then the participants have to alter their spacing in order to let you into this space. They must adjust their positions to make room for you. There are some interesting observations that can be made about how outsiders sometimes approach existing formations of this type, make a bid for entry, and then gain the permission of the insiders to become members. Only when the newcomer is able to be positioned so that he shares in the p-space is he found to be treated by the others as an equal participant in the proceedings.

Finally, there is the surrounding space, indefinite in extent, which can be identified as serving as a kind of buffer between the F-formation itself and the wider world beyond. This space has been termed the *r-space*. This is the space which, though not used directly by the activities of the interaction, is nevertheless actively monitored by the participants - and also noted by non-participants. This space can be established by considering the way in which different F-formations within the same setting space themselves (Fig. 4), by the way in which participants in the F-formations will take note of what is going on close by, but not beyond; and from the way in which outsiders behave when they enter this zone. For example, if an outsider is making a bid for entry into the ongoing formation, they may often wait within this zone. It thus also functions like a vestibule or visitor's room (Fig. 5). If, on the other hand, an outsider passes an F-formation on his way to somewhere else, and he passes within a certain distance of it, he is likely to display his disattention to the F-formation, for example by looking away or lowering his head as he passes. This also suggests how the F-formation exercises a sort of 'influence' over the space that immediately surrounds it and this is another way in which we can gain clues as to the extent of the so-called r-space.



Fig. 4. Spacing between adjacent F-formations



Fig. 5. An F-formation with three participants and an individual in 'outer position' awaiting an invitation to enter the F-formation. Note the split character of the outsider's orientation to the formation.



Fig. 6. An F-formation at Capodimonte, Naples, Italy. There are four participants and a fifth person that occupies an 'outer position' in the r-space. We have a *grouping* of five persons, but within this grouping there is one F-formation.



Fig. 7. An F-formation with three participants, a solo onlooker and a situation where one person is operating on another for practical purposes. Photo taken in 1978 near Lagaip, Enga Province, Papua New Guinea.



Fig. 8. An F-formation in Osaka, Japan

The circular form of the F-formation that we have illustrated - constructed for a particular kind of interactional activity, talk-mediated jointly focused interaction - is widely seen, from Naples (Fig. 6), to the Highlands of New Guinea (Fig. 7), to Japan (Fig. 8), to mention just a few places at random. But, just as the kind of interactional activity that it contains is not the only kind of interactional activity there is, so, correspondingly, this is not the only kind of spatial-orientational arrangement that people sustain. People come together in gatherings to sustain a variety of different interactional projects and the formations they enter into are structured to match. Note, in the picture from the New Guinea Highlands, the completely different kind of spatial-orientational arrangement that obtains between the two men on the left of this picture in which one is adjusting the wig of the other.





Fig. 9. An L-shaped dyadic F-formation (left) and a Vis-a-vis F-formation (right)

In the circular formation I have been discussing, note that the segment of the world outside the o-space that each participant can attend to if he wishes is *different* for each individual. This commonly arises when what is at issue for the participants is not in that outer world, but between them. Such arrangements are typical for talk about topics which are not related to things in the immediate environment. Where, as here, several participants are involved, the arrangement tends for this sort of talk to be circular. In conversations between just two persons, when the topic is disembodied, the arrangement tends to be "L-shaped". In this case, as you will see, the part of the environment to which each looks if he looks directly in front of him is different for each participant (Fig. 9 left). When, on the other hand, what is at issue between two people is their relationship, we often observe an arrangement where each faces the other directly (Fig. 9 right). This is common when people, in greeting, engage in a close salutation. Typically, when two people greet one another and then continue to talk

together on some topic, they can be observed to begin with a face-to-face arrangement and then to shift to an L-arrangement as they move from salutation to talk. This may be seen in the brief sequence illustrated in Fig. 10.



Fig. 10a. GC (far left) announces his intention to greet AF (in striped shirt on right)



Fig. 10b. GC and AF approach one another, preparing to shake hands



Fig. 10c. GC and AF shake hands. Note how their bodies are oriented in a vis-à-vis



Fig. 10d. GC and AF remain in a vis-à-vis arrangement while they continue in a 'greeting' exchange



Fig. 10e. GC and AF talk together about other things. They are now together in a new L-arrangement and occupy a new domain in physical space.

When the participants are jointly concerned about something that *is* in the immediate environment, on the other hand - say looking at an elephant at the zoo or watching a baseball game together (Fig. 11) then, not surprisingly, they arrange themselves so that

they can both attend to the same segment of the environment - and we have the socalled "side-by-side" arrangement. Of course, where the parties must also talk with one another, and there are more than two, you may get a kind of compromise between the side-by-side and the circular form, giving rise to a sort of horseshoe shape (Fig. 12).



Fig. 11. Pairs of people in "side-by-side" arrangement watching a baseball game. Note the almost equal spacing between the three pairs here. A further illustration of the way F-formations space themselves differently from one another than the persons that participate in them.



Fig. 12. The 'horseshoe' arrangement that can result when participants in "side-by-side" with more than two members wish to exchange spoken utterances

In the examples shown so far, the participants are potentially equal in status. That is, even if they do not exercise them, when participants are organized in these ways, they have the same right of participation as anyone else. In many encounters, however, this is

not so. Some participants have different rights than others. This, too, is reflected in spatial-orientational arrangements. For perhaps obvious reasons, if there is a single party to whom all participants are to give equal attention, but that party's behaviour is different from everyone else's, then a spatial separation between the participants arises which reflects the kind of interaction that obtains as, for example, in the teacher-student interaction so common among us (Fig. 13) or in situations where one person is the performer, the rest constitute the audience (Fig. 14).



Fig. 13. Spatial arrangements typical of occasions when there is an unequal distribution of rights to initiate talk or action

As Goffman showed us long ago, there are many different ways in which people interact, many of which may not involve talk at all. Even so, in such cases, we can see that the spatial arrangements that people enter into derives in a significant way from the kinds of involvements they have with one another. Thus, sometimes people remain together as a distinct gathering, perhaps for no other reason than that they are all



Fig. 14. A 'common-focus' gathering, typical of situations where there is a division of role between performer and audience

simultaneously resting after a meal or waiting for something they are all going to do together, but are not, for the moment, in other ways jointly engaged. This can give rise to an assemblage of people which we might call a 'cluster' in which we can distinguish no formation, in the sense of a common spatial pattern in which all share, maintained through co-operative action (Fig. 15). Another kind of grouping, which does have a distinct arrangement, and one that often exhibits through relative centrality of placement and relative proximity the social relationships of the participants, is the group photograph arrangement (Fig. 16) - a highly specialized kind of human grouping that presumably came into existence only after 1839, after the invention of photography. Yet another type of formation we may recognize is the one that arises



Fig. 15. A 'cluster' where participants are grouped but do not enter into a formation with one another

when all the participants do something in unison. Various forms can be observed here, of which the military marching band (Fig. 17) is one well known type. Then, perhaps, we might usefully contrast the starting line of a race (Fig. 18) with a queue (Fig. 19). In both cases the participants are all intent on the same outcome, an outcome which can only be achieved separately by each individual and is not shared. In the race, everyone wants to win, and is given an equal chance at the start to do so, but winning, unlike buying tickets or boarding a bus is something that only one person can do. The all-or-nothing character of the race outcome, contrasted with the turn-taking organization of the queue, is nicely reflected in the difference in spatial-orientational arrangement that may be observed in these two cases.



Fig. 16. A group photograph



Fig. 17. A military parade band



Fig. 18. The starting line for a cross-country race



Fig. 19. A queue for the bus

In what I have sketched here, I have been dealing with the way in which people organize themselves in the service of their interactional projects when they are in environments which do not limit them in how they can arrange themselves. However, as I mentioned at the beginning, our environment is highly structured - it is full of different surfaces, barriers, furniture, passageways of all kinds. This environmental structuring partly constrains the kinds of formational structures of gatherings that can occur but, of course, the environment is itself structured by people to meet their interactional needs. Furniture arrangements, set up in various ways, provide a kind of permanent scaffolding for interactional occasions and, in some degree, take over the boundary-defining work that is done in unstructured environments by the bodies of the participants. However, often the fixed features of the space cannot be easily changed, interactions of various kinds may have to take place in circumstances that set constraints on its organization and this will have an impact on the nature of the interaction and set limits on what is possible within a given setting. This raises, of course, the issue of the interrelations between the structuring of the environment and the structuring of the interaction. This very complex and fascinating question is one that requires extended discussion. Unfortunately, this cannot be undertaken here.

What I have tried to do is to provide some elementary observations on how people organize themselves spatially in relation to their interactional projects. From this I hope it will be apparent that a development of the observational study of how people employ space, bodily orientation and positioning as a means of organizing the attentional structure of social encounters, might usefully add to our understanding of how interaction is conducted. These observations will also be helpful to those who seek to simulate the spatial aspects of social interaction, along with the simulation of exchanges of speech and gesture and facial expression.

Postscript

This paper is a slightly modified version of a presentation made to the American Anthropological Association in Philadelphia in 1988. The ideas discussed here were first formulated some years before, when I was a colleague of Albert Scheflen with the Project on Human Communication, Bronx State Hospital, Bronx, New York. I have altered it very little from the original text, the reading of which was coordinated with a slide presentation. The photographs inserted in the present text, most of them derived from the slides used in the original presentation, were all taken by myself and I reserve copyright for all of them. As this was a text written for oral presentation, no bibliographical citations have been included. I list below a brief selection of titles which form the background for what is presented here and which will be useful for anyone who wishes suggestions for further reading.

Erving Goffman (1961). "Fun in games" in *Encounters: Two Studies in the Sociology of Interaction*. Indianapolis, IN: Bobbs-Merrill; Erving Goffman (1963). *Behavior in Public Spaces* New York: Free Press of Glencoe; Erving Goffman (1971). Chapters 1 and 2 in *Relations in Public*. New York: Basic Books; Adam Kendon (1990). *Conducting Interaction*. Cambridge: Cambridge University Press; Adam Kendon (1992). The negotiation of context in face-to-face interaction. In Alessandro Duranti and Charles Goodwin, eds., *Rethinking Context: Language as an interactive phenomenon*. Cambridge: Cambridge University Press, pp. 323-334; Albert Scheflen with Norman Ashcraft (1976). *Human Territories: How We Behave in Space-Time*. Englewood Cliffs, NJ: Prentice-Hall, Inc.