10 / OFFICE LAYOUT PROCESS

Later, based on that early experience, my colleagues and I developed a new kind of office furniture system for Herman Miller. The purpose of this system was to provide a setting where people could really work, where their offices were really personal, and where the "dead landscape" typical of modern office furniture systems had disappeared. We provided the user with a step-by-step generating sequence, which allowed each person to work out the ideal layout for his/her own office step by step, then to realize it, by building it in the movable cardboard model.

What follows are selected passages from the layout manual for that process, together with photographs of offices people designed for themselves using the process.

1. INTRODUCTION

We aim at an office which is perfectly adapted to you and your work. We should like to help you make your office as finely tuned to you and your work habits as a classic carpenter's workshop. In the carpenter's workshop, each piece is gradually built and fitted, over many years, until each tool fits just where it belongs, and each surface is just the right size and height for the carpenter's work.

Many modern offices do not have this quality. Typically, there is a more haphazard arrangement of available pieces of furniture. The process of work is not reflected in the layout of the office. It is not a truly comfortable place to work. And, certainly, it is not a deeply *efficient* place to work.

In this manual we shall try to help you discover, for yourself, what it takes to make your own workplace completely comfortable and efficient in this way.

The carpenter's workshop referred to above is the end product of years and years of gradual, painstaking adaptation. It is important to recognize that the state of mind in which the carpenter is able to achieve this is a very humble one.

He is never trying very hard to make a "perfect" environment for himself. He is never under the illusion that he can reach anything perfect. He just keeps trying to make it a little bit better all the time. The state of mind in which you can arrive at a layout for an office which works well for you is low key and rather slow.

As you will see, this "easy" process requires a very particular set of tools to get you there. The system of furniture which we call "the personal workplace" is a system whose characteristics come about, the way they are, entirely because we have designed it to make this process work for you.

2. AVAILABLE FURNITURE AND THE MAGIC LIGHT PEN

The items of furniture available in the system are:

WALL LIGHTS AND REFLECTORS
REAL CEILING
CUTTABLE WORK SURFACE
EXECUTIVE DESK
MANAGER'S DESK
LIBRARY BOOKSHELVES
LOW BOOKCASE
FLAT FILES
COUNTER WITH SHELVES AND FILES
CONFERENCE TABLES
PERSONAL CHAIRS
WORKING SOFA
WORKING ARMCHAIR
JAPANESE SILK PANELS
WINDOW PLACE
COMPUTER SETUP
RECLINING CHAIR
STORAGE BENCH
CURTAINS
SIDE TABLE
ROLLING TABLE
WHITE BOARD
FILE BOXES
ROLLING FILE CABINET
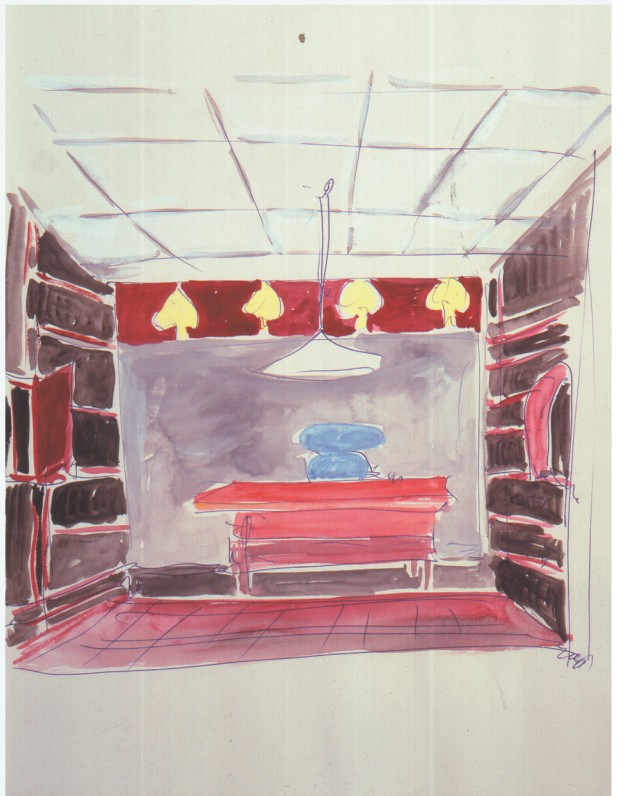
Sketches from my notebook: Watercolor sketches for the Herman Miller office furniture system. 1985.

PAPER PILE ORGANIZER
DESK LIGHT
HANGING LIGHT
WALL SHELVES
PATTERNED CARPET

These items of furniture have been designed to allow you to make your office just what you want.

In theory, any physical system could allow you to lay out your own office. You can go through the layout process defined below, arrive at a good layout for your work, and then have this layout built by any carpenter, or assembled from any set of furniture made by any manufacturer. In practice, though, it is easier to make the layout, from a system of furniture-making which is specifically designed to do just this. In order to explain just what it does, and what has to be done, it is helpful to imagine a kind of "magic light pen."

Suppose you had a magic pen, and that with it, you could make desks, chairs, counters, shelves appear wherever you wanted, in space, just by waving the pen and clicking it. What you would do, then, is to go through the questions, answer them one by one, and as you gradually arrive at an understanding of the perfect workplace, you would use the light pen to mark chunks of air — and make them into desks and tables, shelves and chairs.

This magic light pen would not be restricted in any way. You could simply make any thing, of any size, appear in the air, just where you want it, with the color, surface, and geometry you want.

Of course this is impossible — at least today. But the personal workplace system comes as close as we know how, to making such a magic light pen possible in the 20th century. It is a system of pieces which are designed to be available, in just the size you need, with just the character you need, without trouble, and in the shape, size, and position that comes naturally out of your process.

It is because the system of furniture (the furniture items *themselves* in their variability and adaptability) is like a magic light pen that we believe it is the most useful tool there is, in helping you to arrange and build your ideal workplace for yourself.

3. HOW YOUR OFFICE WORKS

You need to start by getting clear what your office is. What we mean by this is that you must get clear what is the essence that makes it *your* office (as opposed to someone else's), that will make it easy for *you* to work there, that makes it unique to *you*.

Our experience is, that when someone understands deeply what their own needs are, and how their own office works, then this office will almost always become something special, something very comfortable, and something which is — probably — unlike any other persons office.

What you really do when you work

Above all, you must get clear about your actual work habits, that means the way you really work. One way to get clear about what you do is to pay attention to the following list of processes that may play a role in your work. Rank order them according to the relative importance they have in your own work by writing a number after each one.

	rank
Use of desk	—
Files, filing and storage	—
Computer use	—
Conference	—
Clients	—
Discussion	—
Concentration	—
Using library	—
Telephoning	—
Access to records	—
Overview of projects	—
Other machines (FAX, xerox etc)	—
Connection with your staff	—
Drawing and layout	—

In the effort of putting the processes of your work in rank order, you may have some surprises.

Interior office for one person, from the variable office furniture system developed for Herman Miller. Christopher Alexander, Artemis Anninou, and Gary Black, 1988.

Interior office for one person, from the variable office furniture system developed for Herman Miller.
Christopher Alexander, Artemis Anninou, and Gary Black, 1988.

For example, if you ask yourself whether the last office you had, or the present one, really does these things as well as possible, you may be surprised to find that it does not.

Dream about your ideal working conditions

Now start going through the short list of key processes, one by one, in the order you have ranked them. Start with the first one. Ask yourself which place or occasion you can remember where this particular kind of activity was working most beautifully. It is important that you do not stick to any stereotype but that you honestly ask yourself which place you can remember where this activity was really working most comfortably for you.

The result may be quite surprising. For example, if you have identified discussion, and you then ask yourself to remember some place where a really good discussion happened — the best that you can ever remember — you may find that it was in a cafe by a river bank, or that it was in the window seat of an old bookstore, or sitting on a packing case in the attic with your friend. The main thing is that you are very honest and accurate about this, because we are dealing with an empirical problem here. You did actually experience a wonderful atmosphere in such and such a *particular* discussion. You therefore have the greatest chance of recreating a similar quality of process if you can identify the actual circumstances in detail, and reproduce them.

Of course this runs counter to all "normal" thought. It doesn't matter. Do it. Dream as much as you want and identify the most idyllic and best circumstance you can remember and that you wish was happening in your daily life every day.

Define the essence of the dream condition for each process

Now, if you have a vision of the dream condition for each process, write down the key essential elements which made it happen. This is hard to do. To do it, you must construct the essential elements in the form of a center. What this means is that you identify the key physical elements which made that circumstance what it was, and describe their arrangement as a "center."

For example, suppose I am trying to visualize a perfect place to draw. I remember an ideal place where I once very much enjoyed drawing. It was a large, high table with a very big window to the right, with lots of panes, and my brushes to the left away from the window.

This "thing" which I remember is a center. It is a center which lets me draw as nicely as possible. The elements which make this center are the following: the table, the window, and the brushes. And, in addition, the essential thing is the space on the table, between the window and the table and the brushes, which makes this space alive.

Every center always has the same format. There is a center — which is always a space — created by some elements which surround it. The structure of this situation is fundamental. *There is a center* — the space which is the heart of the whole thing. *This is always space*. Then there is a crust or boundary around this center, which forms it. *The crust or boundary is always made of solid elements*. In the case of this example, the boundary is made of a window, a table, and a place where brushes and paints are on the left of the table.

Each part of what you do when you are working is essentially a center. For example, if you spend a lot of time talking one-on-one with a single client (attorney-client relationship for example), then it is the space which the two of you form together which is the principal center. It may consist of two chairs, perhaps a table or a desk, perhaps associated stuff you need to talk about. In any case, the efficiency of the way you can talk with your client depends on the extent to which this center is a concentrated focus, and really works "as a center."

The same is true of the computer in your office. If it is important, then your workstation,

the chair, the keyboard, the discs within easy reach, a surface for the mouse — all this forms a center. Once again, the center is comfortable and efficient to the extent this center really is a *center*.

In the list of activities which you have put in rank order, it is probably the top three or four which play the key role in the way your office needs to work for you, and which therefore create the essence of your office.

One point is very important in your use of the hierarchy of key centers. There is one main center, the first one, and a number of secondary centers — the remaining ones. However, you should be aware that even though there usually is one center that you experience as the "main" center for your office, still, your work changes from day to day, and you may make the rounds in your office. One day the so-called main center may indeed be your main focus of activity. Another day a second one may play the main role. Another day it may be a third one. You need to visualize all these centers as part of a small group of centers which give you your arena for work — and among which one is, often, but not always, the "main center."

The system of centers which you have defined should give an accurate and general picture of the way your own office really needs to be. It should be a complete map of the essential character of your work habits, and your ideal office.

Now write down your most important centers.

4. THE LAYOUT PROCESS

You are now in a position to start visualizing the way your office really needs to be. To help this visualization, set up the cardboard model so that it is like your own office. It is important that walls are in he right places. Dimensions must be fairly accurate. Use the special rule to get lengths to the nearest foot. Make walls the right height. Place windows and doors in the right positions.

Now use the model to do the following steps one at a time. Important note: if any of the following steps are not consistent with the dream centers you have defined up until now, just leave them out.

Position of the major centers

Step 1: *Identify the natural centers of the room.* Use the small red markers to identify the natural centers in the room which is to be your office. Remember that there is probably a natural center somewhere near the window. There may be another in the physical middle of the room, or towards the back. The actual centers depend on the particulars of your room. It is up to you to get them by "feel." Use the red stickers to mark these naturally occurring centers.

Step 2. *Window place.*
Mark the spot near the window which is most likely to develop as a window place. Put a white sticker there.

Step 3. *Entrance transition.*
Mark the zone inside the door which needs to be a transition area, so that your room feels protected emotionally from the open doorway. Put a black sticker there.

Step 4. *Locate the main center of your work.* Now decide in which of the naturally occurring centers you will put the process you have defined as C1, the main center of your work. Use the red spot to mark this main center.

Step 5. *Locate the secondary centers of your work.*
Decide in which of the naturally occurring centers you will put the processes you have defined as C2, C3, C4, the secondary centers of our work. Use the green stickers to mark these secondary centers.

Step 6. *Overlap.*
Note, in what you have just done, and in what you are going to do next, it is essential to remember that different centers may overlap each other.
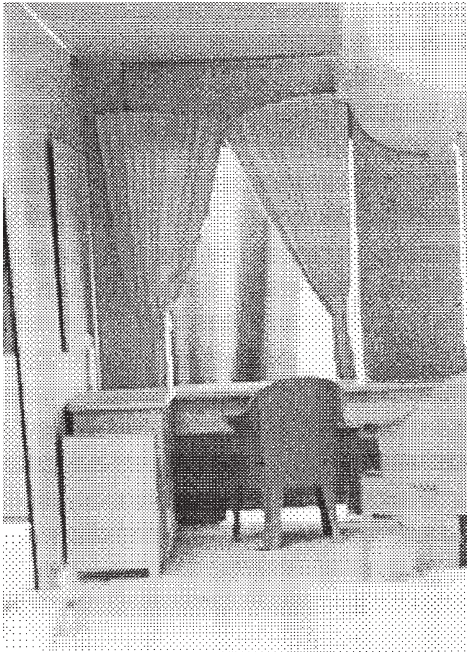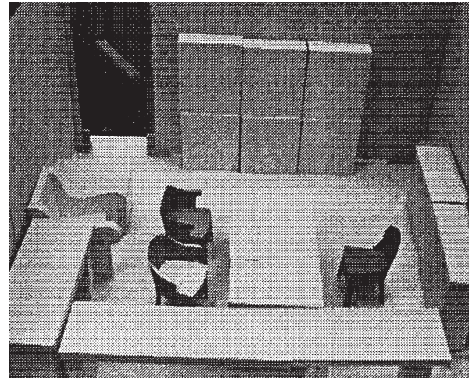
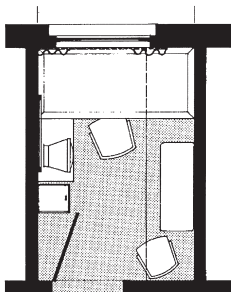*James Maguire on the phone in his present office*

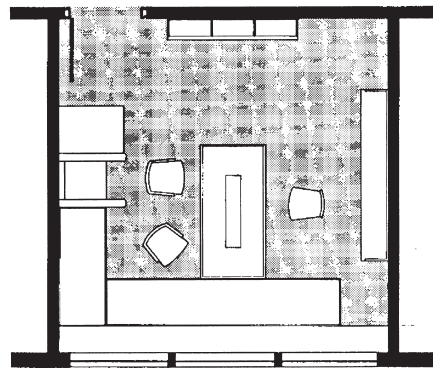*Bo Links on the phone in his present office*

Model of his new office, done using the generative sequence

Model of his new office, done using the generative sequence

Plan of James's new office

Plan of Bo's new office

A particular piece of furniture may be part of two or three different centers, and the different centers may occupy the same space or different overlapping areas of the same space. There is no reason why the centers have to be sharply distinct.

Layout of the major centers

Reader, please note: The items listed in small caps on the following pages 394–97, are indeed centers or center-forming items of furniture, but they are also specially designed items of office furniture which my colleagues and I designed in 1988 for Herman Miller. The particular sequence of layout that is described in these next pages is intended for the use of these specially designed items: a modified form of the same sequence could easily be done with other items, too.

Step 7. *Discussion and conference.*
If your main activity is meeting or conferences, to make your room suitable (for meetings and conferences), it may be very helpful to make the main center a conference table. It may be large, or small, or circular. The space which this table commands would then be the principal center of the room. In other cases, it will be one of the secondary centers. Any of the following items may be useful:

CONFERENCE TABLE
DESK WITH PIGEON HOLES
WORK SOFA
WORK ARMCHAIR
STORAGE BENCH

Step 8. *Your main work surface.*
Choose the main center in the room where you are actually going to work. Imagine yourself standing or sitting there, and decide which way you want to face. Mark it on the model with an arrow and begin to get a rough idea of the physical elements which will form this center. Fix the main work surface of your work place. It may be any of these:

EXECUTIVE DESK
CUTTABLE WORK SURFACE

DESK WITH PIGEON HOLES
COMPUTER SETUP

Step 9. *Secondary horizontal surfaces.*
Along with your desk or main work surface, you may need secondary work surfaces. These can be at right angles to the main one. It usually works best if the second surface is lower than the main one. Many people like a second layout surface near their main work surface. This can be a second

CUTTABLE WORK SURFACE or a
SIDE TABLE

Step 10. *Sparkling daylight.*
Place wall lights along one or two walls in positions which help to define the area you have designated as the main center of the room. Beautiful light is crucial to your comfort. Place reflectors below the wall lights, or above them, them so that the lights illuminate these reflectors and create a cheerful light in the room. Use:

WALL-LIGHTS AND REFLECTORS
DESK LAMPS
HANGING LAMPS

Step 11. *Window place.*
Fix the window as a definite place, and make the window place there by making something which is framed and has depth. This can be done either with the

WINDOW-PLACE or
CURTAINS

Step 12. *Comfortable sofas and working chairs.*
If you want a comfortable chair for your visitors or for yourself, put in a work sofa chair: a comfortable chair designed for upright working and for comfort. It can be a

WORK ARMCHAIR
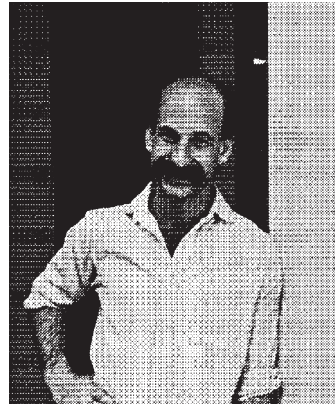STORAGE BENCH
or a WORK SOFA if the room has room for it.

Step 13. *Real ceiling.*
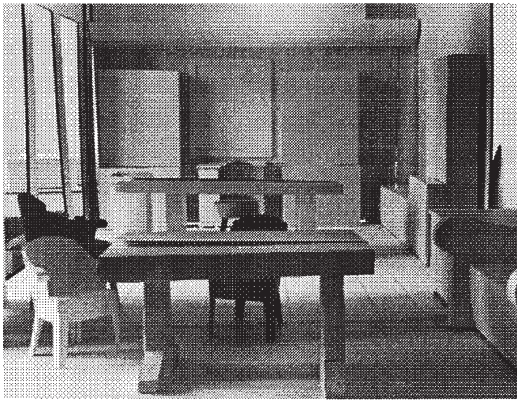Put in a solid ceiling. The light and comfort of your room depends critically on the presence of
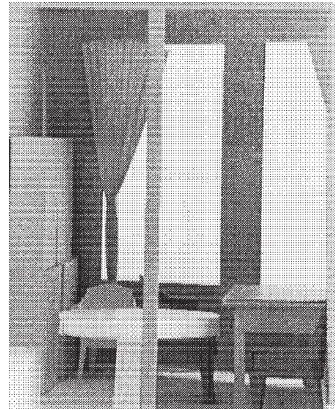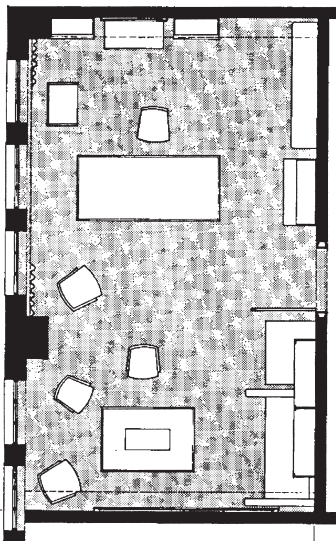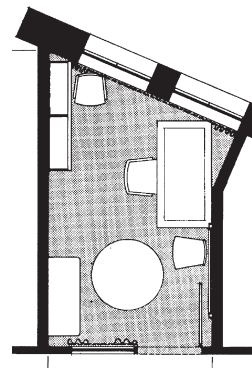
Pirko Luchhesie

Alex Bloom

*Model of her new office, done using the
generative sequence*

*Model of Alex Bloom's new office, done
using the generative sequence*

Plan of Pirko's new office

Plan of Alex's new office

a real ceiling with its own design and color.

REAL CEILING

WALL LIGHTS AND REFLECTORS

*Secondary furnishings needed
to complete the space*

Step 14. *Computer setup.*
The computer setup is a multipurpose computer-specific trolley, which can take almost any make of computer inside and has room for all kinds of connections and subunits.

On it, you have only the screen and the keyboard, which goes away when you don't need it. Some people like to use the computer table from an armchair, on a board, or on their conference table where others can see it too.

COMPUTER SETUP

Step 15. *Reclining chair.*
If you do a great deal of computer work, you may want a special reclining chair, as the main workplace for your computer.

RECLINING CHAIR

Step 16. *Different chairs.*
Informal discussion around the conference table, or in the office, is helped by a variety of different chairs including task chairs, sofa, armchairs and benches. These chairs can be the individually fitted upright chairs.

PERSONAL CHAIRS

ROLLING BENCH

WORK SOFA

WORK ARMCHAIR

Step 17. *Wall surfaces and pin boards*
Walls will be most comfortable if they have spots of color and ornament. The japanese silk panels provide color and harmony from handmade textiles, and the whole surface of this panel is a pin board where papers and messages can be kept.

JAPANESE SILK PANEL

WHITE BOARD

Step 18. *Thick walls*
Besides the thick walls, bookcases, counters and files, surround some parts of the office wall with built-in furniture, thus helping to form the cozy and comfortable feeling in the center of the room. Some of the main ways to make a thick wall come to life may be with

LIBRARY BOOKSHELVES

LOW BOOKSHELF

FLAT FILES

COUNTER WITH SHELVES AND FILES

WALL SHELVES

Step 19. *Filing*
Small groups of files can be conveniently kept in file boxes, in the small rolling file cabinet, or in specially constructed files in the storage bench. For closed bulk storage use the files built in under the counter or the cuttable work surface.

ROLLING FILE CABINET

FILE BOXES

STORAGE BENCH

COUNTER WITH BULK FILES

CUTTABLE WORK SURFACE

Step 20. *Entrance transition*
To maintain a good feeling of privacy and individual territory in your room, use the elements of the thick wall to make an entrance transition space inside the door where you have marked a black spot earlier.

LIBRARY BOOKSHELVES

LOW BOOKSHELF

FLAT FILES

COUNTER WITH SHELVES AND FILES

WALL SHELVES

*Minor furnishings to fill in the gaps
and make up details*

Step 21. *Flat files.*
If you store a lot of papers and need to get them easily, install flat files which are specially made for storing piles of papers. These can be a

FLAT FILE

PAPER PILE ORGANIZER

Step 22. *Occasional tables*

Place various smaller side tables to create minor centers to help the major centers you have established. These smaller tables are most helpful in different positions and at different levels, so they give you the widest possible variety of work-surfaces and surfaces to pile things on. They can be

ROLLING TABLES

SIDE TABLE

ROLLING FILE CABINET

COMPUTER SETUP

STORAGE BENCH

Step 23. *Desk lights*
Place individual lights to spot those centers which are most important.

DESK LAMP

HANGING LIGHTS

Step 24. *Patterned carpet*
To mark a special center which you want to give emphasis to, and to increase the comfort of your room, use a patterned carpet of the right size. Color must be carefully chosen. Use the color process.

PATTERNED CARPET

6. GETTING THE SIZES RIGHT

The size of things is critically important, and will affect the feeling and usefulness of your office in a way far beyond what you imagine. Some things can be bigger than you might think. Other things can be smaller than you might think. All that matters is that it is practical.

Present-day office furniture tends to make everything homogeneous in size, and this contributes to the dead and unpleasant feeling one gets in many modern offices

The personal workplace items are specifically designed to take a wide variety of sizes, and the paper model you have, also reflects this capability. Take full advantage of it.

It is very important that sizes are just the way you want them, without constraint from what anyone might consider "normal." Every-

thing that matters about your office, and the way the centers work, is always affected by the actual size things are. It is not only the efficiency of the space which is affected by sizes of things, but also the *feeling* of the place is significantly altered by the size things are as well. This is not only true for the size of the spaces, but also for the size of the elements. One of the most important things about the personal workplace system, is that it lets you make things just the size you want them — so you can control the feeling of you office, and make it personal.

Use the flexible sizes available in the model to get each piece of furniture exactly the right size.

It is especially important that things all fit together nicely and harmoniously. You should adjust the sizes, until you like the smoothness and comfort of the space you have produced.

Another interior office for one person, built within the variable office furniture system developed for Herman Miller by Christopher Alexander et al., 1988.