RETAIL

ANATOMY & ISSUES

The Interior Plan

ROBERTO J. RENGEL

Retail: Anatomy and Issues

Retail design is one of the most exciting interior design sectors. In retail projects the merchandise, the spatial envelope, graphics, and signage create a unique and strategic mix based on a branding concept. The basic goal is the strategic accommodation of these elements to promote sales. A good store design attracts potential shoppers and induces them to buy.

Although the design of the store on its own cannot be fully responsible for the financial success of the store, it is one of the key ingredients. The successful store provides an environment where merchandise is presented effectively and persuasively. Shoppers should feel comfortable in the space and receptive to buying the merchandise.

The physical shell provided for a store is often a simple rectangular space with the long direction going from front to back. The short dimension is usually the frontage of the store, its face to the outside world. It is generally about a third to a fourth of the space's depth. The space in the store is allocated to the merchandise displays, service areas, or circulation zones. The display spaces of a store are normally not compartmentalized with walls. Open space is preferable to maximize visual exposure and to facilitate orientation.

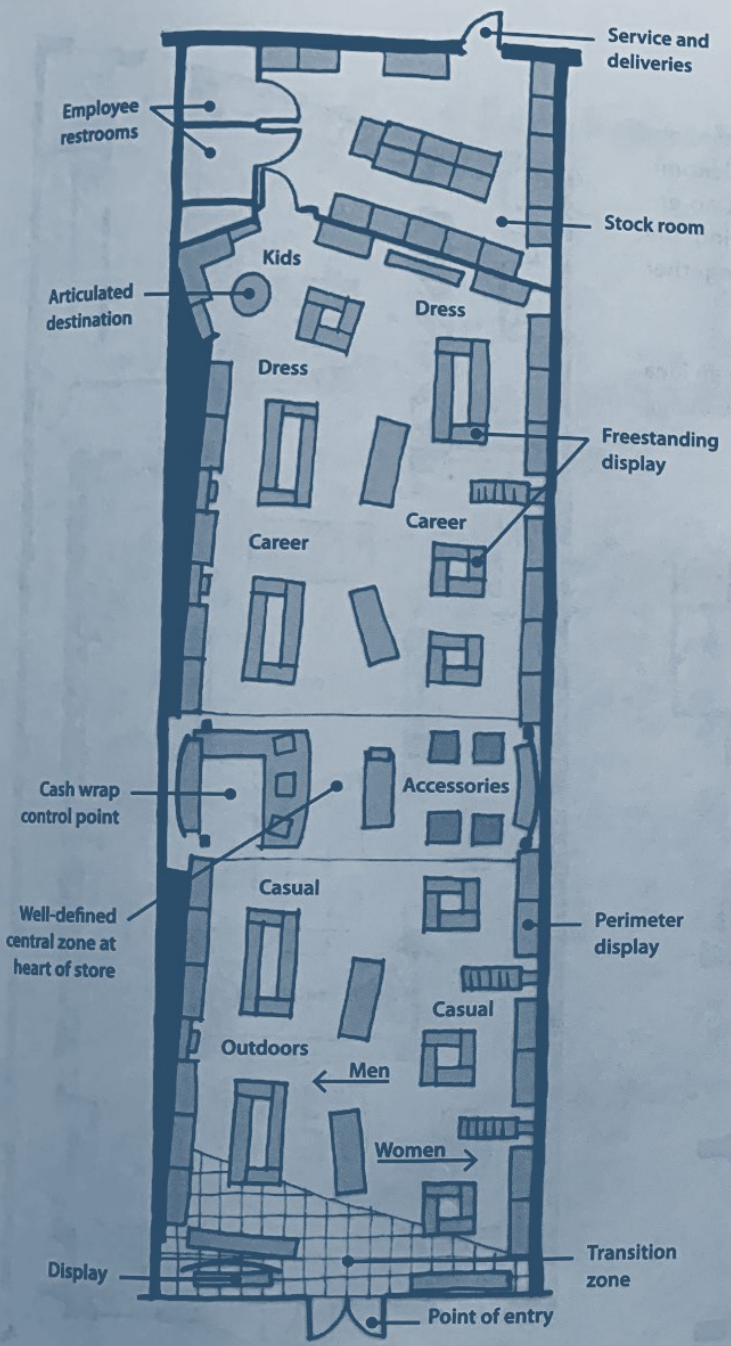
Stores lure people in by providing open, transparent conditions that allow passersby to see inside. Views that provide visual access deep into the store and towards key focal areas, together with strategic displays near the entrance, also serve to draw shoppers.

Products sold in the store are staple items, convenience items, or impulse items. Staple items are the principal items sold by a particular kind of store, like shirts and pants in a men's apparel store. These are the items most shoppers come to buy. A common merchandising strategy is to situate the staple items deep in the store to expose shoppers to other merchandise while getting there. Convenience items, such as socks and underwear in the apparel store, are secondary. Impulse items are miscellaneous items, such as accessories which are normally located close to the cash register to entice queued-up shoppers while they prepare to pay.

Products are most often displayed in groups and arranged by type, color, or size. Mass displays make the organization of products intuitive and easier to understand. They also serve to provide visual order, such as when rows or clusters of same-color shirts are combined to produce harmonious visual fields of merchandise. Products may also be combined with other products to form a cohesive functional whole. For instance, plates, napkins, and silverware may be grouped as a unit to convey entire table place settings and help customers visualize how they appear in a group.

Service areas are usually in the back. They provide storage space, employee restrooms, a shipping and receiving area, access to a service alley, and sometimes a small office. Cash wrap stations are placed within the retail space, and can be accommodated toward the front, middle, or back, depending on the store and its specific circumstances. In all cases they need to be convenient and should have sufficient space around them to allow smooth circulation.

Shoe store perspective



Shoe store floor plan

Retail Store Considerations

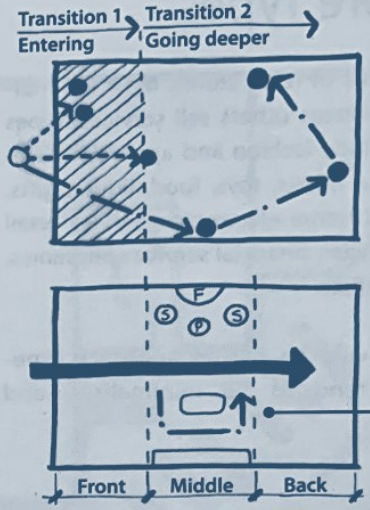
Movement: Two of the most important goals of retail environments are to attract shoppers inside and make it easy for them to move throughout the store. Strategically located focal points attract potential buyers and entice them to move toward the back of the store. A transition zone inside the entrance allows shoppers to scrutinize the store before committing to proceed all the way in.

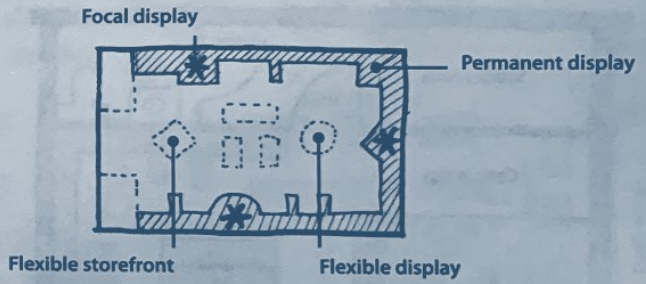
Merchandise: The front-to-back placement of merchandise within a department or throughout the entire store is strategically executed. Featured presentations are close to the main aisles and highly visible. Secondary locations are often between featured items. Focal locations are distributed throughout the store, anchoring their respective zones. High-demand items are often placed in the back regions of the store to serve as magnets.

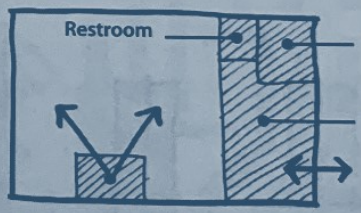
Display: Store merchandise and display fixtures are moved around frequently. Some fixtures need to be moveable. Perimeter zones are often fixed although many display systems can accommodate different types of attachments (i.e. hooks, shelves, and hangers), and allow merchandise changes. The specific displays on fixed focal points throughout the store also change as needed.

Service: Stock rooms, employee restrooms, manager offices, and shipping/receiving functions occur in the back of the store as not to take up valuable front space. Service spaces within the sales space are usually limited to the cash wrap. These are strategically located to offer convenience and security.

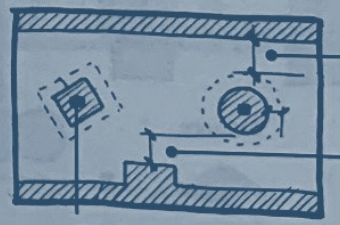
Miscellaneous: The effective handling of building elements such as columns and the provision of proper clearances are important design considerations. Display islands or vertical displays are often built around columns and pilasters. Clearances around display areas need to be such that passersby can walk by stationary fellow shoppers in the process of inspecting merchandise.







Cash wrap and service



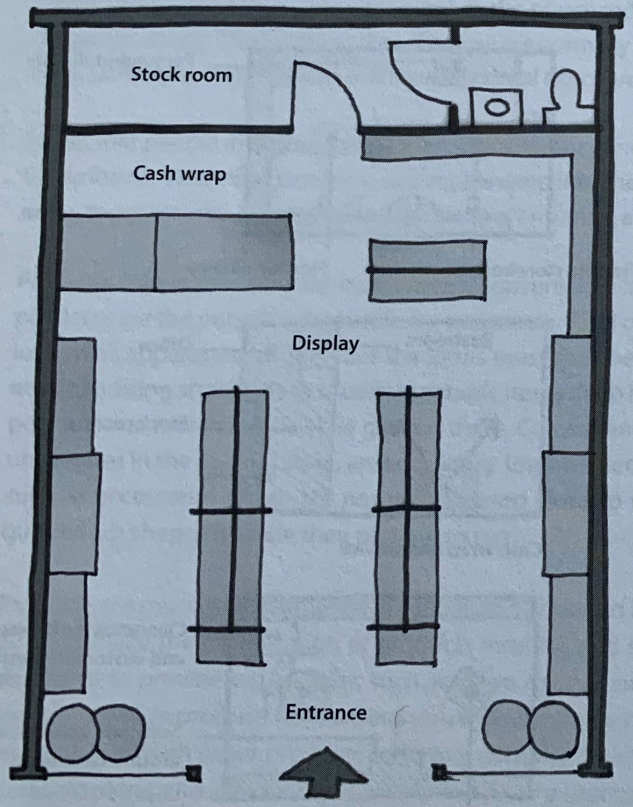
Displays around columns and architectural elements

Retail: Store Types

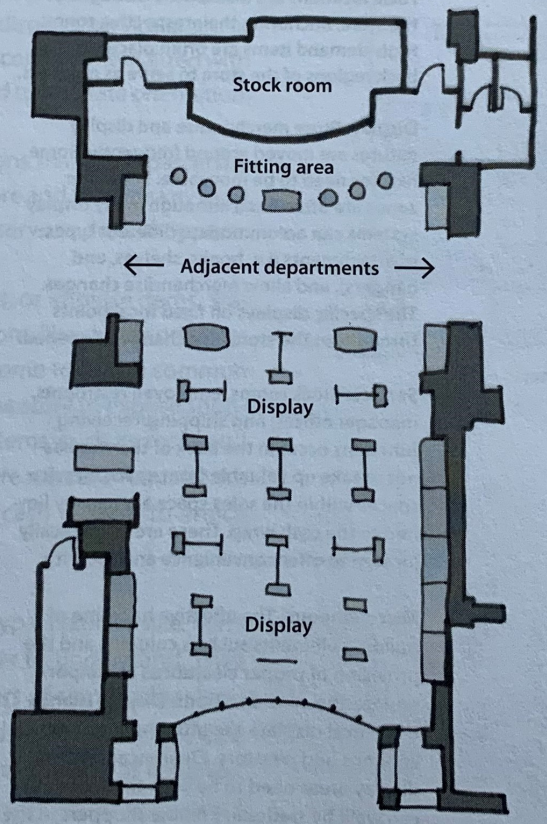
There are many kinds of retail stores. Most are merchandise driven, whereas others sell services. Types of merchandise include fashion and apparel, household goods, jewelry, books, toys, food, liquor, gifts, greeting cards, and home electronics. Service retail includes travel agencies, financial service companies, and even the post office.

Retail stores also vary by design approach. Specialty boutiques tend to be minimalistic and abstract, whereas convenience stores are more straightforward and dense. The common denominator is that these stores always represent an environment that has been designed to bring the merchandise, the buyers, and the sellers together in effective ways.

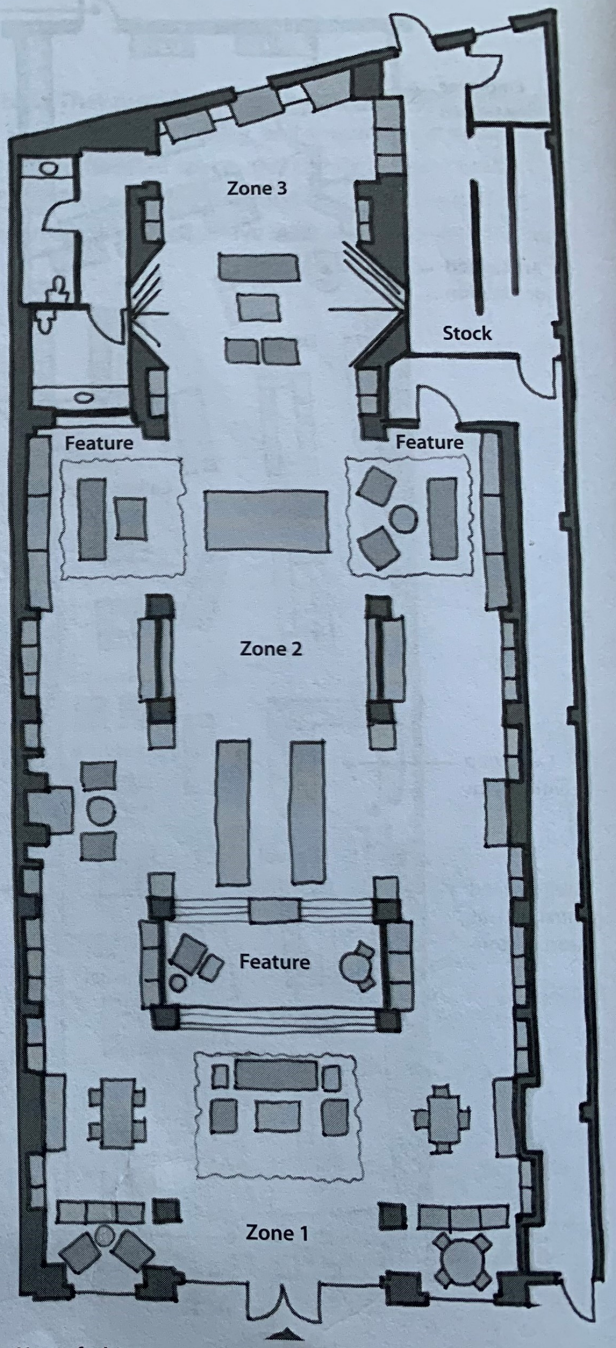
Shown here are six diverse stores to give you an idea of what they look like in plan view. They range from a convenience store to a bookstore.



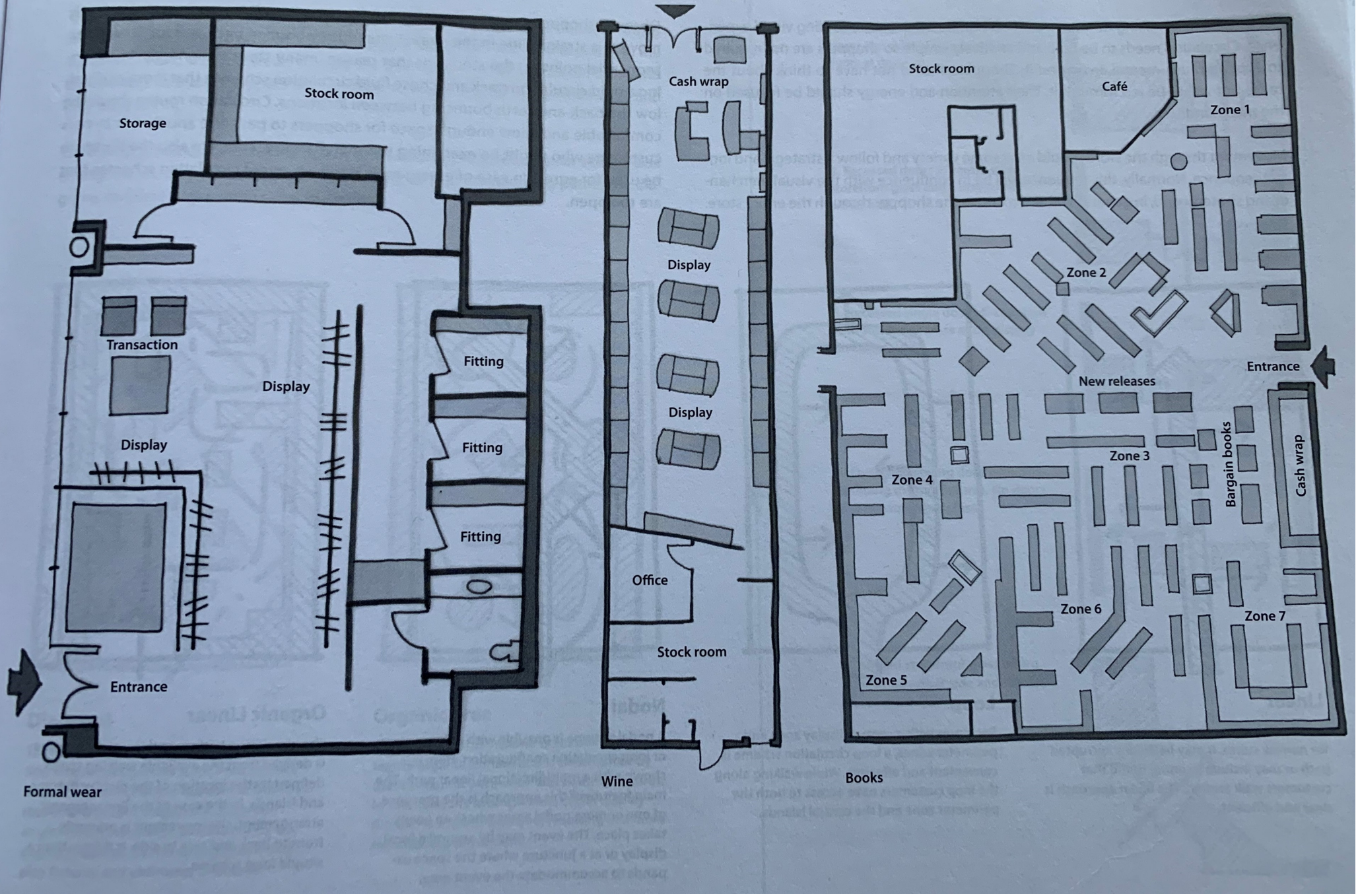
Convenience



Shoes



Home fashion

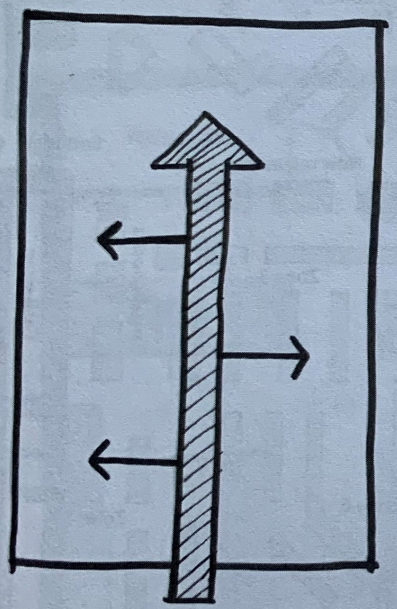

Storage
Stock room
Transaction
Display
Display
Fitting
Fitting
Fitting
Entrance
Formal wear
Cash wrap
Display
Display
Office
Stock room
Wine
Stock room
Café
Zone 1
Zone 2
Entrance
New releases
Zone 3
Zone 4
Bargain books
Cash wrap
Zone 5
Zone 6
Zone 7
Books

Retail: Circulation

For a customer, walking through a store should be a rich and rewarding visual experience. Circulation needs to be fluid and relatively simple so shoppers are not required to expend much mental energy on it. Shoppers should not have to think about the route but rather be led through it. Their attention and energy should be focused on the merchandise.

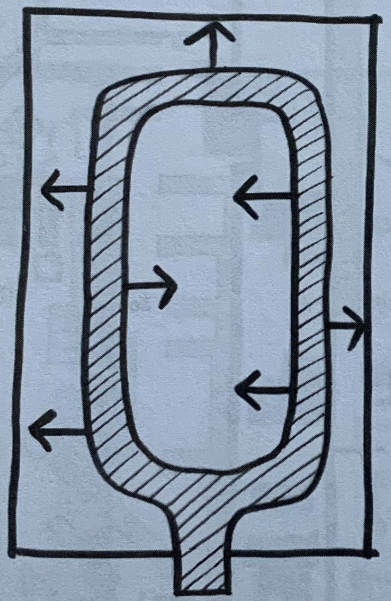
Movement through the store should offer some variety and follow a strategic and logical sequence. Normally, this sequence will be in confluence with the visual merchandising strategy, and, in general, will aim to move the shopper through the entire store.

Observe shoppers in a busy store one day. You'll realize that customers rarely move in a straight line in the store. Instead they bounce back and forth between sequential points in the store. For that reason, many store designers avoid defining a rigid circulation track and chose fluid circulation schemes that more easily allow the back-and-forth bouncing between locations. Circulation routes should be comfortable and allow enough space for shoppers to pass one another, or bypass customers who might be examining the merchandise. They are also the routes to be used for egress in case of emergency. However, avoid circulation schemes that are too open.



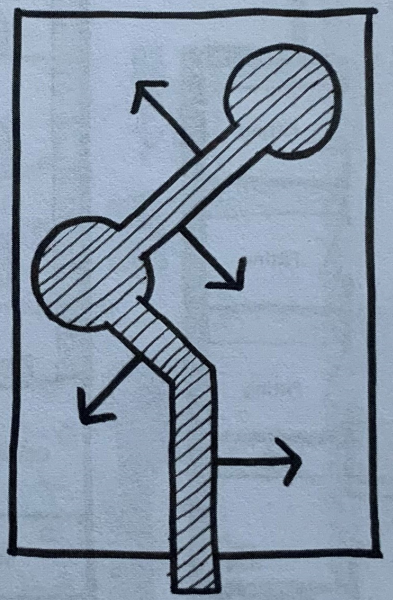
Linear

A front-to-back central spine may be used for narrow stores. It may be an uninterrupted path or may include a central island that customers walk around. The linear approach is clear and efficient.



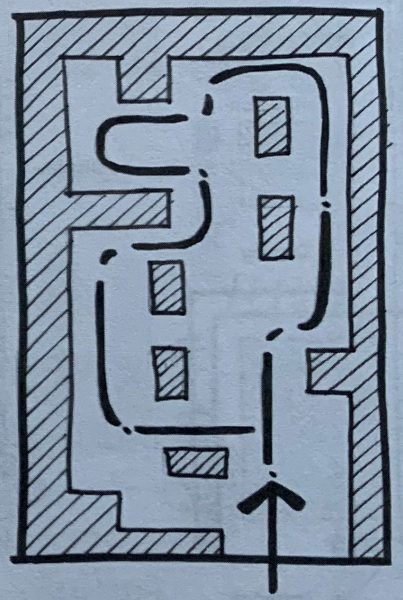
Loop

For stores with a central display zone and perimeter zones, a loop circulation scheme is convenient and effective. While walking along the loop customers have access to both the perimeter zone and the central islands.



Nodal

A nodal scheme is possible with a linear or loop circulation configuration. Here it is shown with a multidirectional linear path. The main feature of this approach is the presence of one or more nodal areas where an event takes place. The event may be around a focal display or at a juncture where the space expands to accommodate the event area.

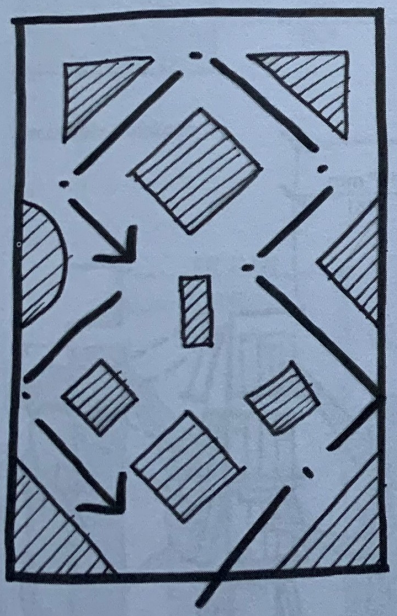


Organic Linear

The circulation pattern in this type of scheme is derived from the available walking space defined by the location of the display fixtures and islands. In the case of the linear organic arrangement, the movement is primarily front to back and side to side. It is freer than a simple loop scheme.

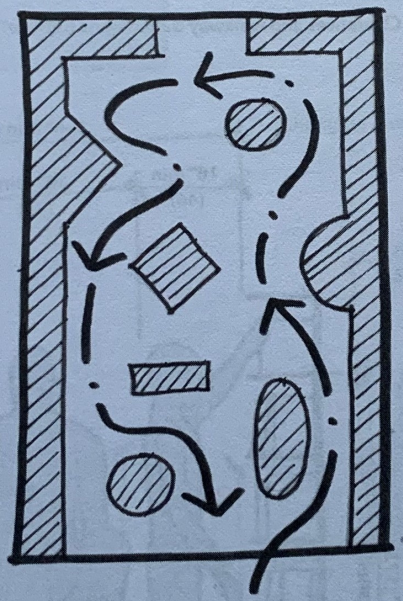
When laying out the circulation scheme for a store, remember to coordinate routes and display elements to provide adequate sightlines to the various focal points in the store. Also, avoid creating zones that are too deep between the circulation spine and the end wall as many shoppers will not explore zones that do not provide clear and easy ways to exit.

Circulation schemes for stores include front-to-back approaches, angular side-to-side arrangements, loop or racetrack configurations, or freer, meandering paths. The diagrams on these pages show some variations.



Diagonal

The movement pattern in a diagonal circulation scheme progresses from front to back but not in a direct linear fashion. In this case, movement occurs diagonally, at certain angles (e.g. 45 degrees), as dictated by the angles produced by the arrangement of display fixtures and perimeter elements.

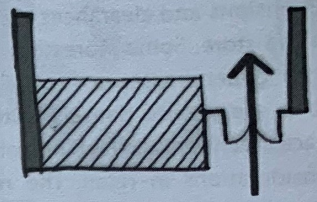


Organic Free

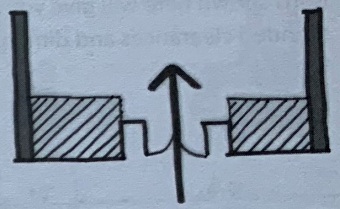
Movement in this scheme takes place in a highly organic fashion and is determined by the location of perimeter and floating fixtures. In this case, the arrangement of the display fixtures is organic and free, resulting in a more meandering movement.

Storefronts

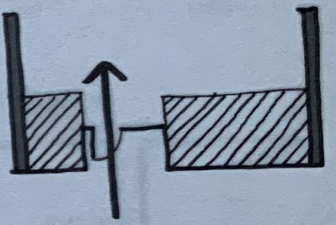
1. Storefront glass and a display along one side with recessed double doors at one end.



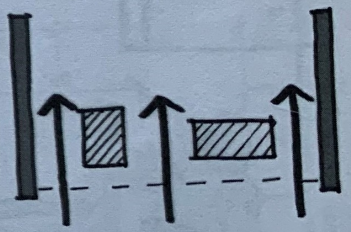
2. Recessed doors at center with storefront glass and a display on either end.



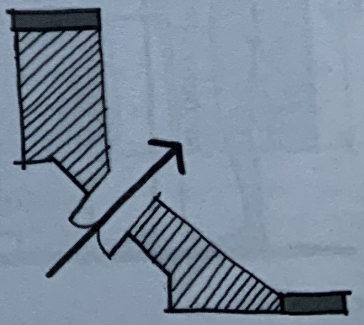
3. Recessed single door off-centered with storefront glass and a display on either side.



4. Overhead coiling door with free-standing display fixtures. No doors and no storefront glass.

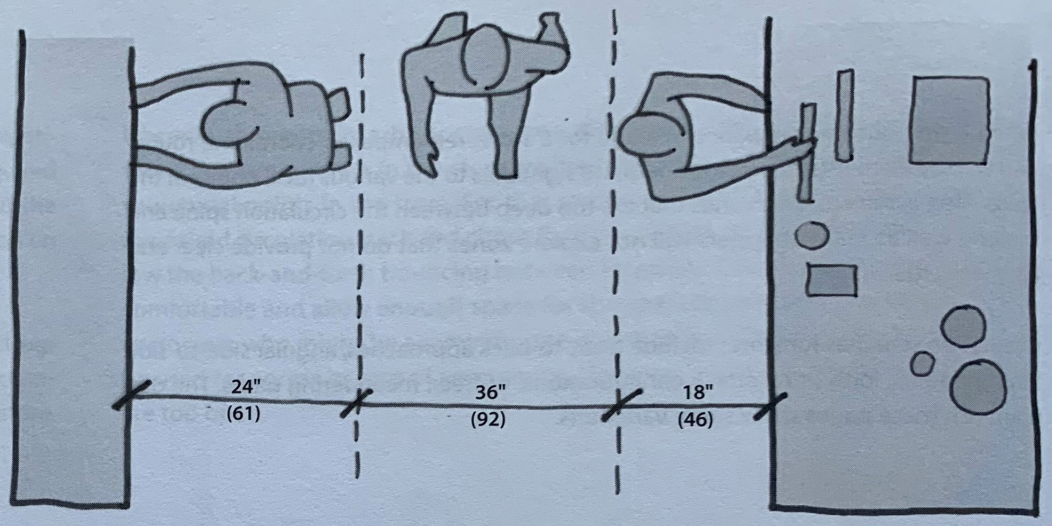


5. Angled storefront glass with a display on either side and double doors centered.

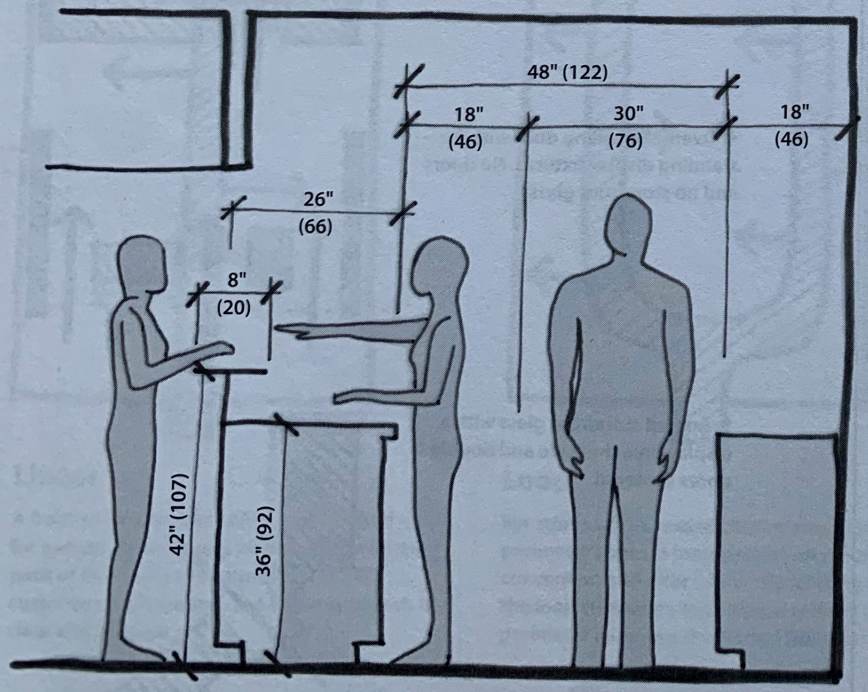


Retail Anthropometrics

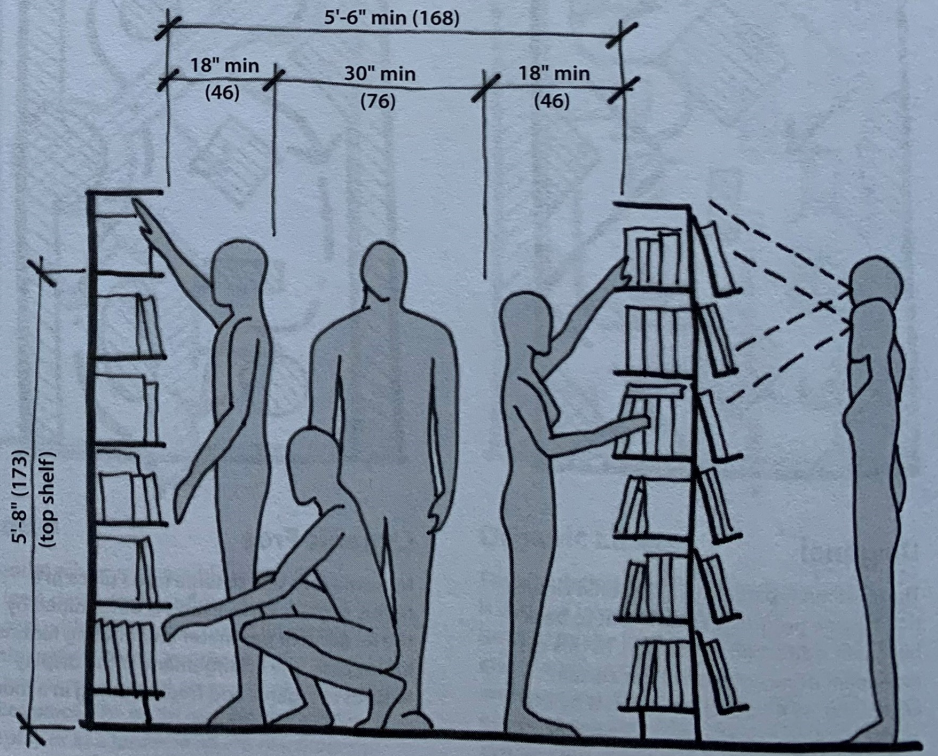
Dimensions and clearances vary widely, depending on the store. Some stores have fewer displays and more generous space for walking around. Other stores are packed densely, with tighter circulation spaces. Density is, in fact, one of the most important considerations in retail. The representative situations shown here will give you some ideas of recommended clearances and dimensions for retail.



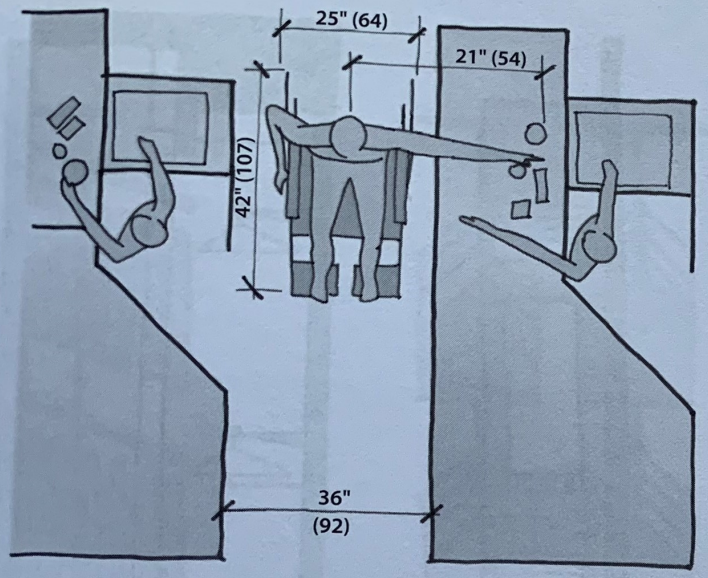
Clearances and walkway dimensions between counters



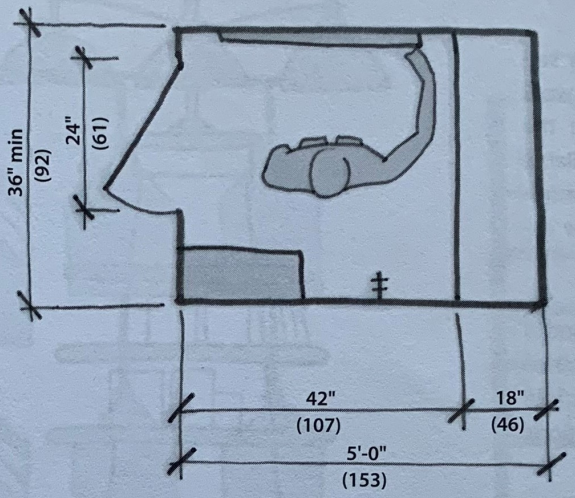
Counter: Public side



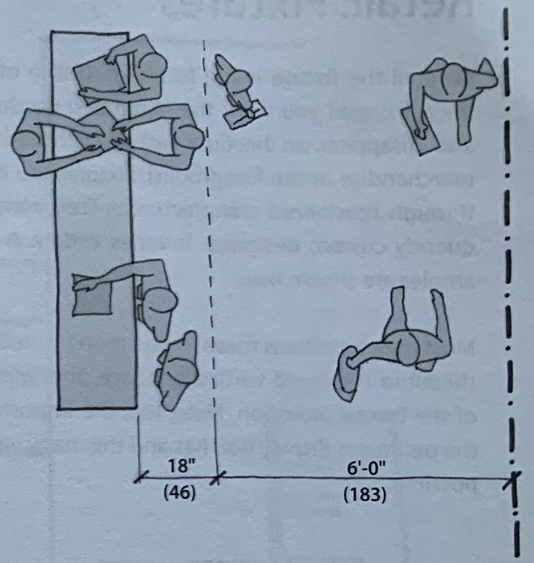
Perimeter and freestanding displays



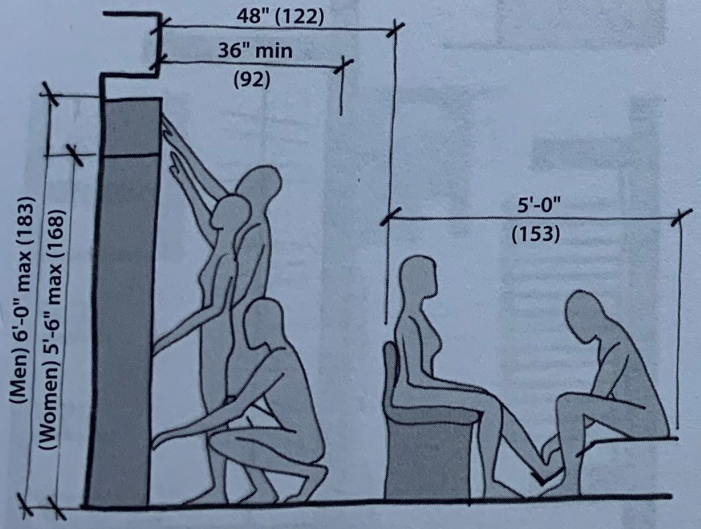
Accessible checkout



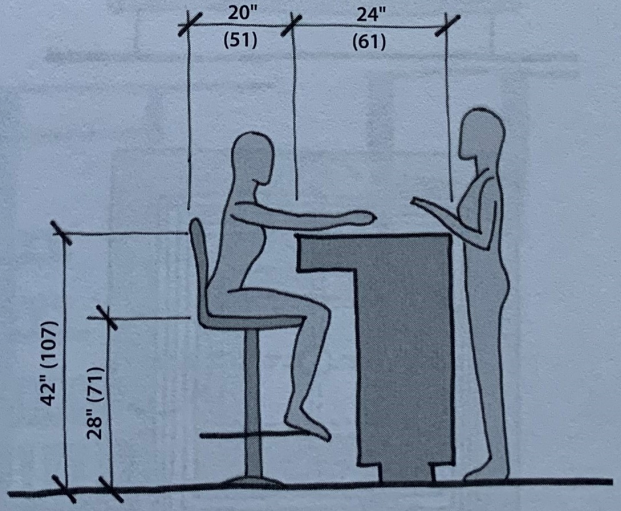
Changing room



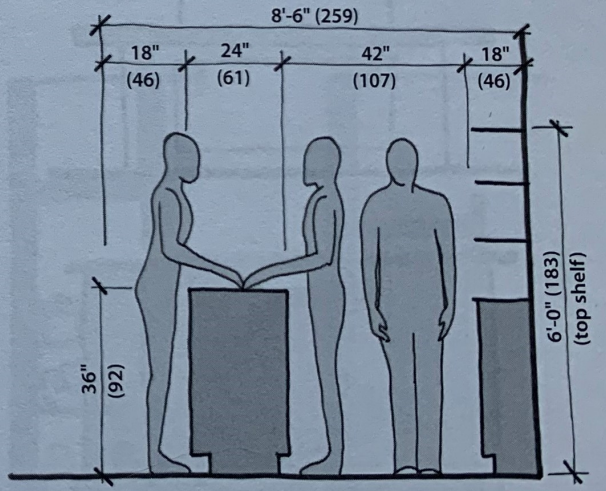
Entrance spaces at cash wrap



Shoe stores



Counter transaction: Seated

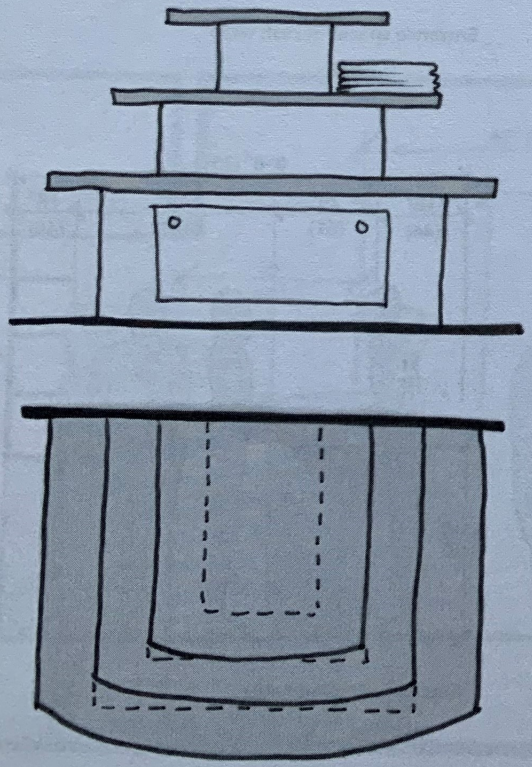


Counter: Merchant side

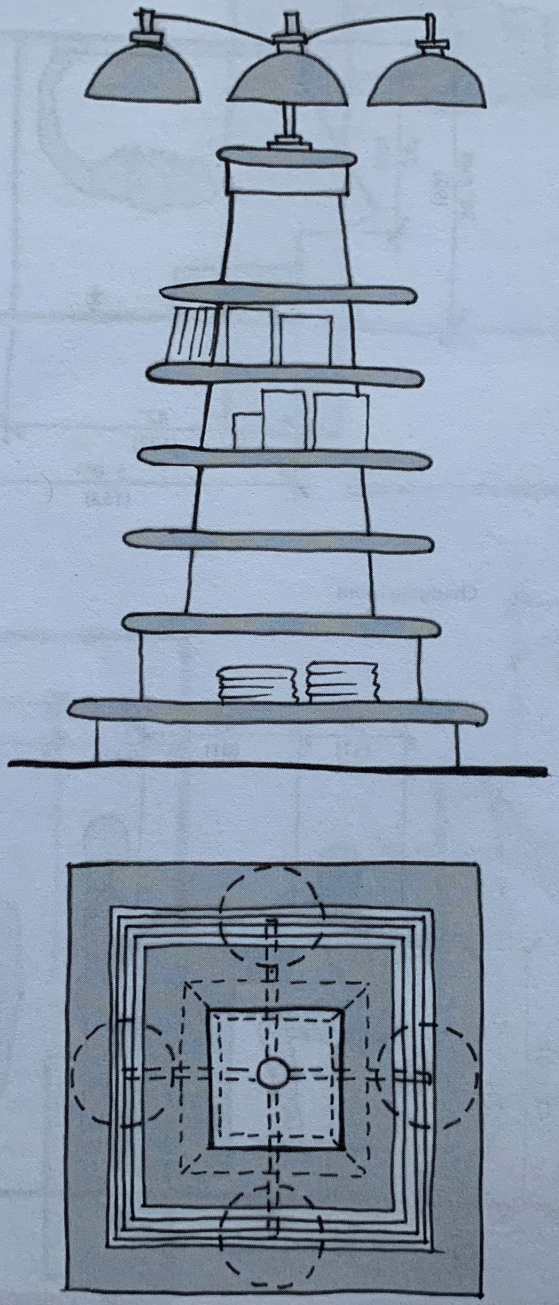
Retail: Fixtures

In retail the fixture is the furniture. Unlike other settings, in retail you want the fixtures to do their work and disappear, to become just background for the merchandise in the foreground. Fixtures are available through specialized manufacturers. They are also frequently custom designed. It varies widely. A few examples are shown here.

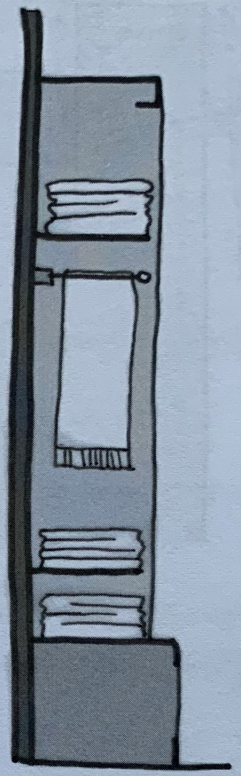
Most merchandise is meant to be seen frontally and is therefore displayed vertically, hence, the importance of the frontal elevation. Note, too, the important role the perimeter display wall has and the many variations possible.

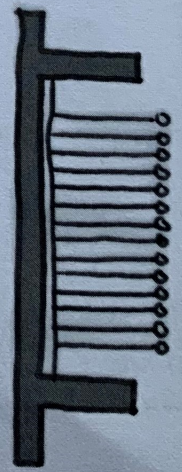


Stepping display at wall

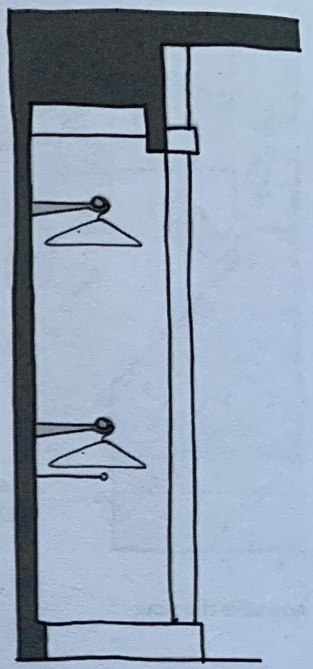


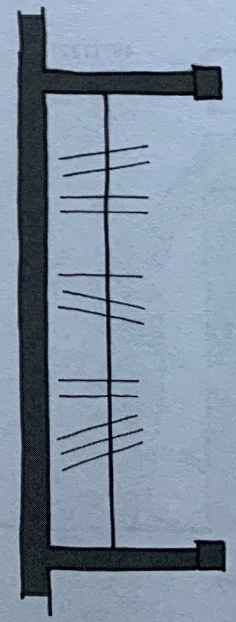
Freestanding column with stepping shelves





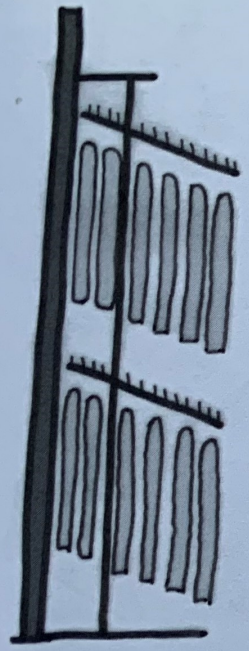
Racks



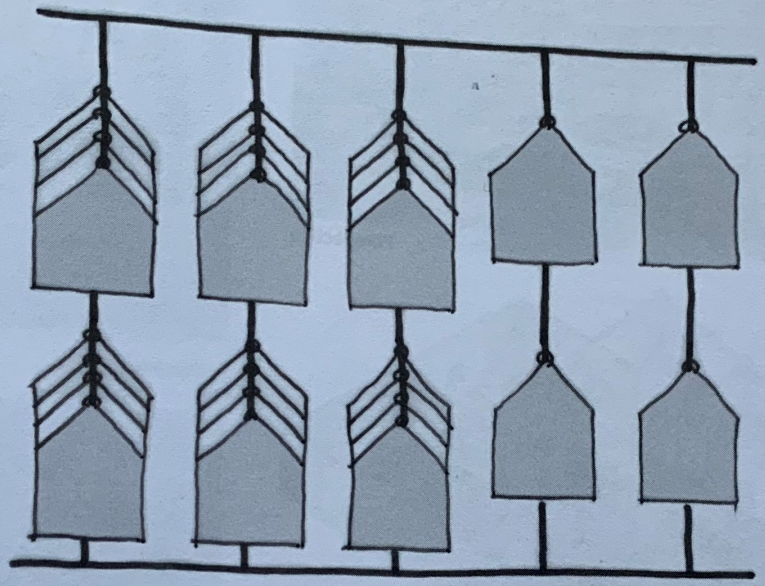


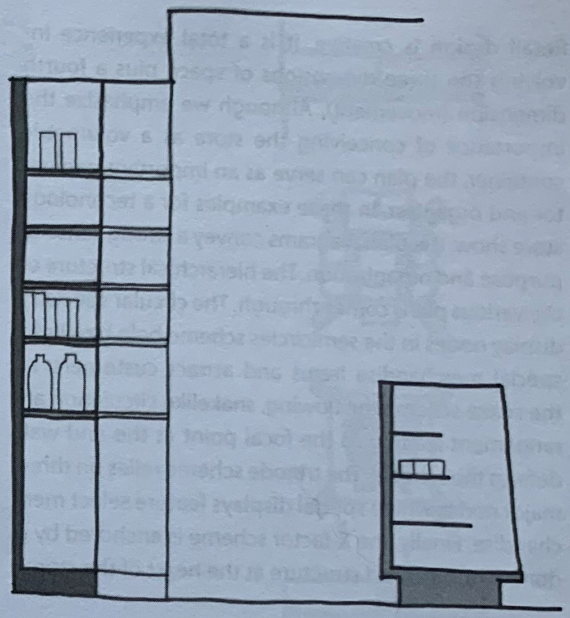
Hangers

Perimeter displays

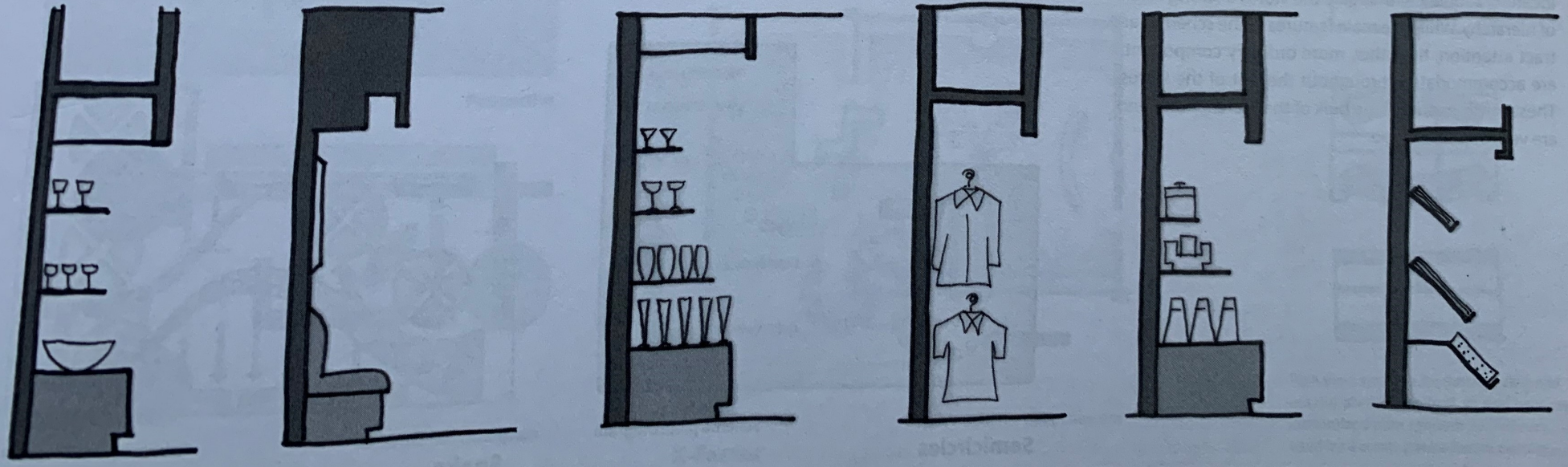


Clothing display





Perimeter/Counter

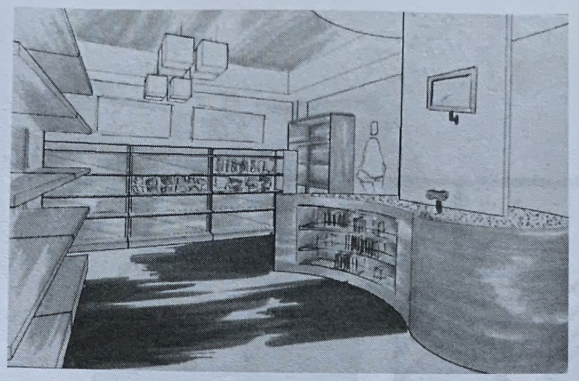


Perimeter wall examples: Section views

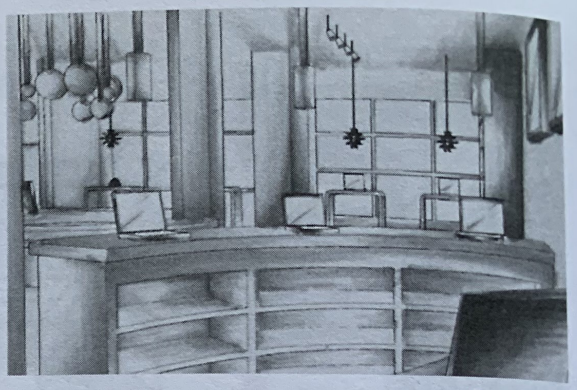
Retail Examples I

Retail design is creative. It is a total experience involving the three dimensions of space plus a fourth dimension (movement). Although we emphasize the importance of conceiving the store as a volumetric container, the plan can serve as an important generator and organizer. In these examples for a technology store show, the plan diagrams convey a strong sense of purpose and organization. The hierarchical structure of the various plans comes through. The circular specialty display nodes in the semicircles scheme help highlight special merchandise items and attract customers. In the snake scheme the flowing, snakelike circulation arrangement leading to the focal point at the end wall defines the scheme. The trinode scheme relies on three major nodes where special displays feature select merchandise. Finally, the X-factor scheme is anchored by a dominant X-shaped structure at the heart of the store.

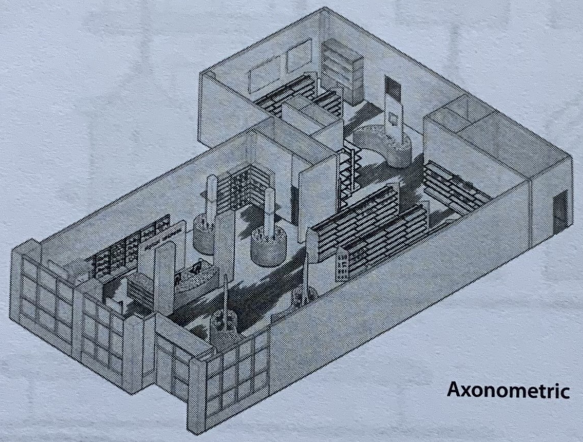
The thing these four schemes have in common is the use of powerful ideas (e.g., shapes, circulation, strategic location, sequence) that give the stores a strong sense of hierarchy. While the main features of the schemes attract attention, the other, more ordinary components are accommodated throughout the rest of the stores. These, of course, hold the bulk of the merchandise and are very important, too.



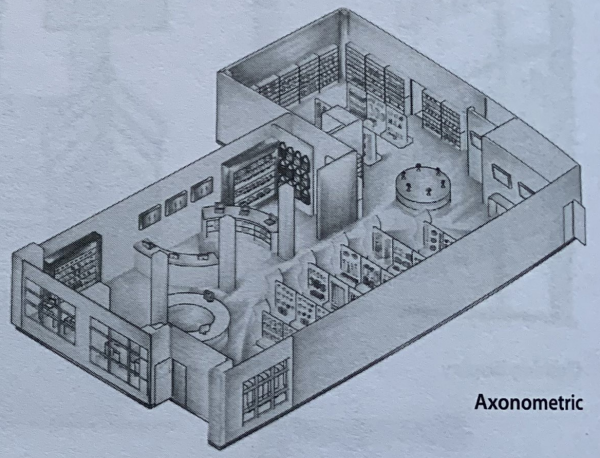
Perspective



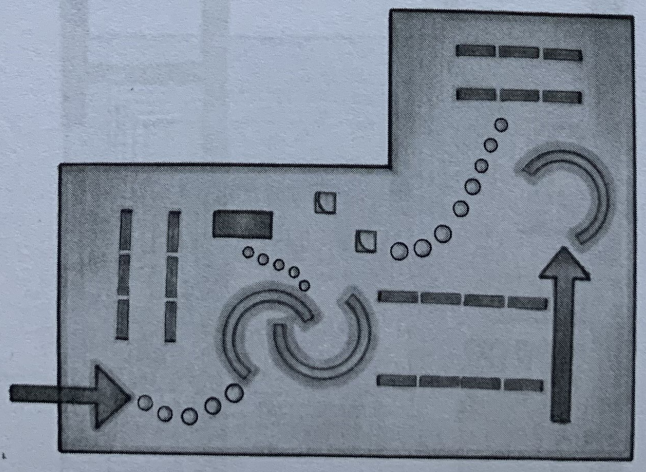
Perspective



Axonometric

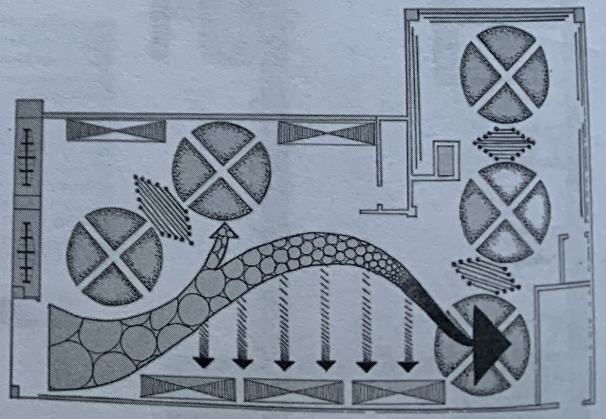


Axonometric



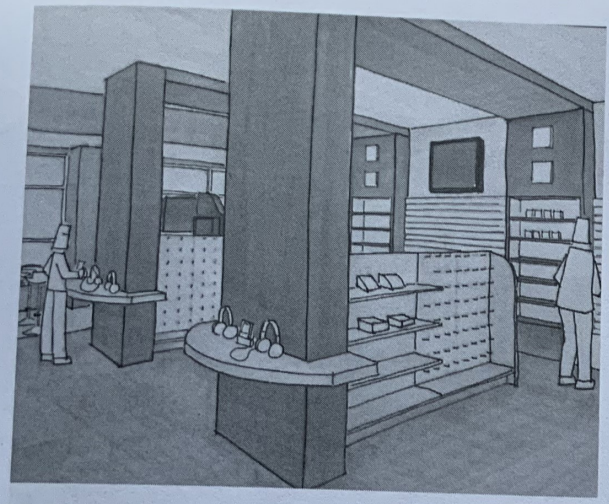
Scheme plan/Diagram

Semicircles

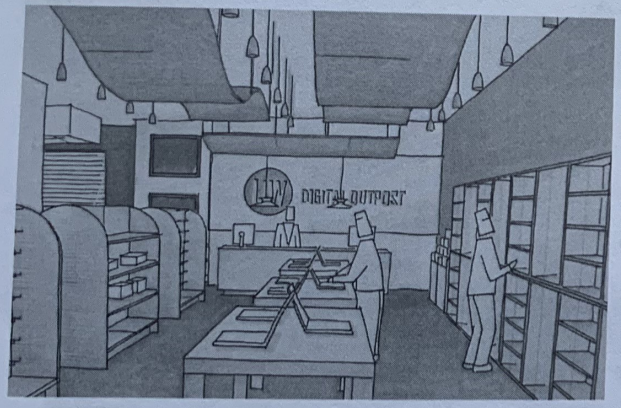


Scheme plan/Diagram

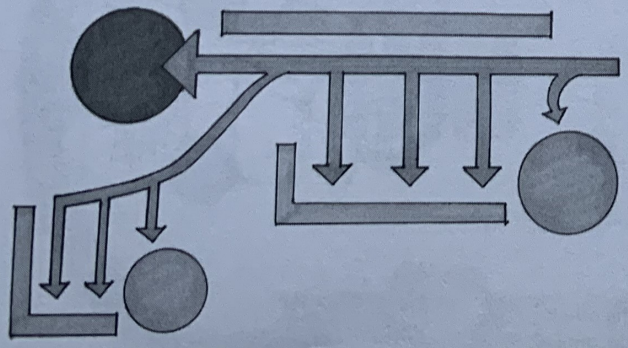
Snake



Perspective

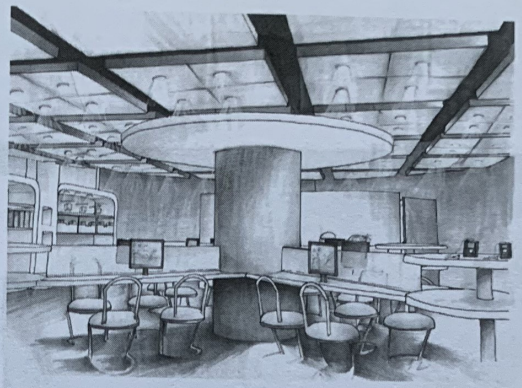


Perspective

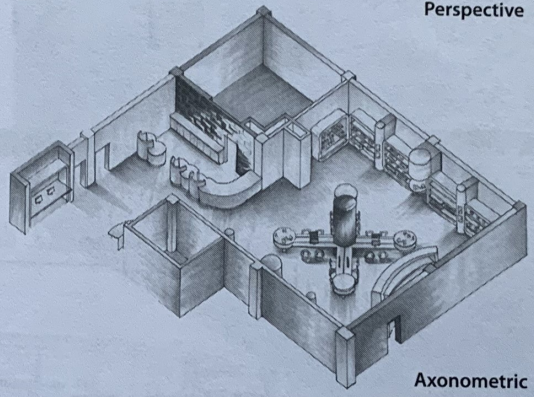


Scheme plan/Diagram

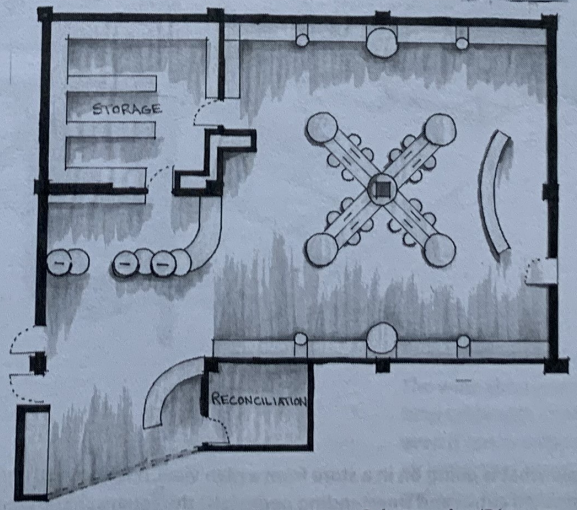
Trinode



Perspective



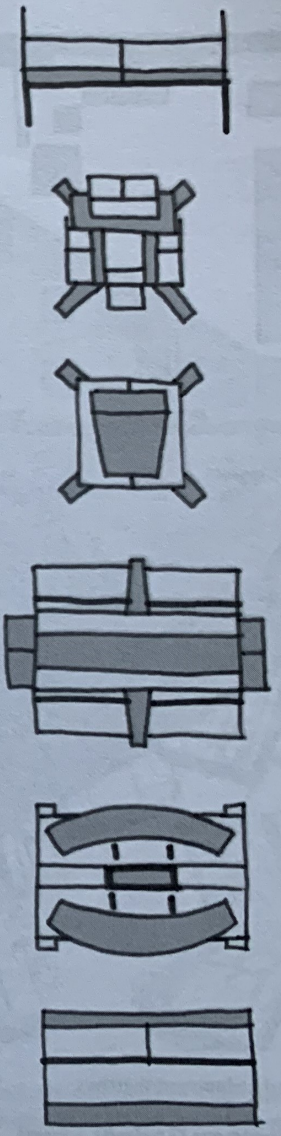
Axonometric



Scheme plan/Diagram

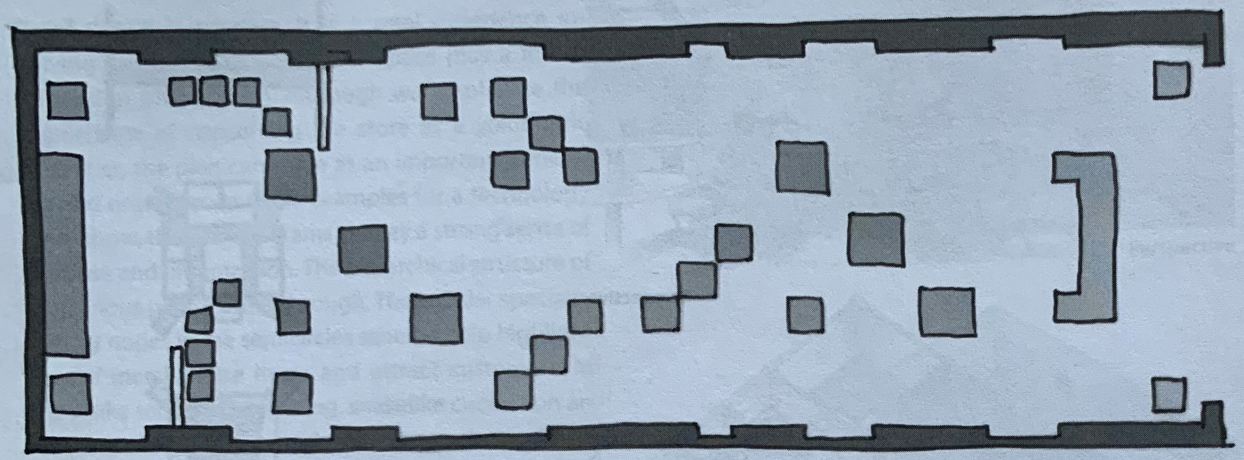
X-Factor

Fixtures in Plan



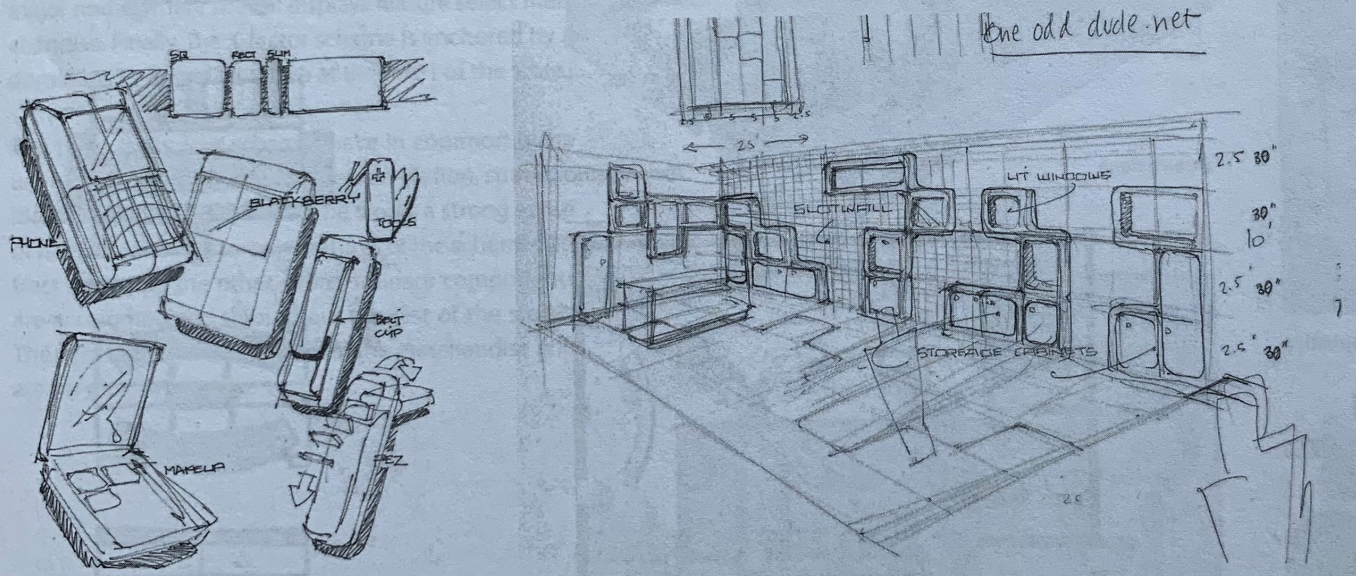
Plan view symbols for fixtures vary and are not always standard. Shown here are customized plan symbols for fixtures used by a computer/software retailer.

Retail Examples II



Plan/Diagram

Perspective

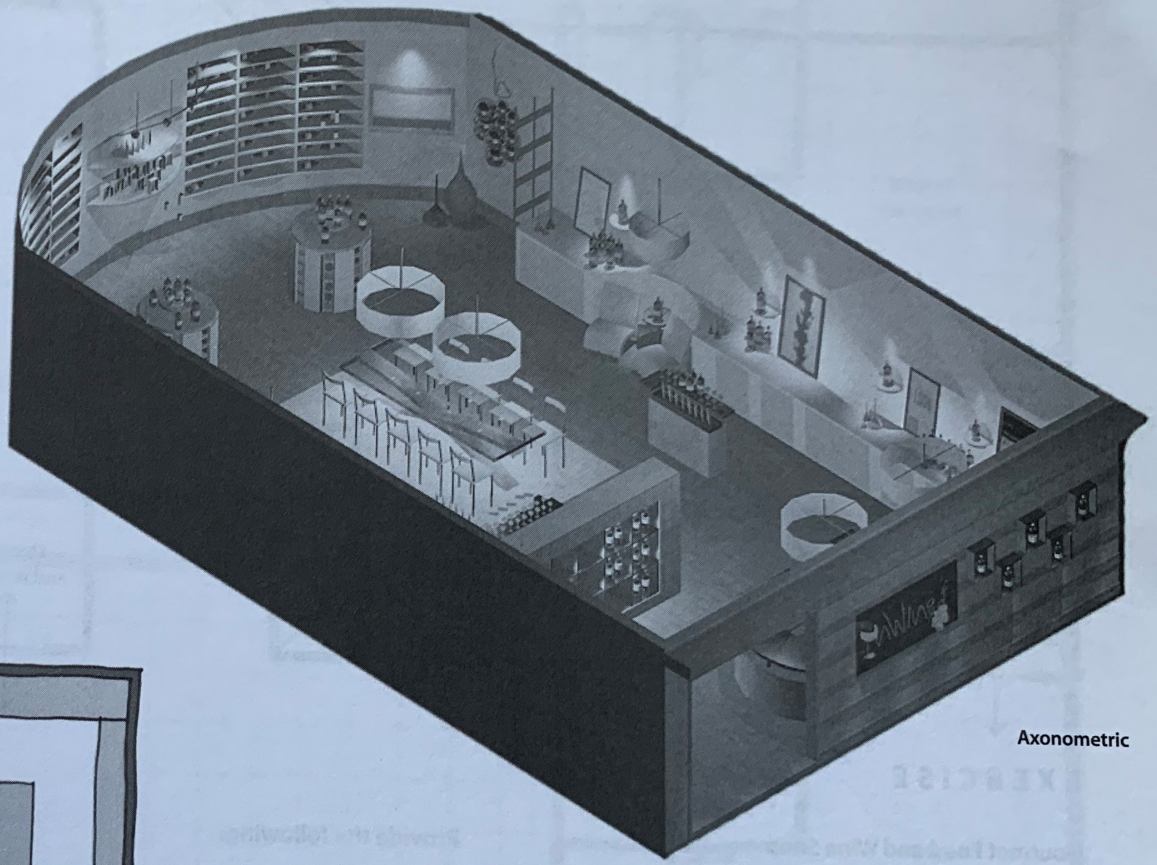


Design development sketches

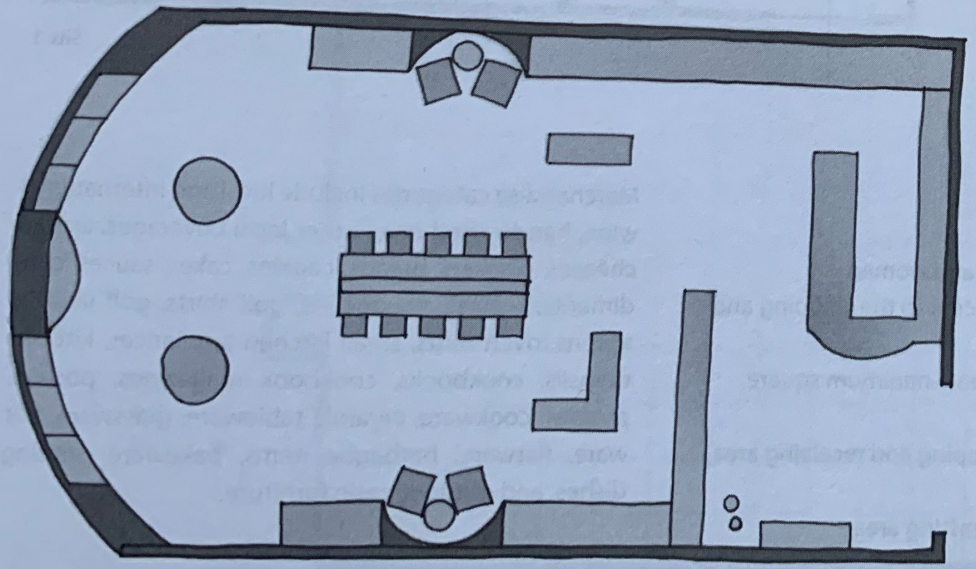
Technology Gadget Store

This is a good example of how it is sometimes impossible to know what is going on in a store from a plan view. It is not until one sees some of the other drawings that one begins to understand what kind of display (stacked cubes and freestanding pedestals) the square shapes represent. Note that, unlike the examples on the previous page, there are no clear dominant locations in this design, as seen on plan. The hierarchical treatment in this case is fairly even. This is also a good example of the use of design development sketches (beyond bubbles and diagrams) to help visualize space and its contents.

Perspective



Axonometric



Space Plan

Wine Shop

The wine shop project features, clearly, a dominant element right at its heart, a long table with chairs. This is recognizable in plan view, as well. It starts to suggest, even if one is unfamiliar with the project's program, that wine tasting sessions are an important component of the project. Furthermore, it conveys a choice of how the wine tasting happens: people gather around a single table as a group. Note that in addition to the featured table, there are product displays all around, on the walls and on the various freestanding pedestals surrounding the main table.

RESTAURANTS

ANATOMY & ISSUES

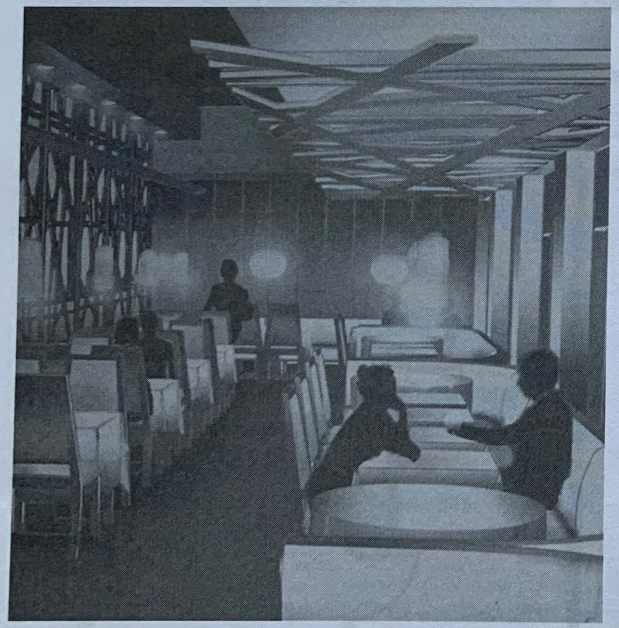
The Interior Plan

ROBERTO J. RENGEL

Restaurants: Anatomy and Issues

The two basic components of a restaurant are a kitchen, where the food is prepared, and a dining room, where the food is served. In addition to the two essential settings, restaurants also include a bar area and restrooms (required by code) in the public area and often a small office and an employee area in the private back area. At a more detailed level the front of the house (or public area) usually has a host station up front, with a waiting area, and one or more waiter service stations somewhere in the facility. The most characteristic thing we see in the public side of restaurants is people eating at tables. The table, and its many variations, is then one of the basic elements to be understood by designers.

Seeing a restaurant operation from a back-of-the-house perspective is a fascinating experience. There is the frequent arrival of raw ingredients; the storage of food; its preparation on demand; busy waitstaff running back and forth, bringing in new orders and taking out completed meals, while being careful not to run into patrons crossing just outside the kitchen door, on their way to the restroom. The bartender at the bar is also busy preparing drinks for patrons at the bar and customers already seated at tables. Up front, the hostess greets incoming customers and escorts them to their assigned tables.



Dining area

Bar area

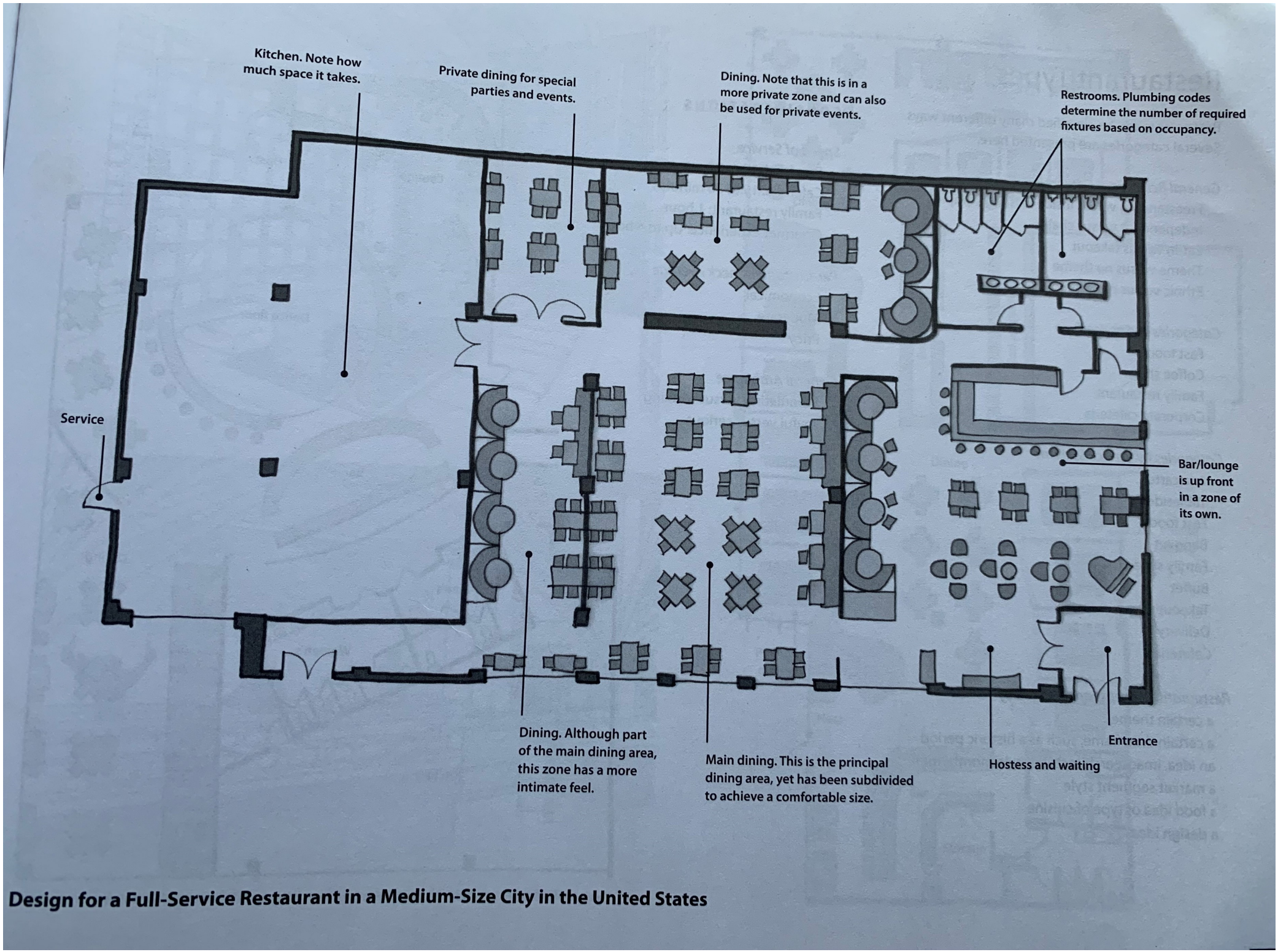
The following are some of the questions to be addressed before space planning a restaurant facility:

- What is the desired seating capacity?
- Will there be a single large dining hall or multiple smaller areas?
- Will there be a bar? If so, for how many people? Where should it go?
- Will the kitchen be full service? How large should it be?
- Where will deliveries come in?
- How will food be ordered? Will waiters take orders at tables?
- Are there any special considerations regarding how the food will be served, such as in a Japanese sushi bar or a Spanish tapas bar?
- What should the turnover time be? Fast, as in a fast food restaurant, or more leisurely?

Not all restaurants are alike, and understanding the specific requirements to be addressed in their design is necessary in order to be on target with the design strategy.

Five Important Design Considerations:

1. Good flow
2. Kitchen (size and location)
3. Kitchen–dining relationship
4. Volume of business
5. Speed of service



Design for a Full-Service Restaurant in a Medium-Size City in the United States

Restaurant Types

Restaurants can be classified many different ways. Several categories are presented here.

General Restaurant Categories
- Freestanding versus inside existing complex
- Independent versus chain
- Eat-in versus takeout
- Theme versus no theme
- Ethnic versus nonethnic

Categories by Service Type
- Fast food
- Coffee shop
- Family restaurant
- Corporate cafeteria

Categories by Service Systems
- A la carte
- Tableside
- Fast food
- Banquet
- Family style
- Buffet
- Takeout
- Delivery
- Cafeteria

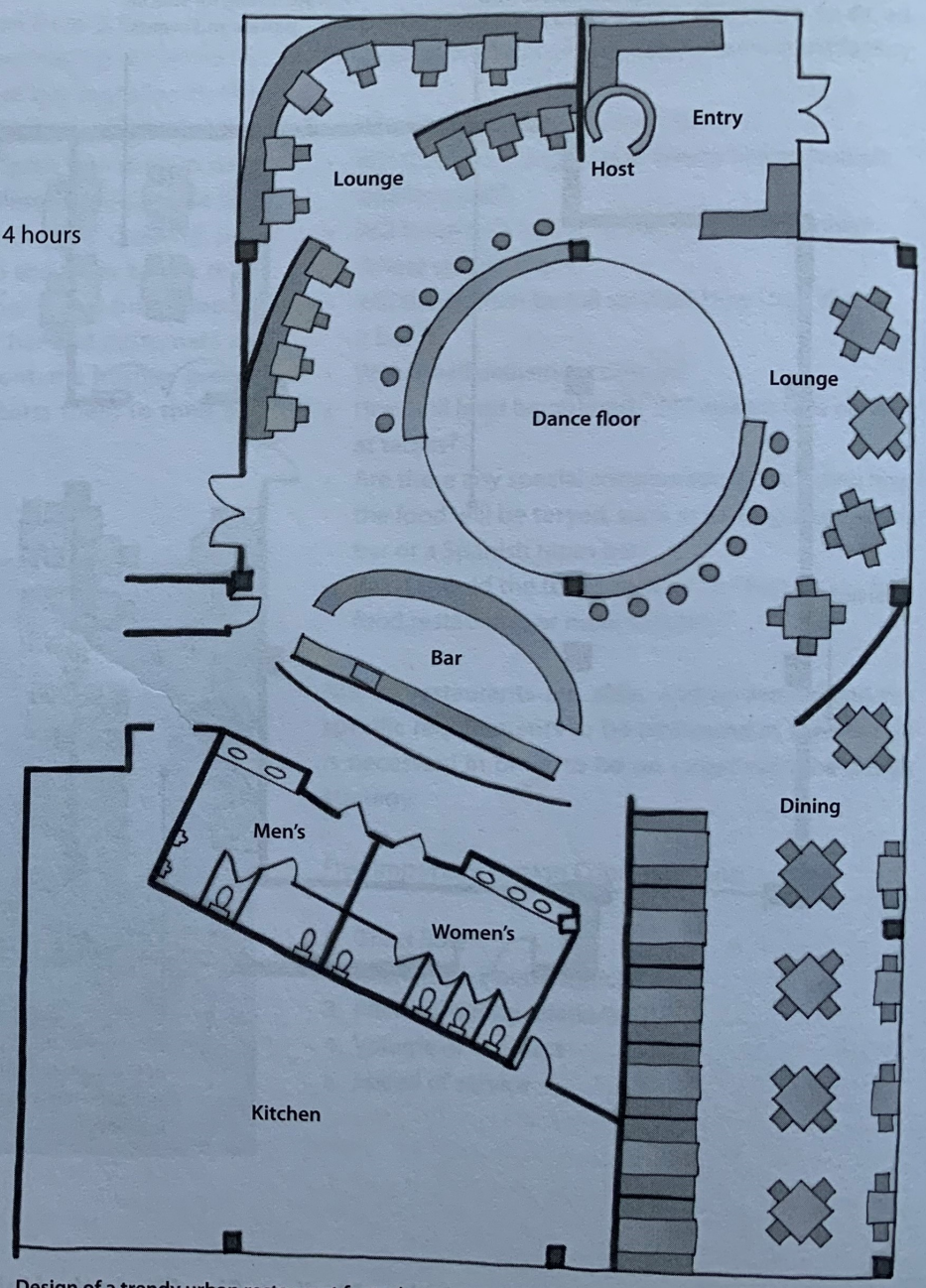
Restaurant Concepts are Inspired by
- a certain theme
- a certain time frame, such as a historic period
- an idea, image, architectural style (nontheme)
- a market segment style
- a food idea or type of cuisine
- a design idea

CONSIDERATIONS

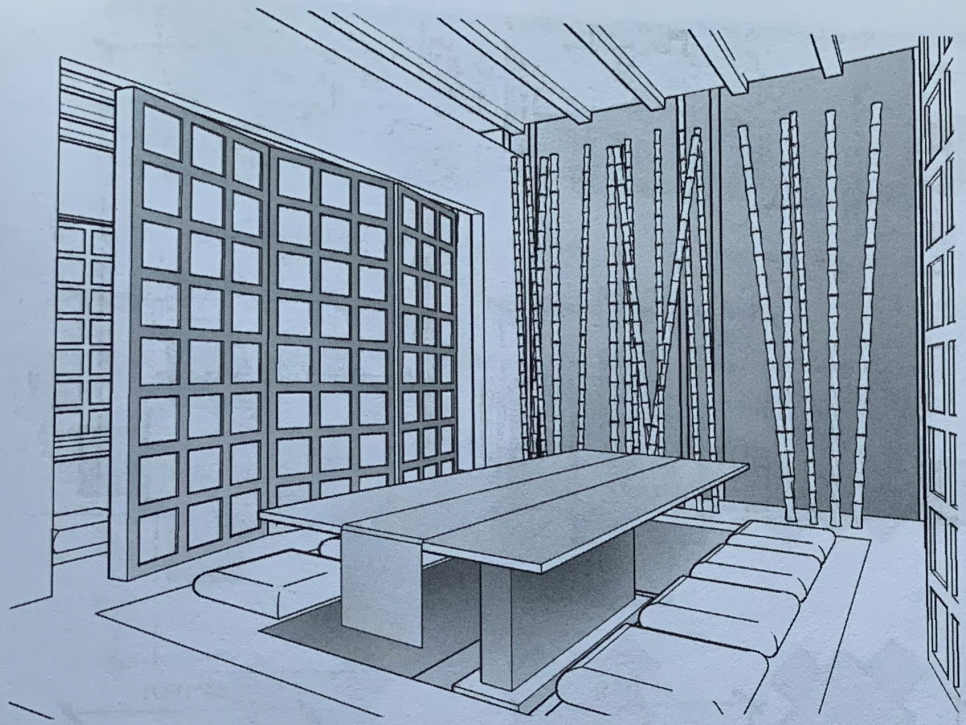
Speed of Service
- Fast food: 15 to 20 minutes
- Cafeteria: 15 to 30 minutes
- Family restaurant: 1 hour
- Gourmet experience: Up to 4 hours

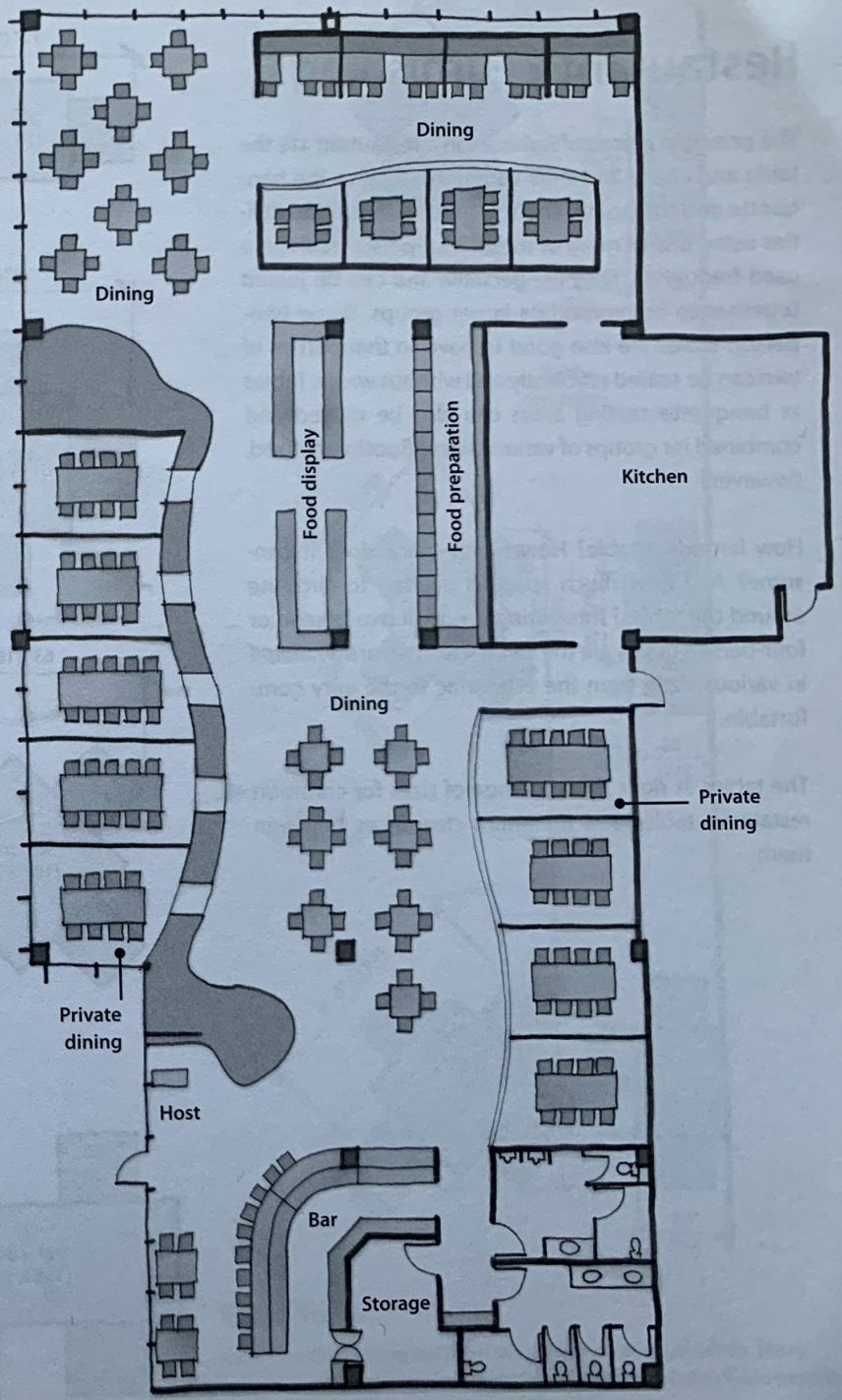
Per-Customer Check Average
- Economical
- Moderate
- Pricy

General Ambiance
- Stimulating versus relaxing
- Joyful versus serious



Design of a trendy urban restaurant featuring new cuisine and dancing after hours





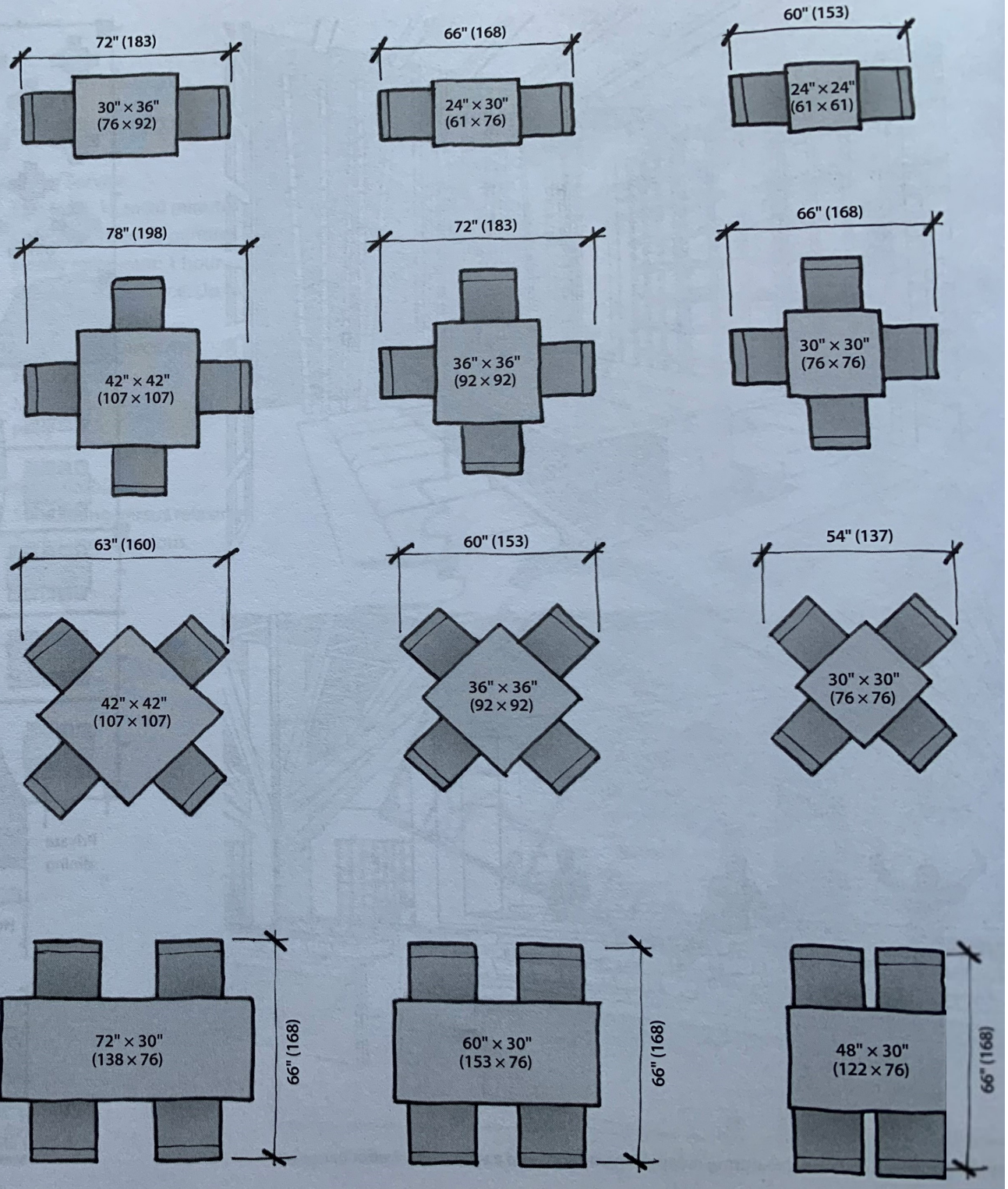
Design of a Japanese restaurant featuring many dining options and a teppanyaki buffet bar

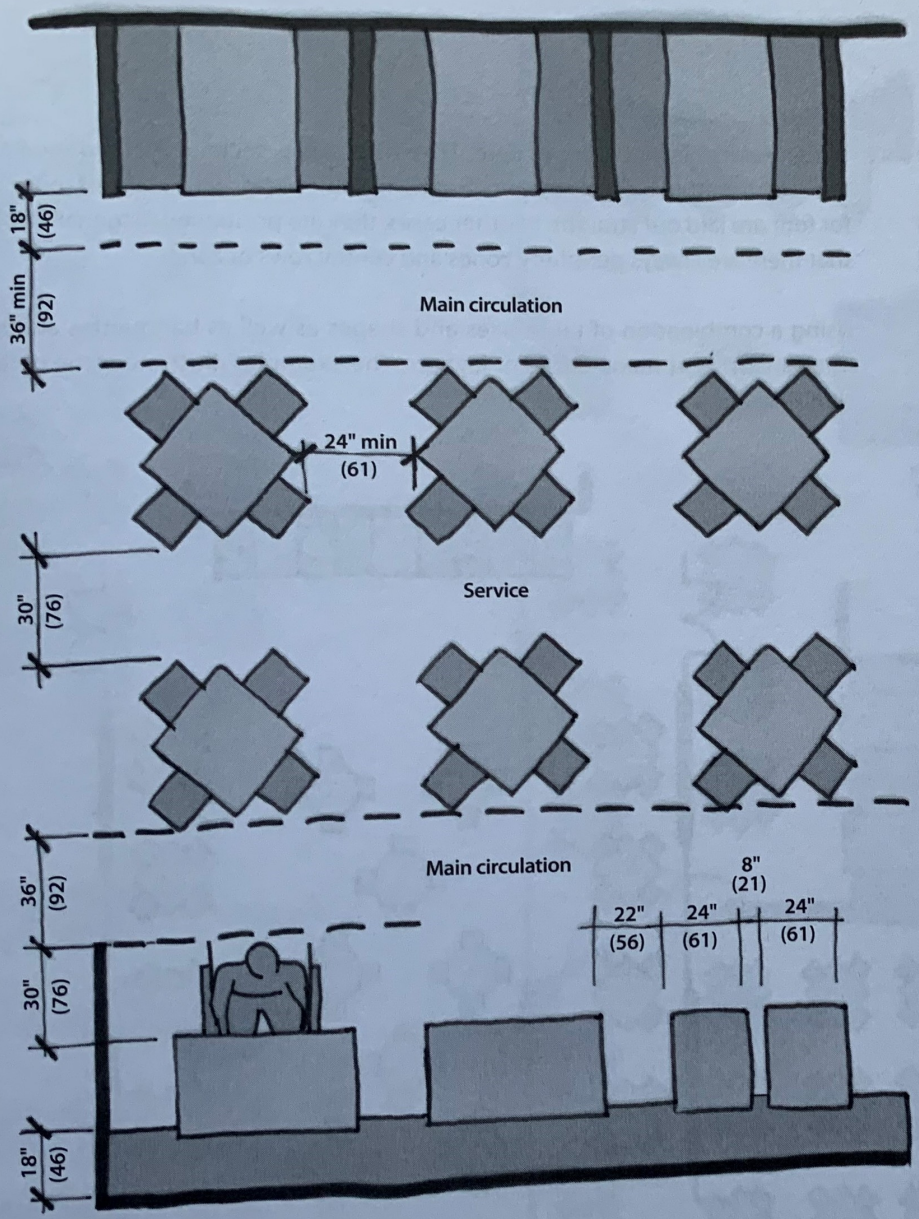
Restaurants: Furnishings

The principal pieces of furniture in a restaurant are the table and chairs and their variations, such as the banquette and the booth. There are many layout possibilities using one or more of these. Four-person tables are used frequently. They are versatile and can be joined together to accommodate larger groups. Some two-person tables are also good to have so that parties of two can be seated efficiently and without waste. Tables at banquette seating areas can also be moved and combined for groups of various sizes. (Booths are fixed, however.)

How large is a table? How much space does it consume? And how much space is needed to circulate around the tables? Interestingly, not all two-person or four-person tables are the same size; they are available in various sizes, from the economic to the very comfortable.

The tables at right show a range of sizes for common restaurant tables and minimum clearances between them.





Clearances at tables and circulation

Table Arrangements

Good circulation flow is crucial in restaurants. It is desirable, for instance, to separate patrons and service staff circulation routes as much as possible. Desirable clearances between tables and circulation space widths are always a question mark. The answers will vary, as some restaurants have high-density dining areas, and others don't. In either case, the following recommended spacings should give you some useful information to start with.

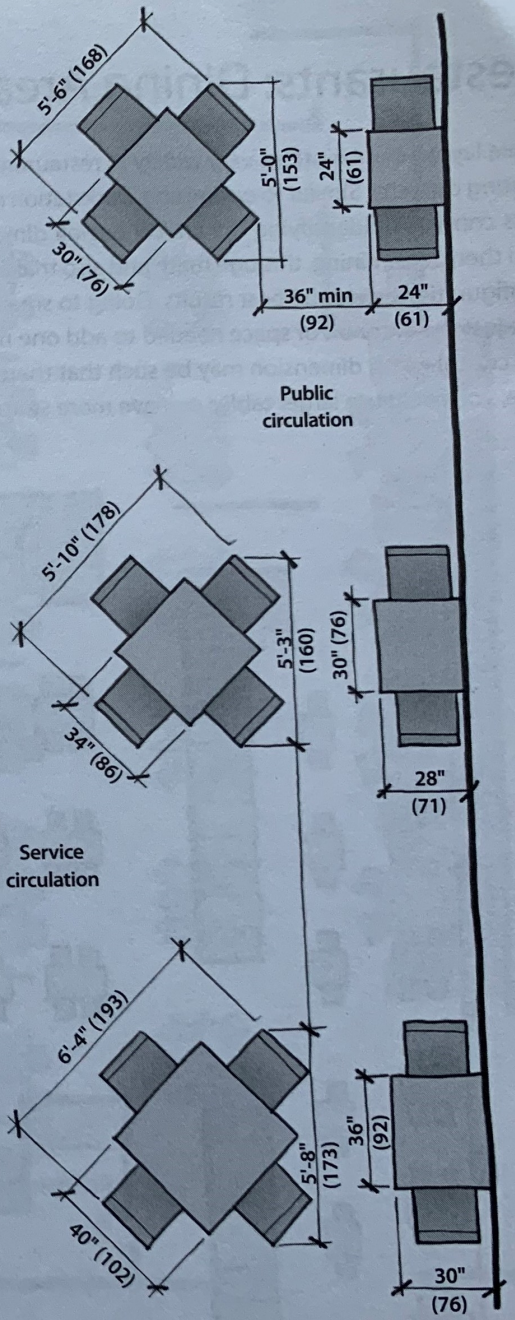


Table Sizes

Note that the spacing between these tables is very generous. Many restaurants have much closer spacing, resulting in higher table densities.

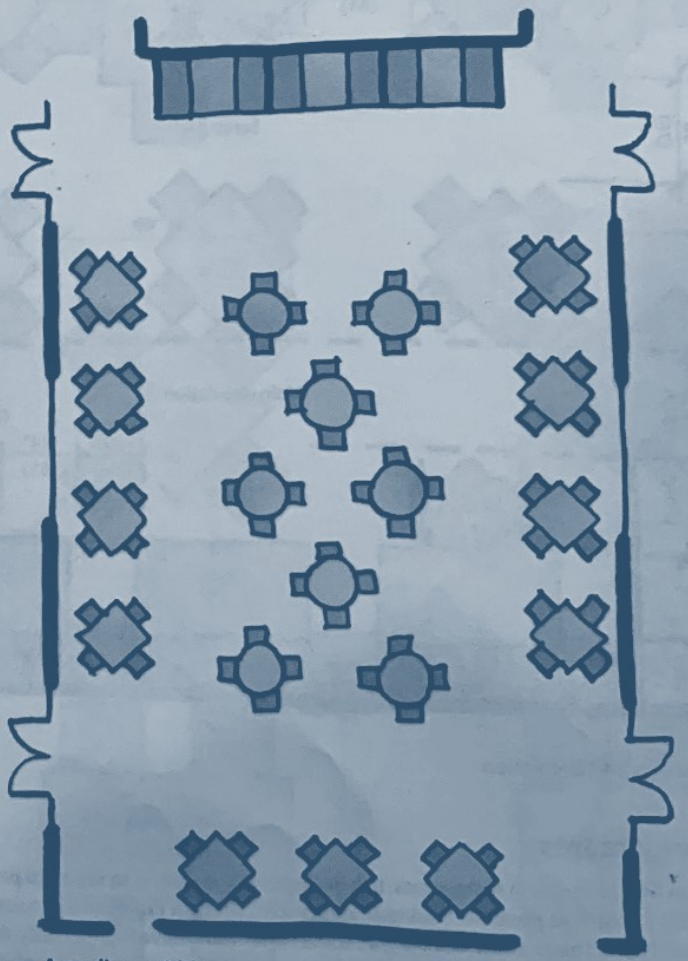
Restaurants: Dining Areas

Table layout combinations vary widely in restaurants. The goal is usually to maximize seating capacity. Similar to optimizing workstation capacity in office projects, the process consists of identifying the critical overall dimensions of the spaces in question and then determining, through math and also trial and error, which combinations and configurations yield the best results. Going to smaller tables will, in some cases, give you just the extra bit of space needed to add one more row of tables. In other cases, the critical width dimension may be such that there is no way to add a row, in which case, you could use larger tables or leave more space in between, or both.

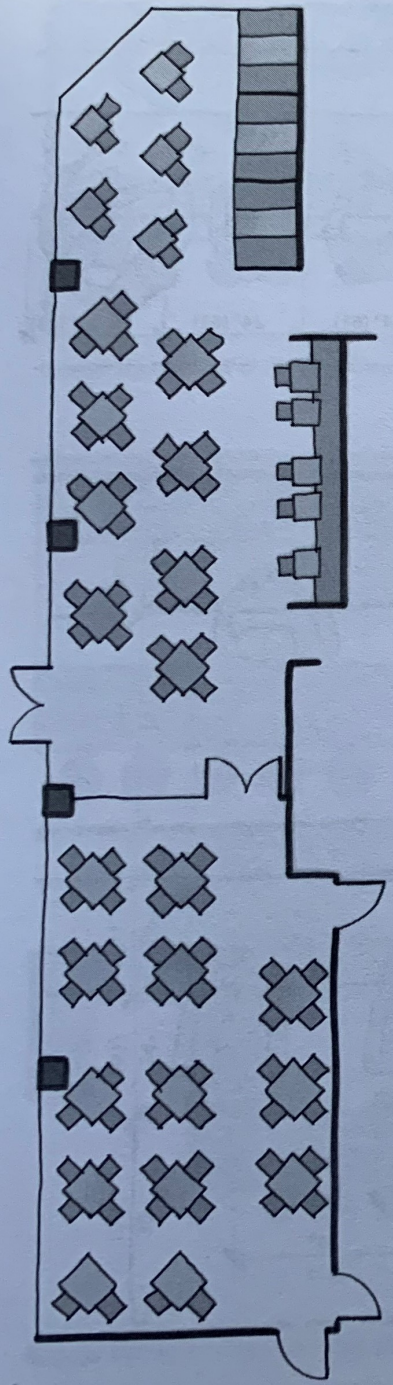
Study the five layouts shown here. They use square, rectangular, and round tables. Some also feature banquettes and booths. In some cases, the square (or round) tables for four are laid out straight. In other cases, they are positioned diagonally. You'll find that there are always periphery zones and central rows or zones.

Using a combination of table sizes and shapes as well as banquettes and booths, one can arrive at many different layouts. The examples illustrate some of the possibilities.

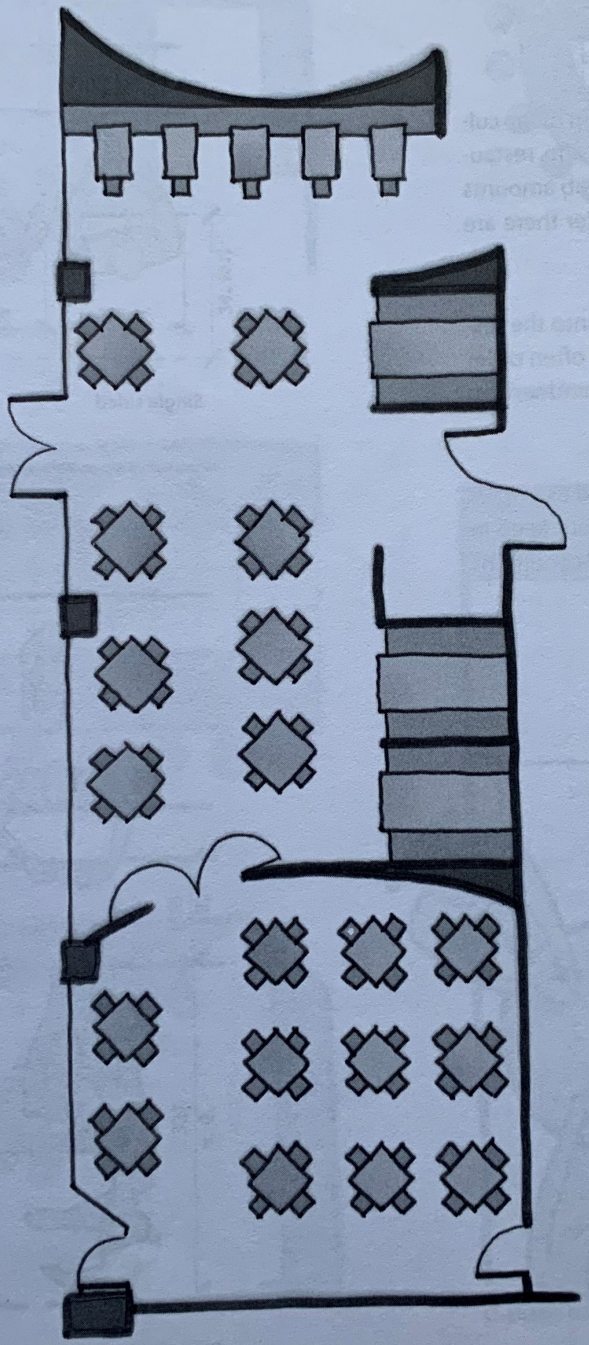
Two connected rooms side by side



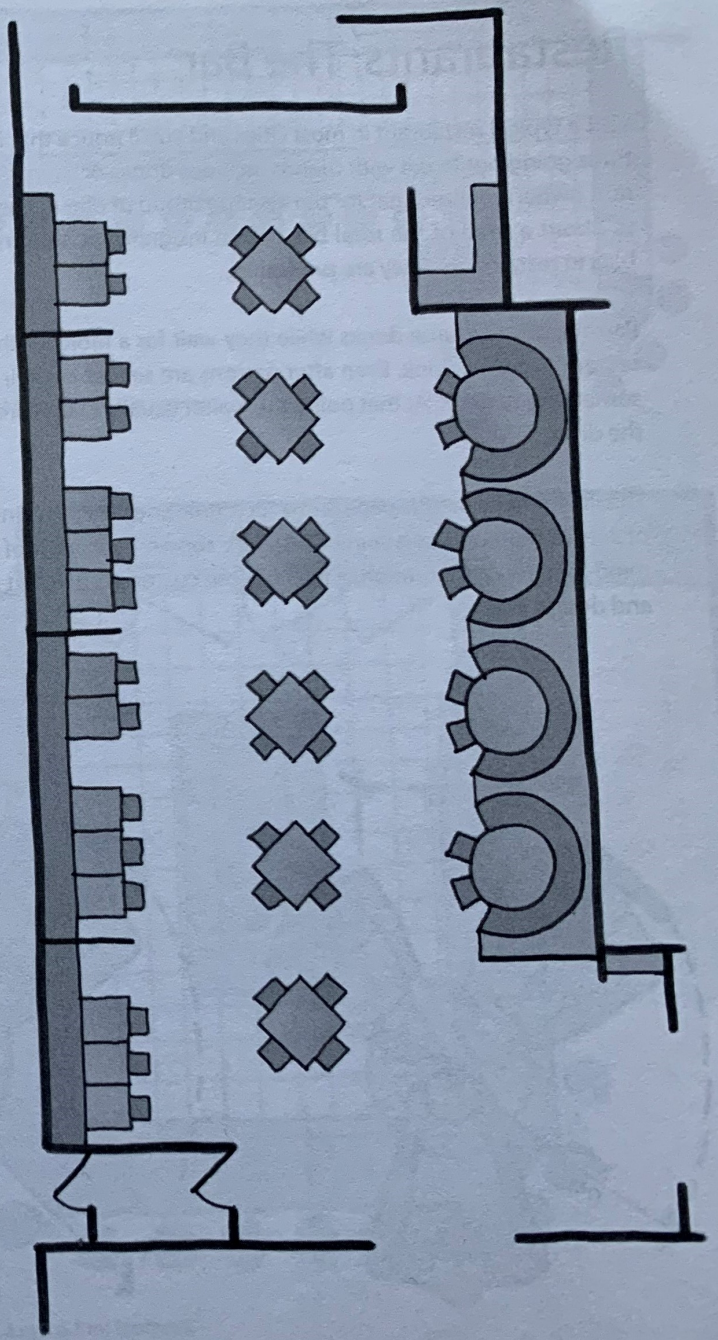
A medium-width room



Long and narrow space with front and back zones



A front-and-back arrangement



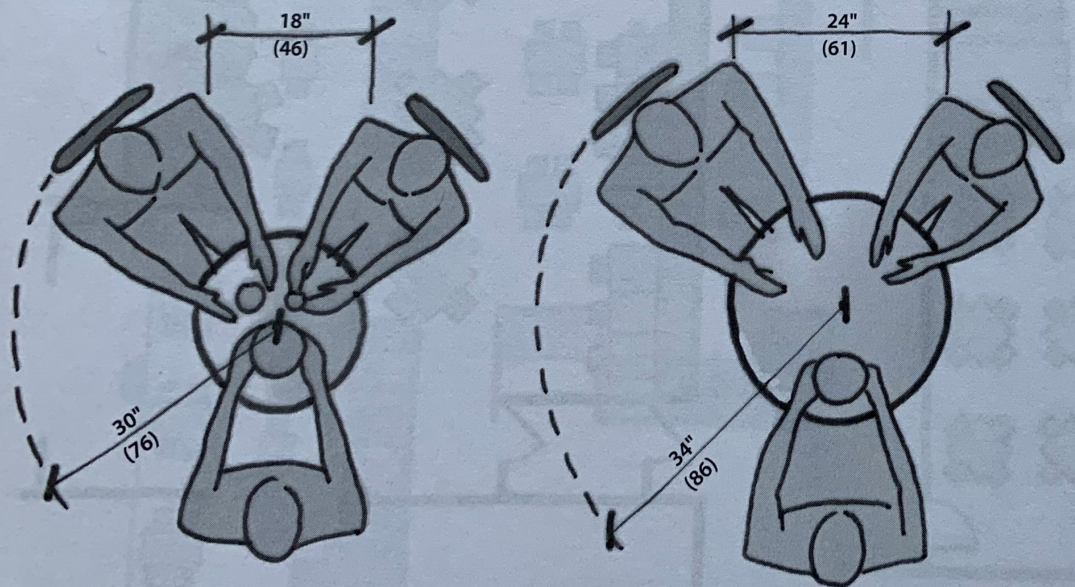
A rectangular room of average width

Restaurants: The Bar

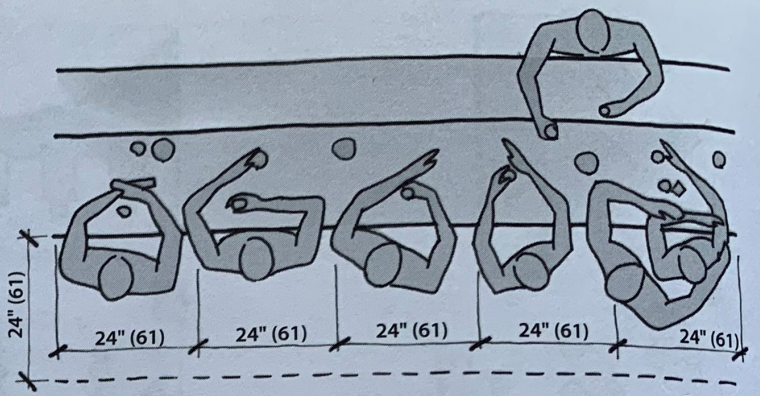
Visit a typical restaurant in most cities and you'll notice that it has a bar. In many cultures going out to eat with friends includes drinks or "spirits." Some time ago, restaurant owners realized that for the average group of diners, the beverage tab amounts to about a third of the total bill, not an insignificant amount. No wonder there are bars in restaurants. They are profitable.

Patrons can consume drinks while they wait for a table, or they can go into the restaurant just for a drink. Even after patrons are seated at their table, they often order something to drink. At that point, the waiter usually takes care of getting and serving the drink.

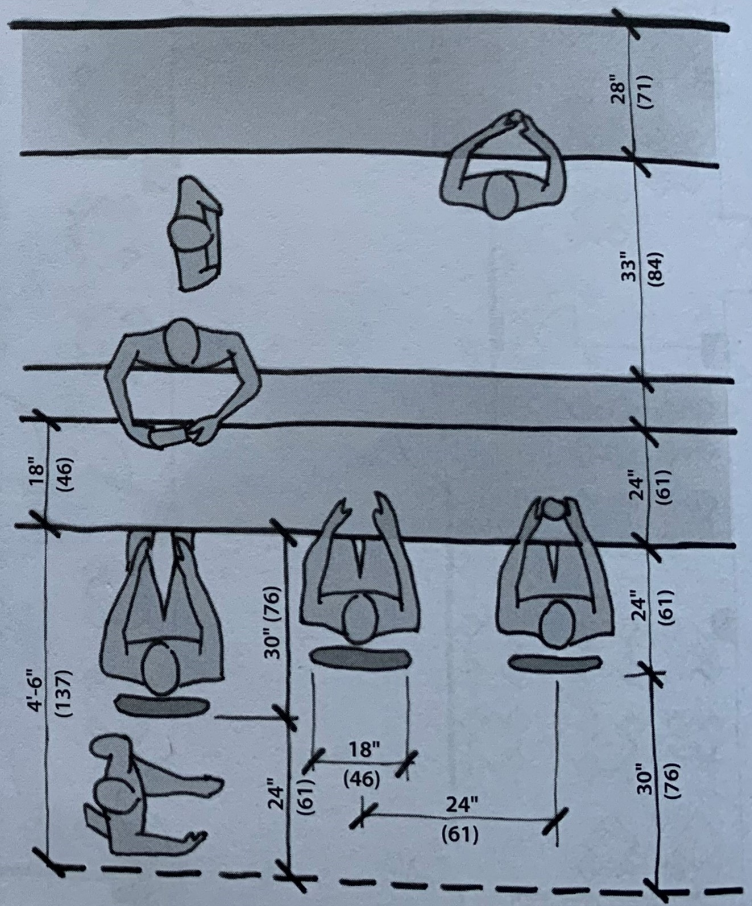
The illustrations on this page show recommended dimensions at bars and examples of some common bar layouts. These are shown as a point of reference, but keep in mind that the configuration of bars is often customized to suit specific site conditions and design ideas.



Bar tables

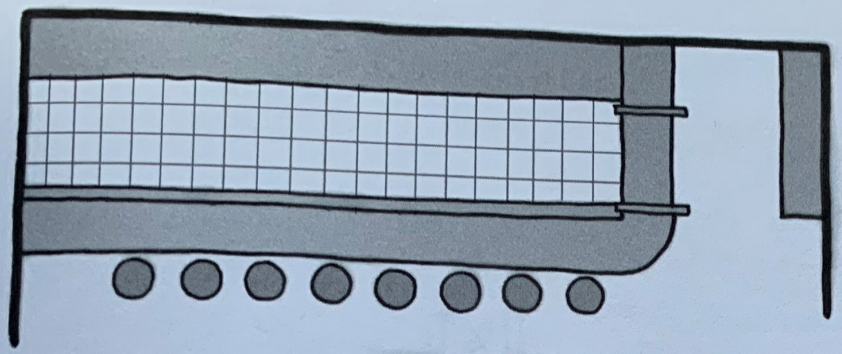


Single sided

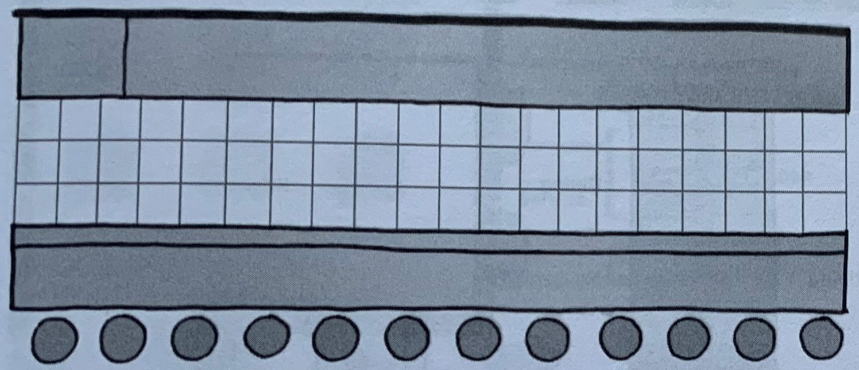


Double sided

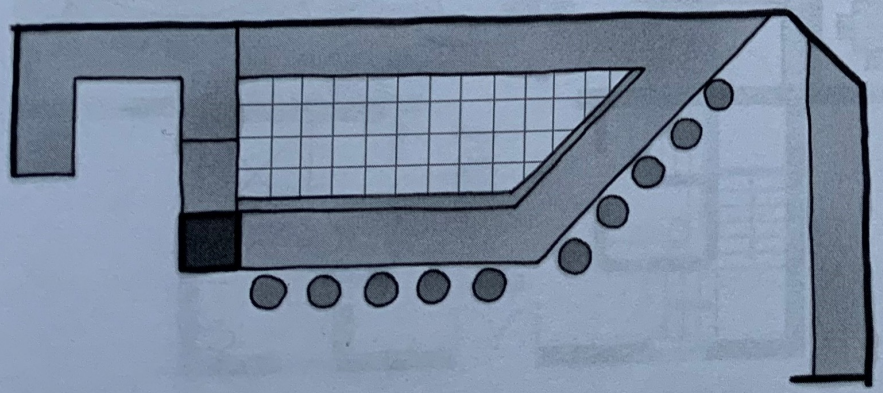
Dimensions at bars



Straight bar: 25' × 10' (7.62 m × 3.05 m) footprint

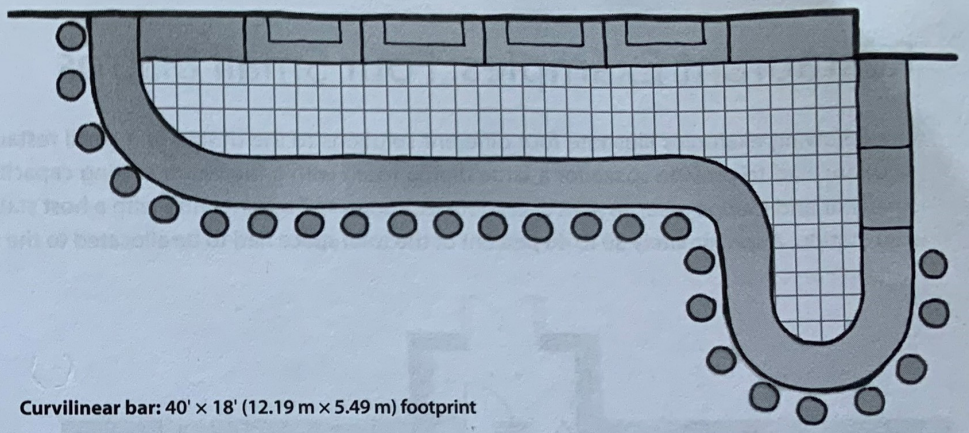


Straight bar: 28' × 10' (8.53 m × 3.05 m) footprint

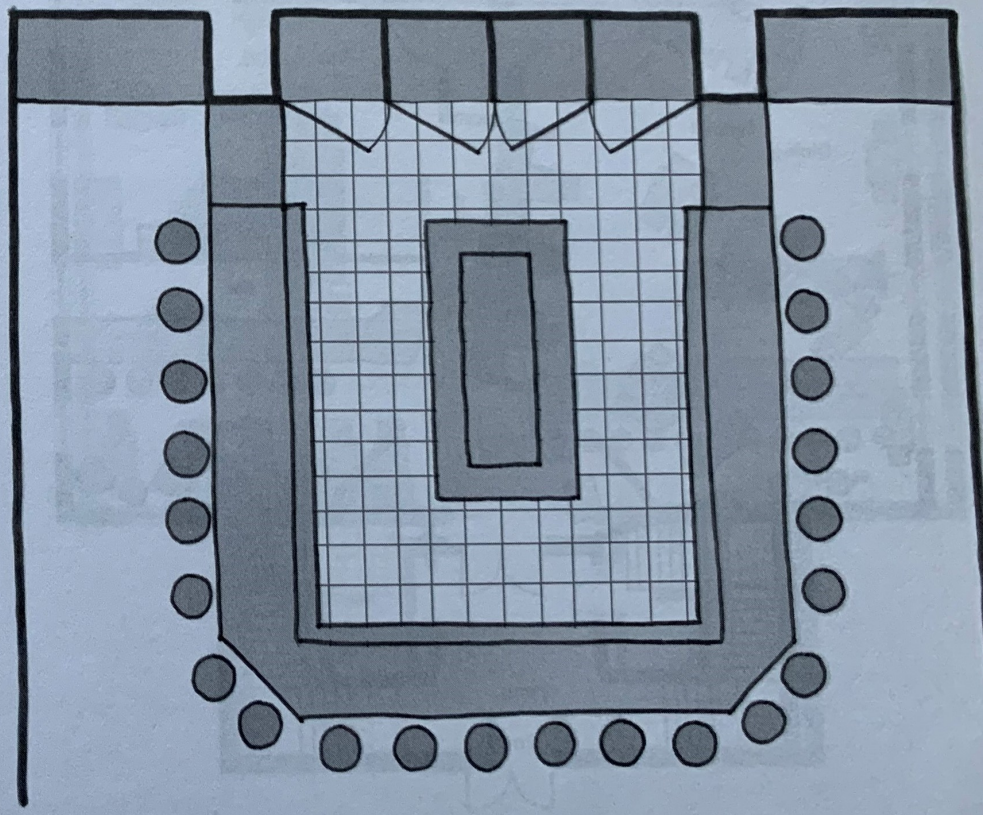


Angular bar: 30' × 12' (9.14 m × 3.66 m) footprint

Typical bar configurations (short runs)



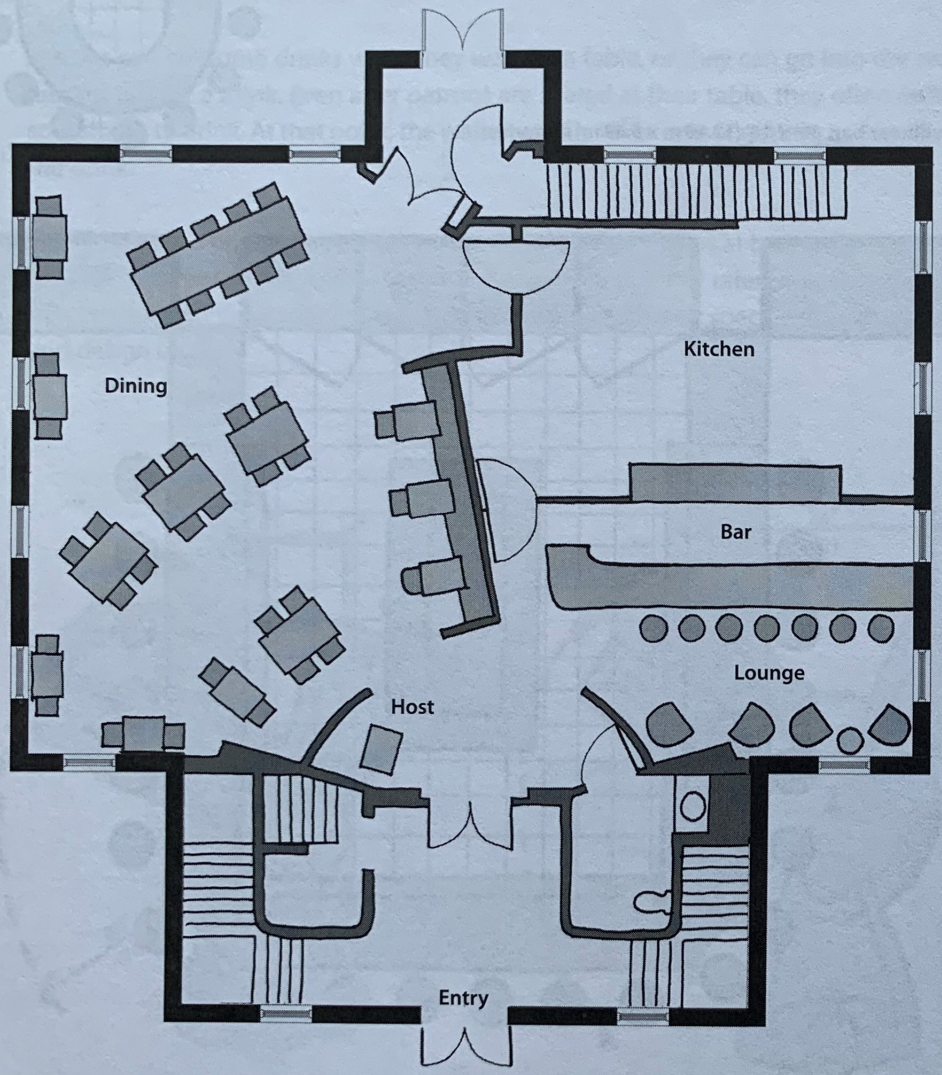
Curvilinear bar: 40' × 18' (12.19 m × 5.49 m) footprint



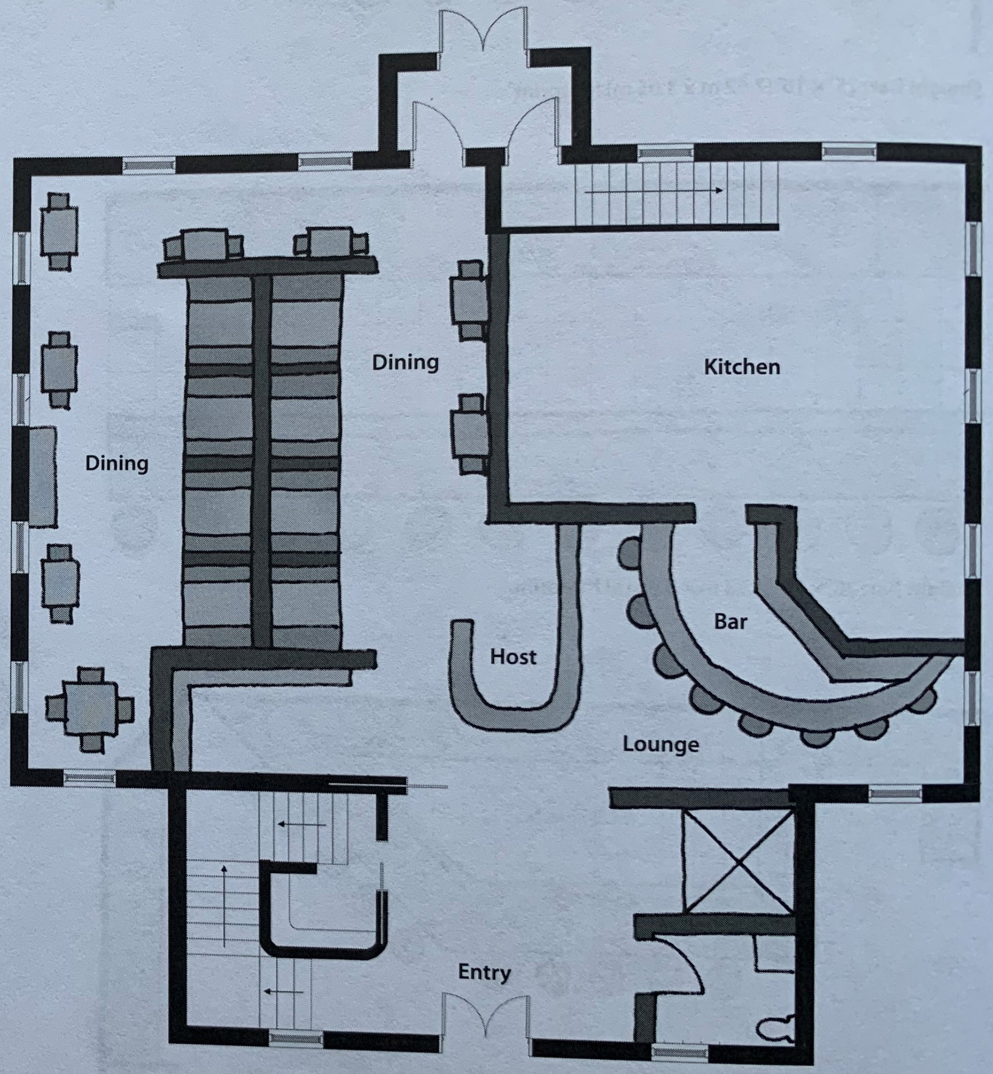
U-shape bar: 21' × 20' (6.4 m × 6.1 m) footprint

Typical bar configurations (medium runs)

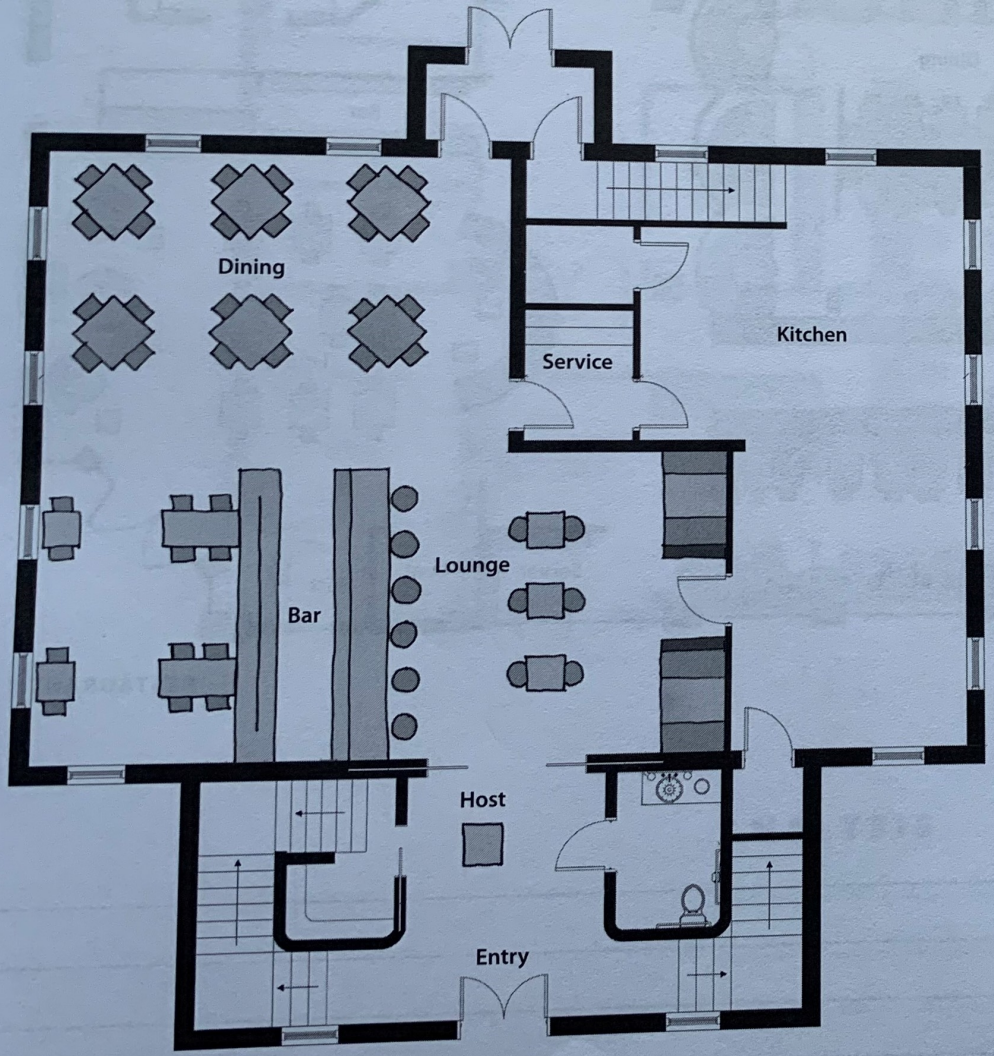
The following examples illustrate four different solutions to the design of a small restaurant. The solutions had to provide space for a large dining room with a minimum seating capacity of 40, a small bar and lounge area, an ADA accessible restroom, and a front entry with a host station and a wait station. Approximately 30 to 40 percent of the total space had to be allocated to the kitchen.



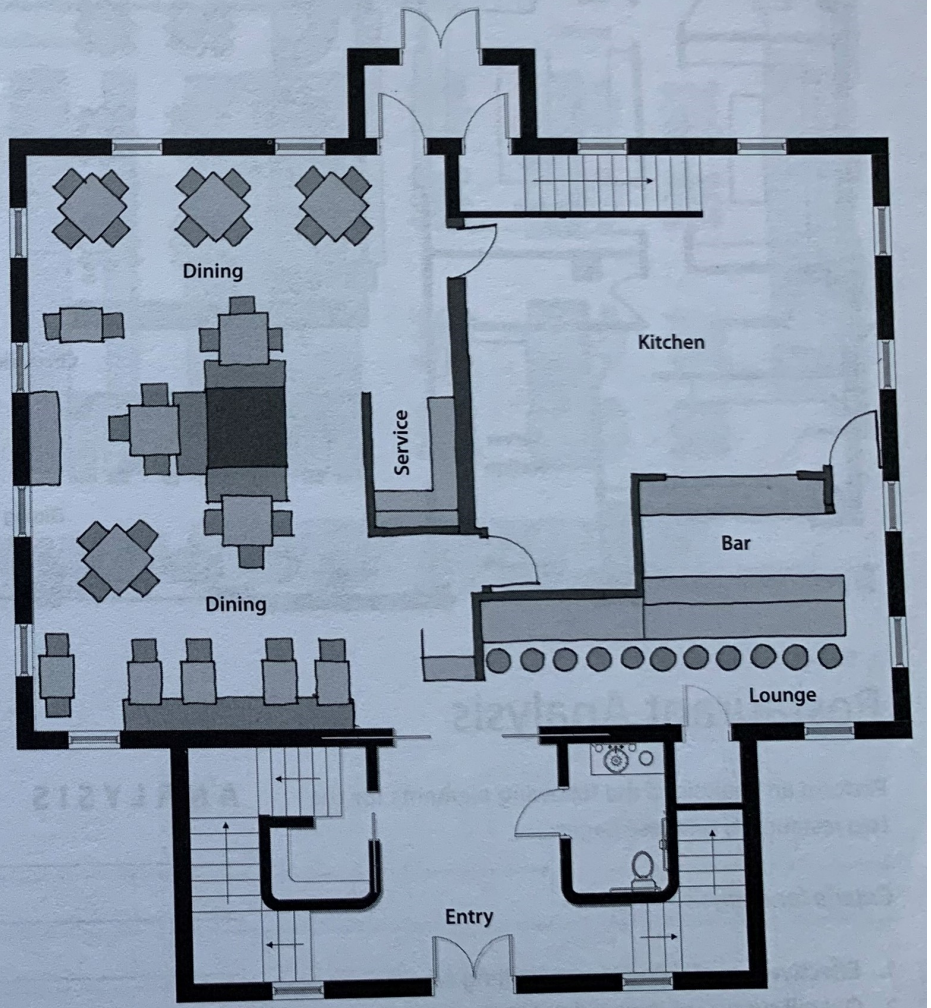
Radial scheme divided into two compartments, one for dining and one for the bar



A two-compartment arrangement featuring booths and a playful circular bar



A one-room L-shaped scheme with the bar at the point



A two-compartment scheme featuring a central object in the dining area and a narrow longitudinal bar zone