Here and There, Now and Then:
A Teleworker's Reflections on Workplace

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Preface

A 'position' paper's awfully sticky,
when 'where' I am is just what's tricky!
Where 'when', as well, also's perplexing
Time zones, you see, can be quite vexing.
Work times and places are quite dynamic,
my best description is "nomadic."

Introduction

For the last eight years I've worked as a long-distance teleworker, first for Apple Computer and more recently for IBM. As a result, I've had a number of experiences which expose ways in which overly simplistic assumptions about the nature of "the workplace," and associate practice are embedded in organizations and technology. In this position paper I offer some reflections on the nature of the teleworker's workplace, in the hope that it may provide useful grist for the workshop.

I discuss three perspectives on 'workplace':
- I begin with a discussion of "where I work" from the point of view of providing "accounts" to various parties. While one might think that at least *saying* where one works is a relatively simple matter, I suggest that this isn't so.
- Next I focus on a particular example of a workplace, the meeting room, and describe my experience attending a meeting via speaker phone. On the basis of this example, I suggest that it is not so much place that is important, but rather the movement over time through a trajectory of places, each which provides a changing configuration of constraints and resources for collective interaction.
- Finally I say a few words about my own workplace—that is the configuration of resources with which I try to surround myself regardless of where I am physically located—and suggest that there, too, it is movement among individual places over time that is an important, albeit overlooked, aspect of workplace.

Obviously this is a highly personal and highly particular account. Nevertheless, I think such reflections on personal experience have an important role to play in coming to grips with the notion of 'the workplace.' While we can not generalize from the experience of one, or even a few, nevertheless, any new conceptions we arrive at should at least be able to embrace the experiences I describe.

1. Where Do You Work?

Whenever someone asks me where I work, I feel a little internal hesitation, a slight catch, as I wonder what to say. Even though I've answered the question many, many times, it is interesting to observe how many different answers can be appropriate:

- Where do I work? I 'work at' IBM, a gigantic corporation worldwide in scope, with offices in virtually every major city, and most of the world's nations. (This is the answer I give to most strangers.)

- Where do I work? I 'work out of' my home in Minneapolis. (This is what I say to people who know IBM doesn't have a research lab in Minnesota.)

- Where do I work? I 'work with' a group of people who are located at the IBM T.J. Watson Research Center in Hawthorne[1], New York (except for the colleague in California!). (Even though this is one of the places I don't frequently inhabit, this is what I prefer tell IBM colleagues that I meet for the first time, because it helps them understand what I do and who I am likely to know.).

- Where do I work? Perhaps, for a definitive answer, we should ask my employer, IBM. If you were to access the IBM corporate database through the "Blue Pages" global directory (as any IBM'er who didn't personally know me would do), and searched for me in the Watson directory, you would not find me. Instead, you would have to do a search of all IBM sites world wide, and when you found me (as you would since I do work "at" IBM), you would find me listed in the Chicago Directory. Although I occasionally visit my in-laws in Chicago, I have never done IBM business there. It turns out that I am in the Chicago directory because it is the directory closest to Minneapolis (the Minneapolis sales office not being large enough to warrant its own directory). And, in fact, my database entry clearly gives an address showing that I work out of the IBM sales office in downtown Minneapolis, an office to which I have never been. This would be an amusing fiction, except that corporate attorneys sometimes send mail to that address, to the bewilderment of the Minneapolis mail room personnel who had never, until then, heard of me. Once upon a time, as an energetic new employee, I tried to change this. After some effort, I managed to get to the person who was actually able to move me (conceptually, of course) to New York and to Watson. All was well, for a few weeks, until I noticed that my payroll taxes were now being withheld for New York. It turns out that the database has a single field called Lives_and_Works_At, thus reifying an incorrect assumption about my life.

- Where do I work? As far as the government is concerned, I work in Minnesota since I reside there over 75 percent of the time. I found this dilemma — whether to run afoul of the government and the tax authorities, or whether to be a bit inaccessible to the corporate lawyers — easy to resolve. So now, as far as the corporate ontology is concerned, I am Thomas D. Erickson, 9919976, listed in the Chicago directory, and working out of the Minneapolis sales office, where I've never been.

Where do I work? The answer depends on who you are and why you're asking.

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[1] Actually, the Watson Research Center is better known for being in Yorktown Heights, New York, but the center outgrew its space there a decade ago and half of the Computer Science department got moved fifteen minutes south to Hawthorne, NY.

2. The Meeting Place

Since the issue of where I work, in the large, is complicated, perhaps we would do better to begin with a simpler case. Rather than looking at my entire work universe, let's look at examine a smaller bit, something I regard as the atomic unit of the organization: the meeting. The following account, recorded not long after the event, describes a meeting I attended several years ago. Although its circumstances were unusual, as you will see, I argue that what this story reveals is typical of most meetings.

> I 'attended' a special meeting with about two dozen people. I was attending via speaker phone; all the other attendees were co-located in the meeting room. Because it was a relatively large meeting, the moderator called on people, and the amount of time that someone spoke was kept brief, the result being that nobody got to say everything they wanted. After two hours the meeting approached its scheduled end. At this point, as an experienced telecommuter I would usually, at this point, jump in and say 'thanks for calling', and then everyone would chorus 'good bye' and I'd hang up. Or the leader of the meeting would initiate the exchange, and the same thing would happen. However, this time, I missed my chance to jump in, the leader of the meeting forgot about me, and the meeting ended with me still 'there' on the speaker phone.

> What happened next was quite interesting. When the meeting 'ended', everyone burst into conversation. After all, the participants had been building up things to say for two hours. I had an especially nice vantage point because the speaker phone in the meeting room was very sophisticated— it had directional microphones that tried to home in on the person speaking, and it was going crazy trying to focus on a conversation. I was getting a snatch of conversation from here, and a snatch from there — it was like having an out of the body experience at a cocktail party. Interestingly enough, because I knew all the people and issues, I could actually guess at a lot of what was going on even though I heard only a few seconds of each conversation: People were making meetings, clarifying positions, apologizing, etc. It struck me that this "after-meeting" part of the meeting was incredibly productive —a lot of "conversation potential" had been built up during the meeting, and only now was it being realized.

There are two points to make here. To begin with, I should note that this observation was accompanied by quite a bit of dismay on my part. As a teleworker, I realized, I typically miss the 'post-meeting' part of the meeting (as well as its counterpart, the 'pre-meeting'). For me, and anyone who attends meetings via phone or other forms of digital mediation, meetings take on a digital — that is, an on/off — quality. One moment everyone is 'there', the next moment, everyone has vanished. I typically miss the gradual gathering of people in the meeting room (typically people wait to start the call until the meeting is ready to 'start'), and I miss the conversation afterwards, whether it be the synchronous burst of multiple conversations that occurred in this case, or the more usual chats that occur as people leave their seats, or find themselves headed in the same direction through the hallways. Even when I am actually 'present', I am not able to participate in the subtle selection of conversational partners and semi-private or private conversations.

Another point to make here has to do with the function of the place in this meeting. While it is important that people came together in a particular place, and while it was useful that that place provided a particular configuration of resources (a table, whiteboard, private room, speaker phone), it seems to me that what was more important was the interactive trajectory of the meeting. That is, temporally and spatially, a series of phases happened:
• People converged on the meeting room; perhaps some participants encountered one another on the

way or outside the room and paused to chat.

- Those who arrived before the meeting started, found themselves in a room with others with a few minutes to pass. Perhaps they engage in casual conversation; or perhaps they conduct business that they think they can make progress on in a few minutes.
- At some point the meeting 'starts.' In addition to this being the point where remote participants are normally 'brought in,' it is, more generally, the point at which constraints on collective behavior come more strongly into play. That is, people are now discouraged from having side conversations with one another; a moderator controls the floor, allotting turns to speakers and moving through a publicly displayed agenda; and so on. These, and other constraints, are what aid the group in making progress on its collective business.
- At some point the meeting 'ends.' Remote participants 'leave', and the co-located participants depart more gradually, taking advantage of the relaxation of interaction constraints to interact with one another.

It seems to me that it is this entire trajectory — a gradual coalescence, a period of constrained interaction, followed by a relaxation of constraints and a transition to other activities — that is important in making the meeting useful. That is, for the face to face participants, the meeting accomplishes both its formal objectives, but also provides a fertile venue for informal meetings, opportunistic information exchange, and below-the-official-radar exploratory conversations. The remote participants, on the other hand, are unable — or at least handicapped — in their ability to participate in the non-formal activity that occurs on the meetings' temporal and spatial boundaries.

I suggest that any new conception of the workplace needs to account for situations like this. That is, it is not so much 'place' that is important in work, but rather trajectories — a sequence of shifts in a group's interactive possibilities governed by changing resources and social norms—that provide a changing milieu which supports a variety of interactions.

3. My Personal Workplace

Because I work in so many places, and move among places so much, I have become acutely aware of
- the various resources I need to get work done
- the work I need to do to make sure those resources are in place
- the kinds of work I can accomplish with certain sets of resources

The table below summarizes the ways in which I typically configure my work environment in different types of places (note that I could add many more places — my front porch; a shared lab space at Watson — and many more resources — the presence of an electrical outlet; the availability of good reading light). The configuration of resources that I deploy in a particular place is a response to a variety of forces, ranging from the amount of physical surface area available (for spreading out computers, papers, books and so on) to the types of network connectivity available, to the presence of expensive resources (e.g. color laser printer; an office building), to the likelihood that I will be interrupted.

It is worth noting that sometimes I go to particular places voluntarily because the resources they provide (as well as the resources they 'insulate' me from) enable me to do certain kinds of work. For example, I will often, when working out of Minneapolis, go to a cafe to read, edit, or work on a paper. In part I do this to remove myself from the potential interruptions of incoming email or phone calls, in part to remove myself from the distractions of other work, and in part because the cafe provides a blend of public activity and personal anonymity which I find energizing for certain types of work. Other places in which I work — airplanes and hotels — are obviously not voluntary choices, but can nevertheless be well suited for certain types of work for some of the same reasons as working in cafes. I will often, for

example, plan to critically read and edit a paper on my commute to Watson because I know that the task of reading with a pen in hand can be accommodated by the rather meager resources of the airplane seat.

Resource x Places	Mac	Mac Network	PC	PC Network	Printing	Faxing	Work Surface	Files & Books	Colleague Availability
Home office	yes	yes (v. fast)	yes	yes (slow)	Ink Jet (at hand)	yes (at hand)	very large	nearly all	Remote via tel, email, Babble
Watson Office	yes	yes (fast)	yes	yes (v. fast)	Many (1 to 5 min. away)	yes (3 min. away)	large	few	Mostly co-present (0 to 3 min. away); also email, tel, Babble
Hotel	yes	yes if not PC net	yes	yes if not Mac net	no	no	medium	no	Remote via tel, email
Sunroom at home	yes	no	no	no	no	no	large	1 min. away	Can hear phone ring
Cafe	yes	no	no	no	no	no	medium	no	no
Airplane	yes if no PC	no	yes if no Mac	no	no	no	tiny	no	no

More generally, I will often try to arrange my day so that I move among places with different sets of resources: I may begin the work day in my home office doing email, take a paper down to the front porch to edit, return to the office for a phone meeting, and go off to a cafe for a couple of hours in the afternoon to write. Note that this movement is neither random nor at my own whim: I check email in the morning to see what has accumulated over night and whether there are any changes to the day's schedule; if I am up early, I may spend some time on the front porch because I know that my east coast colleagues won't be in the office yet; I am often in my home office in the mid to latter half of the morning, because that is when many of my co-workers are present and active on "Babble", a chat-like shared conversation environment that we 'hang out' in and use for informal, opportunistic talk.

In many ways, my movements between these places for work have similarities to my comments about meeting trajectories. That is, it feels to me that what is important is not so much the particular workplace, as the movement among work places: that is, it is my ability to change the sets of resources available by moving around (and thus changing the constraints and possibilities for action and interaction that the presence or absence of particular resources entails) that helps structure my day and, in a sense, motivates my activity. Or to say it in a slightly different way: for me, it feels as though my "workplace" is a path along which I move, partially of my own volition, partly in response to my knowledge or expectations about what is happening elsewhere, and what resources (which can include the presence and availability of particular people at a remote site) are likely to be available.

4. A Final Thought

In a sense, the metaphor of nomadic computing, which was popular a few years ago, is quite apropos. However, one must discard the popular conception of nomads as wanderers who go where they will across an unknown landscape. Instead the more accurate notion — of peoples who have a deep understanding of the ways in which resources are spatially and temporally distributed across a well defined territory and who go where (and when) the resources they need happen to be — seems quite apt.