

# Soundscapes (Part 2)

Jonathan Ochshorn on Sound, Privacy and Dysfunction

Prof. Lasansky's Sensational Spaces: Architecture and the 7 Senses

Oct. 25, 2024

Overview of discussion:

I. Three aspects of sound/hearing not considered

II. Three aspects of sound/hearing considered

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A. Marshall McLuhan

B. Cultural markers

C. Sound as mode of expression or aesthetic contemplation

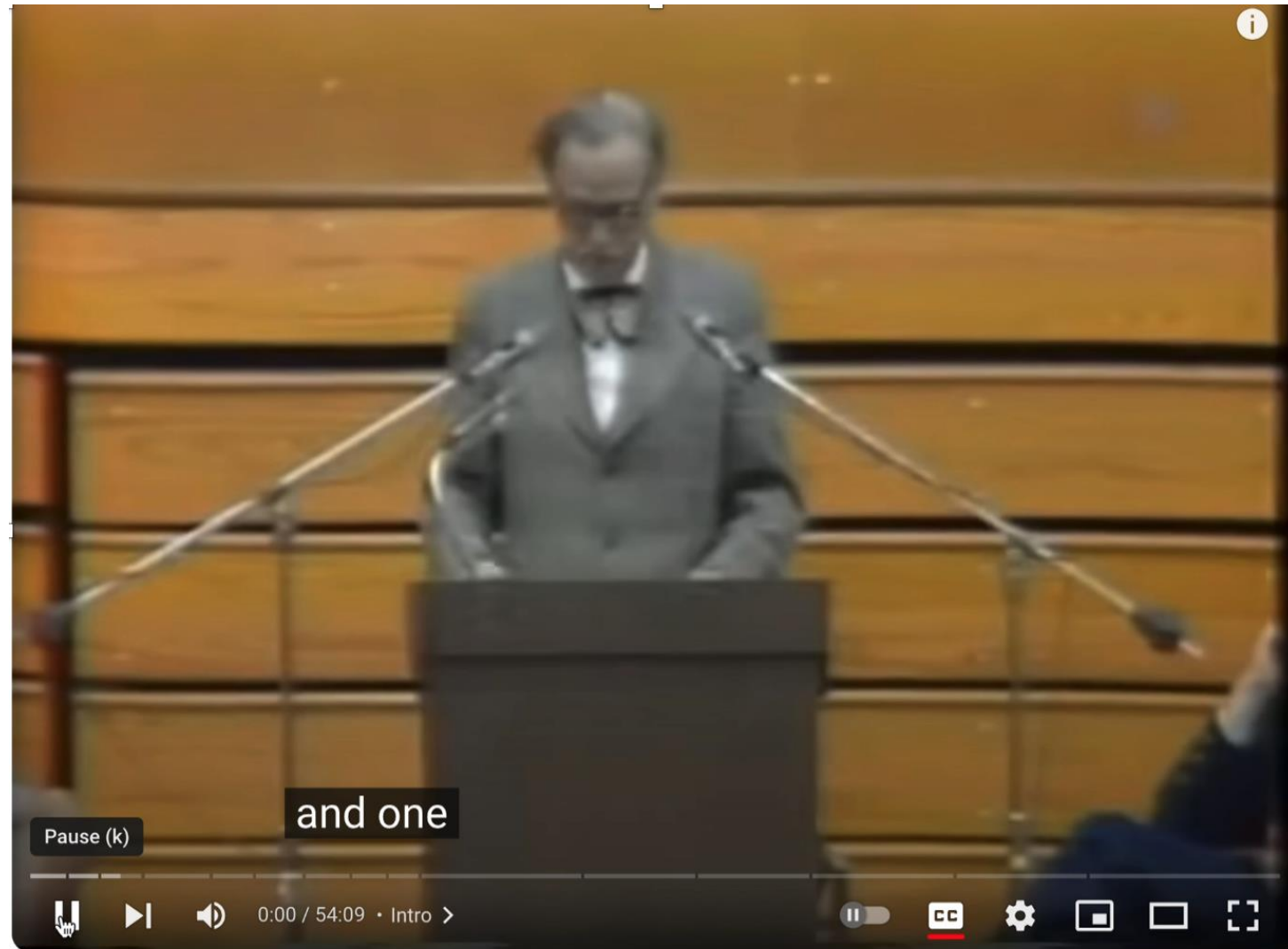
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A. Marshall McLuhan: seeing and hearing represent stages of human development, with hearing (along with touch, taste, and smell) prioritized in so-called untamed settings where such senses afford greater knowledge of the surrounding territory than sight. McLuhan thought hearing encouraged a more holistic world view than sight. The printed or written word changed everything — not, per McLuhan, for the better — but then the acoustic world re-emerged with electronic media.

“Acoustic space is about the simultaneity of auditory information, which parallels the simultaneity of electric information; and this is why McLuhan proposed that electrically configured information is acoustic in nature.”

[Emma Findlay and Robert Logan, “Acoustic Space, Marshall McLuhan and Links to Medieval Philosophers and Beyond: Center Everywhere and Margin Nowhere.”](#)



**Marshall McLuhan 1974 - Full lecture Living in an Acoustic World | University of South Florida**

**See film clip at [https://youtu.be/0L\\_ugK386QY?feature=shared](https://youtu.be/0L_ugK386QY?feature=shared)**

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**Annie Hall (1977) scene with Marshall McLuhan**

**See film clip at <https://youtu.be/vTSmbMm7MDg?feature=shared>**

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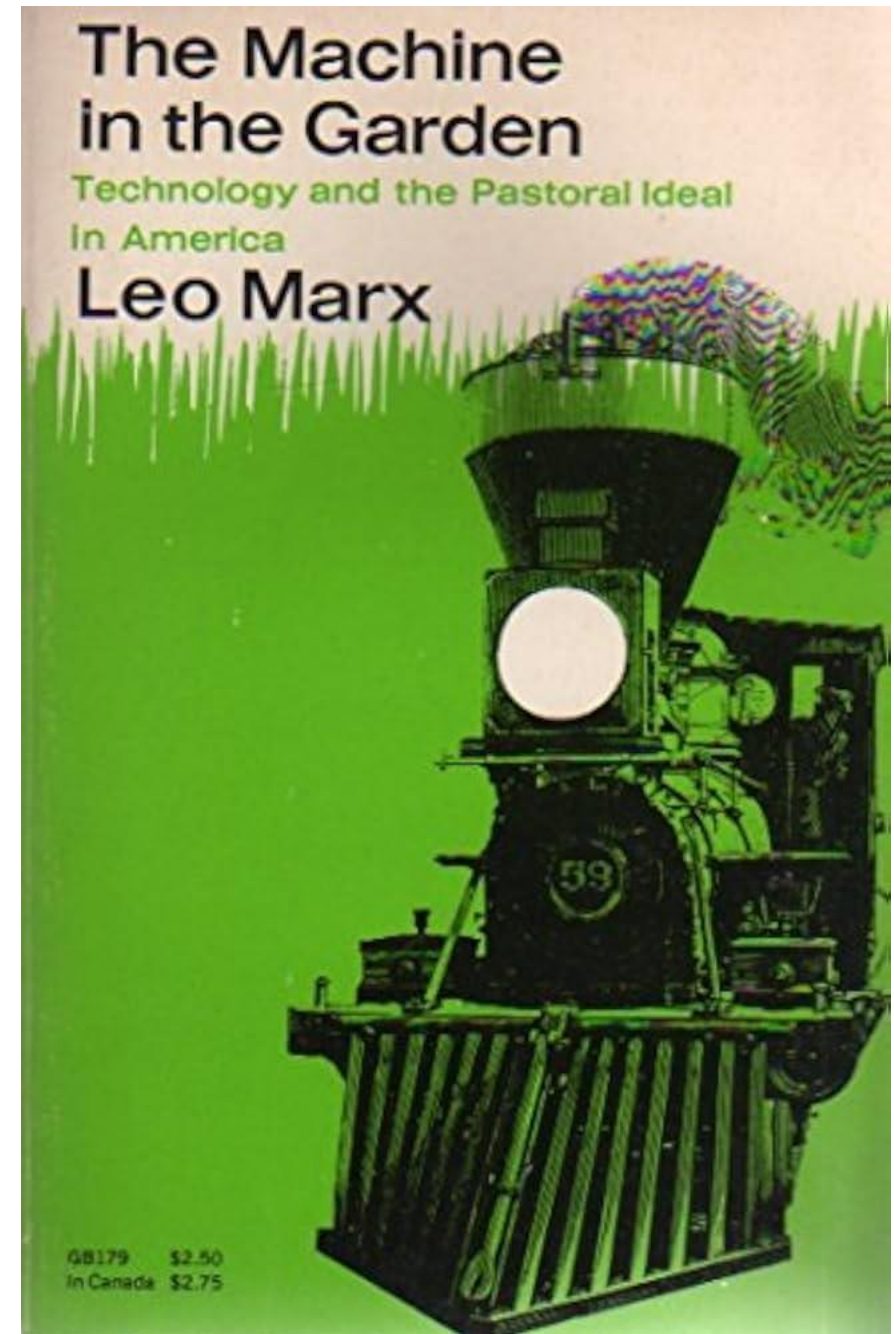
A. Marshall McLuhan

B. Cultural markers

1. **Ivan Pavlov** and "classical conditioning" (e.g., using sounds to activate a physiological reaction in dogs, expecting to be fed).

2. **Church bells**, as well as music in many other contexts.

3. **Leo Marx, *The Machine in the Garden***: "The locomotive, associated with fire, smoke, speed, iron, and **noise**, is the leading symbol of the new industrial power. It appears in the woods, suddenly shattering the harmony of the green hollow, like a presentiment of history bearing down on the American asylum. The **noise** of the train, as Hawthorne describes it, is a cause of alienation in the root sense of the word: it makes inaudible the pleasing sounds to which he had been attending, and so estranges him from the immediate source of meaning and value in Sleepy Hollow."





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John Cage (1912–1992) describes the value of his apartment in New York City specifically in terms of noises originating outside the enclosure wall: *“I love living on Sixth Avenue. It has more sounds, and totally unpredictable sounds, than any place I’ve ever lived. ... I wouldn’t dream of getting double glass because I love all the sounds. The traffic never stops, night and day. Every now and then a horn, siren, screeching brakes—extremely interesting and always unpredictable. ... There was a burglar alarm one night and I was amazed because the pitch went on for hours, was quite loud. It seemed to me to be going slightly up and down. So, what it became in my dreams was a Brancusi-like shape, you know, a subtle curve. And I wasn’t annoyed at all.”*



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- A. Overview of sound and architecture
- B. Desire for privacy
- C. Ideological or other assaults on privacy



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II. Three aspects of sound/hearing considered

**A. Overview of sound and architecture.** There are three acoustical functions that need to be addressed in buildings

1. Isolating interior spaces from outside sound
2. Sound quality within any given room
3. Sound isolation between adjacent rooms or spaces.

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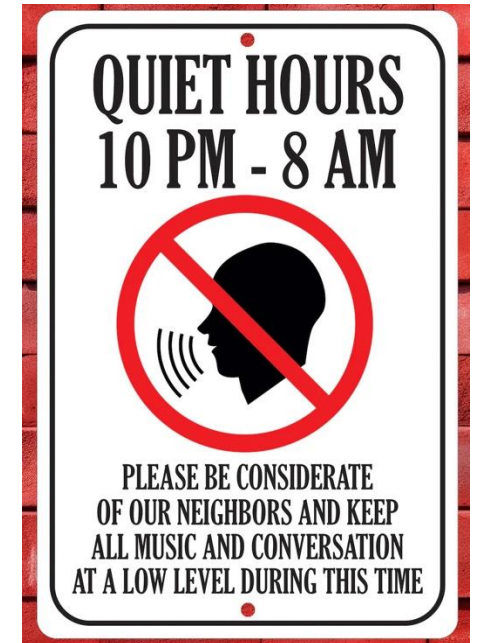
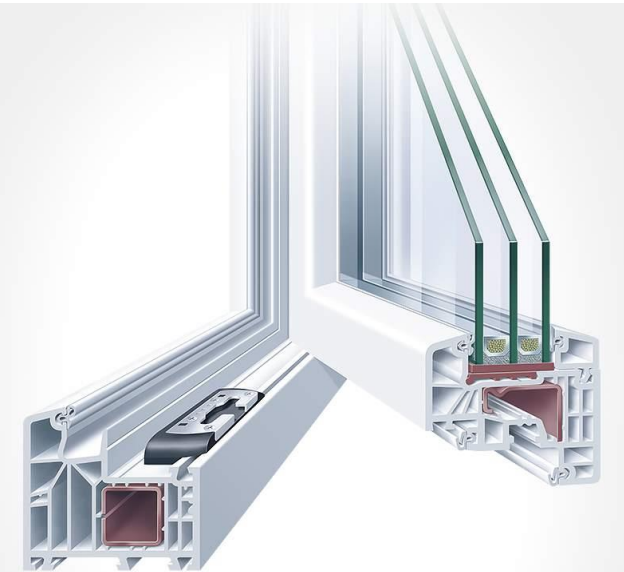
II. Three aspects of sound/hearing considered

A. Overview of sound and architecture. There are three acoustical functions that need to be addressed in buildings

1. Isolating interior spaces from outside sound (e.g., highways or airports) or isolating exterior spaces from interior sound (e.g., loud music).

a) Acoustic control:      Absorbed by another medium  
                                     Reflected against a barrier  
                                     Interference from ambient (white) noise

b) Legal control: Legislation limiting noise levels



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1. Isolating interior spaces from outside sound

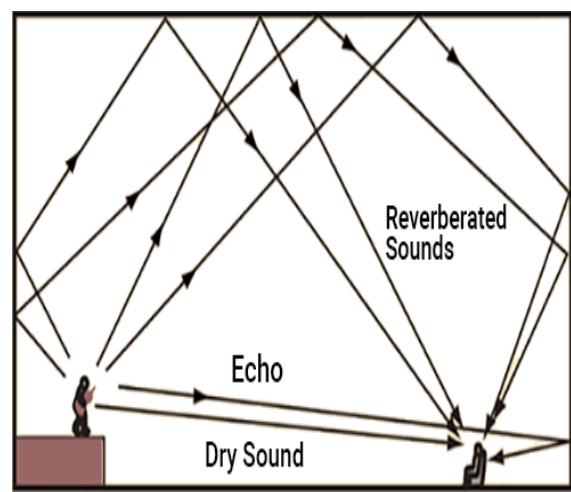
2. Sound quality within any given room

Reverberation is the key metric here, affected by surface characteristics of walls, floors, and ceilings, but also by room geometry.

a) Control reverberation with sound-absorbing materials. Example of concert halls, but applies to all spaces.

b) Example: Hard surfaces in assembly spaces or restaurants.

c) Example: Milstein Hall Crit Room "whispering gallery"





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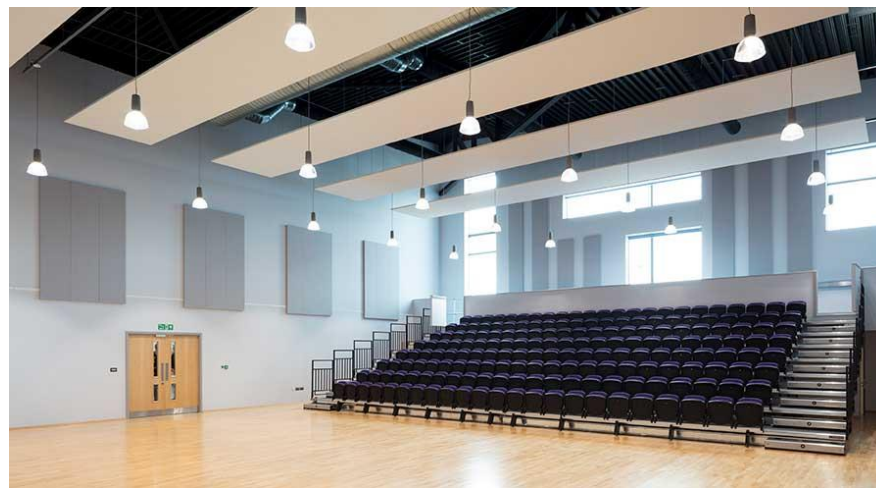
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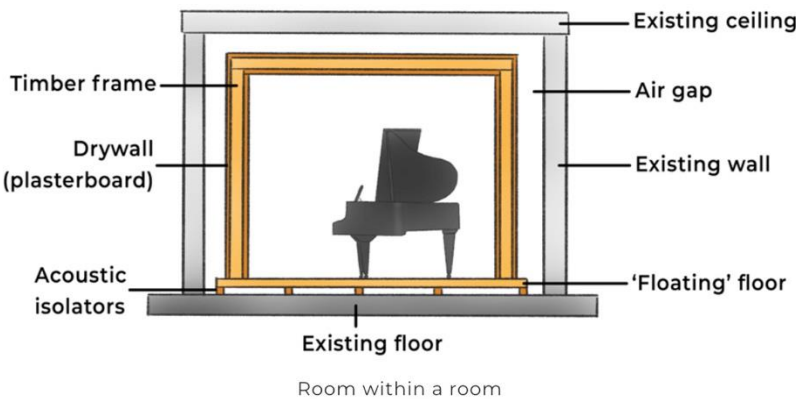
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- 1. Isolating interior spaces from outside sound
  - 2. Sound quality within any given room
  - 3. Sound isolation between adjacent rooms or spaces.
- a) Sound Transmission Class (STC) Rating measures sound attenuation between spaces

b) Acoustic glazing: Example Milstein Hall auditorium

c) Recording studio design



Sketch	Brief Description	STC
	1. 2x4" studs, 24" o.c. 2. 1/2" gypsum board screwed to studs. 3. 2" thick sound attenuation blanket.	40
	1. 2x4" studs spaced 16" o.c. and staggered 8" o.c. on 2x6" plates. 2. 1/2" gypsum board screwed 12" o.c.	39
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STC RATING CHART	
STC	What can be heard at this level
25	Soft speech can be heard and understood
30	Normal speech can be heard and understood
35	Loud speech can be heard and understood
40	Loud speech can be heard, but not understood
45	The threshold at which privacy begins
50	Loud sounds can be heard, but are very faint
60+	At this level, good soundproofing begins. Neighbors generally are not disturbed by very loud speech from inside.

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A. Overview of sound and architecture

B. Desire for privacy

1. Encompasses all the senses
2. Aspects or motivations for privacy
3. Privacy has a history



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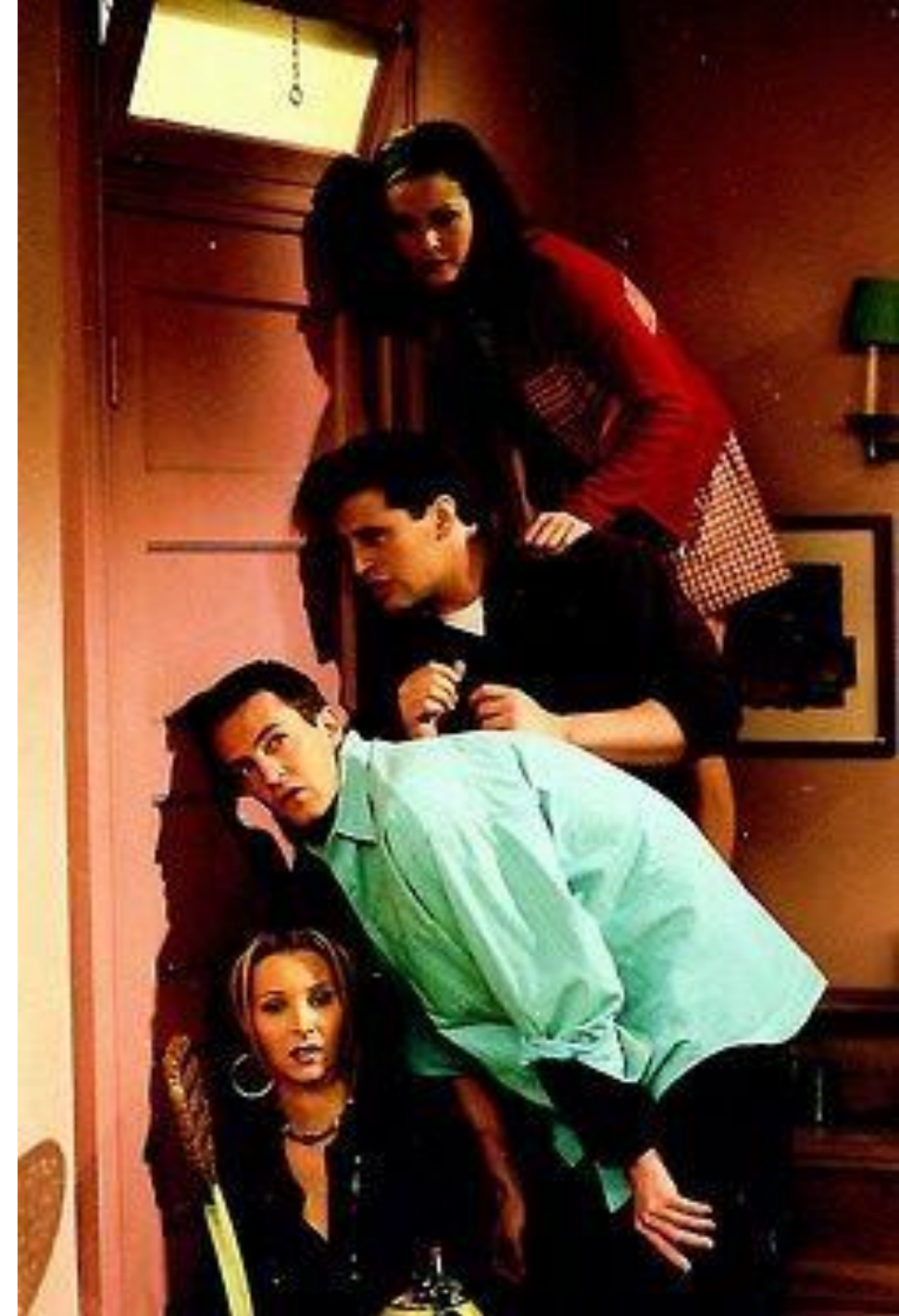
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1. Encompasses all the senses

Yes, but in terms of space — of architecture — the most important are **sight, hearing, and smell**, since these three senses operate *through* space, at a distance, and therefore have, by definition, *architectural* ramifications for privacy.



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**2. Aspects or motivations for privacy**

a) Avoid political surveillance (and its ramifications): *sight, hearing*

b) Enable taboo activities (intimacy, etc.):  
*sight, hearing, smell*

c) Exclude others from awareness of content  
of activities: *sight, hearing, smell*

d) Enable conventional activity without  
disturbing others: *sight, hearing, smell*

e) Avoid distraction: *sight, hearing, smell*

f) Enable concentration: *sight, hearing, smell*





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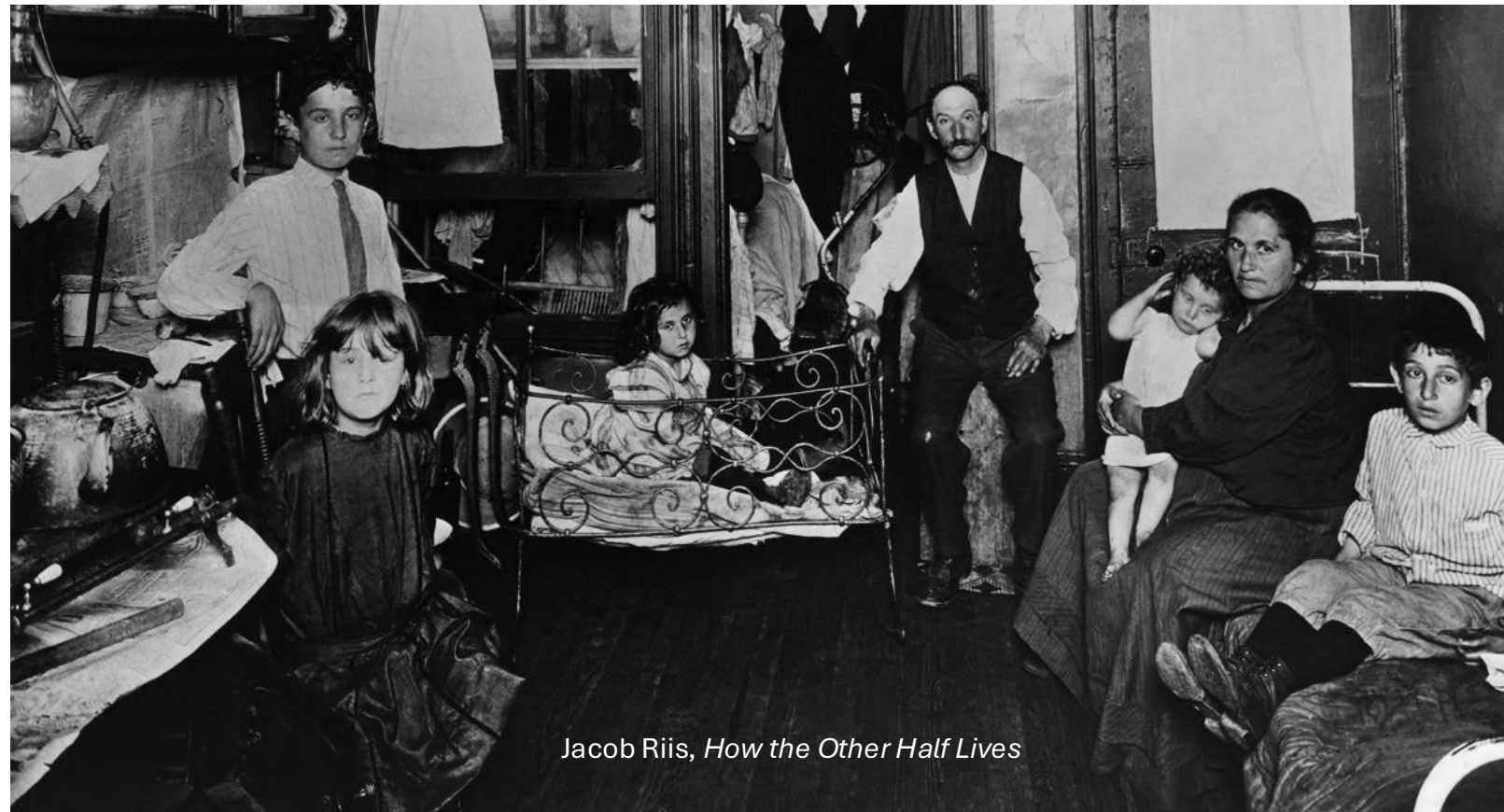
a) Early (medieval) assertions of privacy were primarily governed by the threshold to the family residence: discretion was enforced regarding looking at or hearing what was going on inside the house, from outside the house.

b) Within a house, especially in working-class houses, it was difficult to imagine much privacy.

c) Bourgeois notions of privacy, with separate functions in separate rooms, emerged later.

"Amidst the complex evolution of privacy there were several features of the cases at the London Assize of Nuisance [described earlier in the book — legal cases in which privacy within the home was defended] that have remained constant throughout the period. The first was that in the definition and defence of privacy, there was a critical distinction between the inside and the outside of the dwelling place, however confined, insubstantial and overcrowded it might be."

Vincent, David, *Privacy: A Short History*, Polity Press, Cambridge, 2016, p.3.



Jacob Riis, *How the Other Half Lives*

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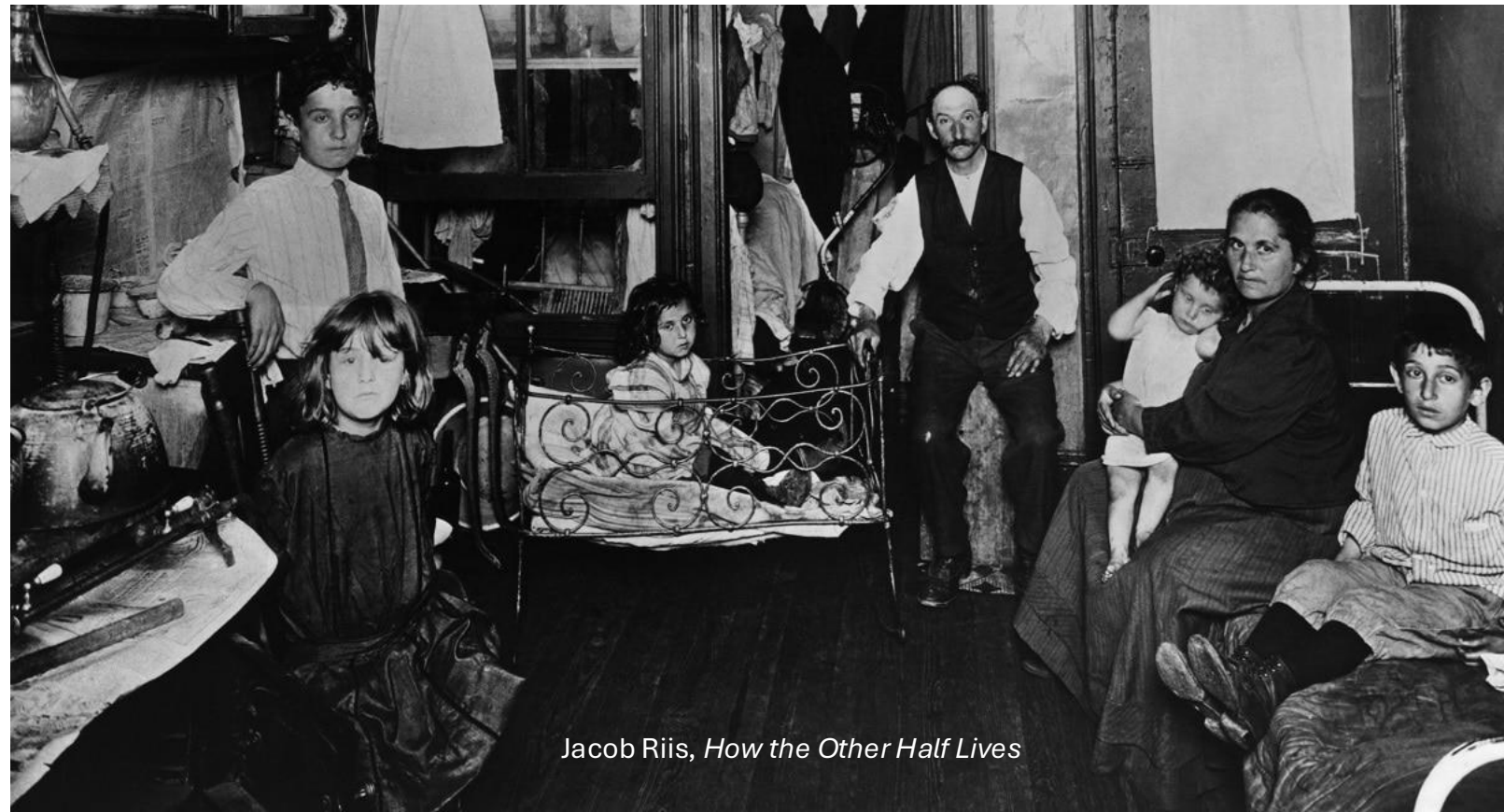
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"The nominal distinction, for instance, between parlors and bedchamber was taking form in the early-modern period, but in practice only the houses of the elite could aspire to sufficient rooms and specialized beds to separate fully the activities of the day and the night. For the great majority of those enjoying their enlarged accommodation, adults, children, servants and visitors could still be found bedding down all over the house and eating and socializing in the same space when morning returned."

Vincent, David, *Privacy: A Short History*, Polity Press, Cambridge, 2016, p.8.



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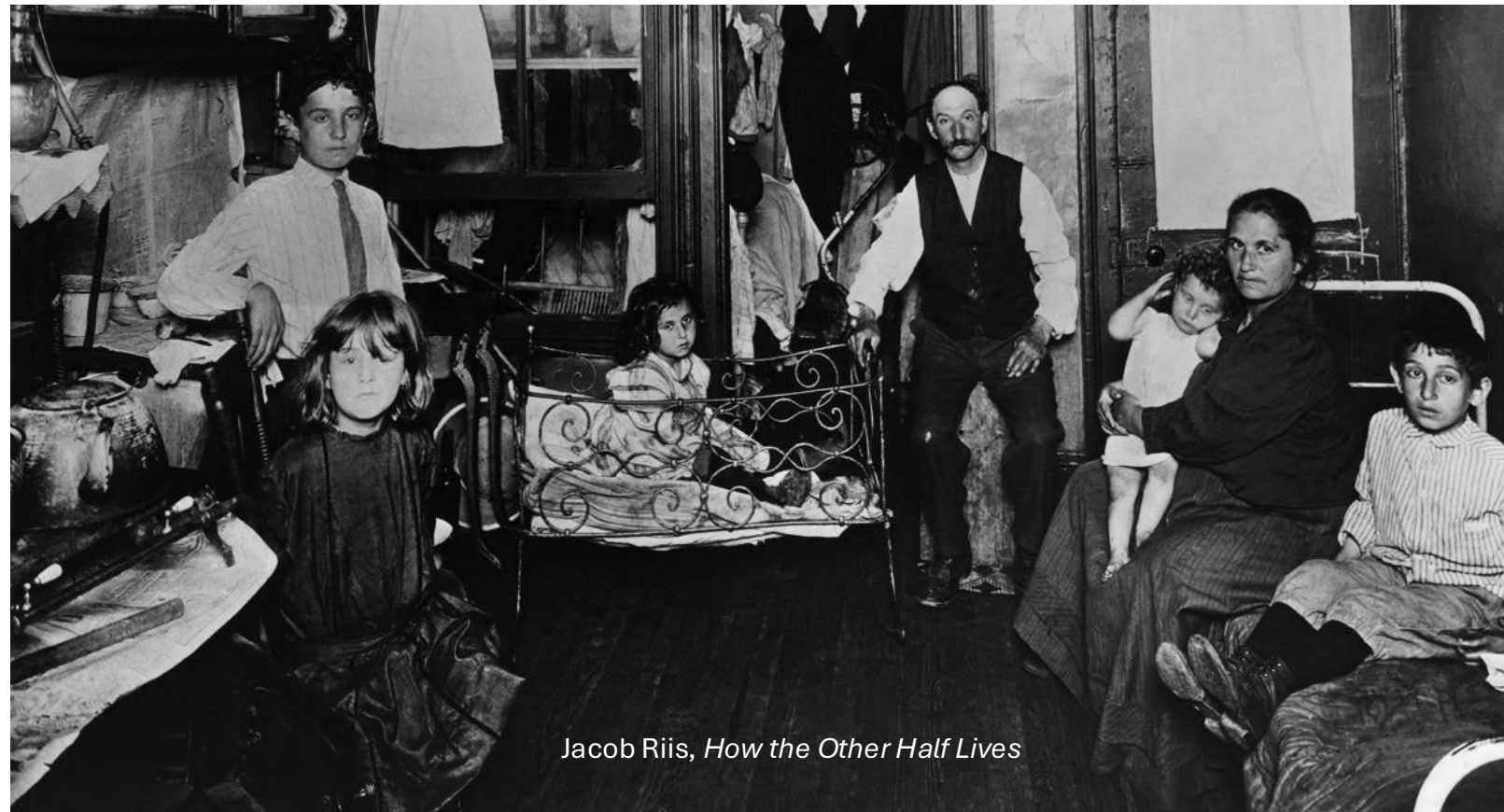
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"The single most important consequence of the rising standard of housing was not the comparatively rare provision of a lockable study, or a bedchamber used only for the repose of a married couple, but rather the multiplication of casual opportunities for private intercourse. More and smaller rooms meant that there was a greater chance that one might be temporarily empty in the interstices of the household's activities."

Vincent, David, *Privacy: A Short History*, Polity Press, Cambridge, 2016, p.13.



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1. Panopticon

2. Open office

3. Modernist spatial ideologies

a) Rowe and Slutzky, *Transparency: Literal and Phenomenal*

b) Unite d'Habitation

c) Milstein Hall



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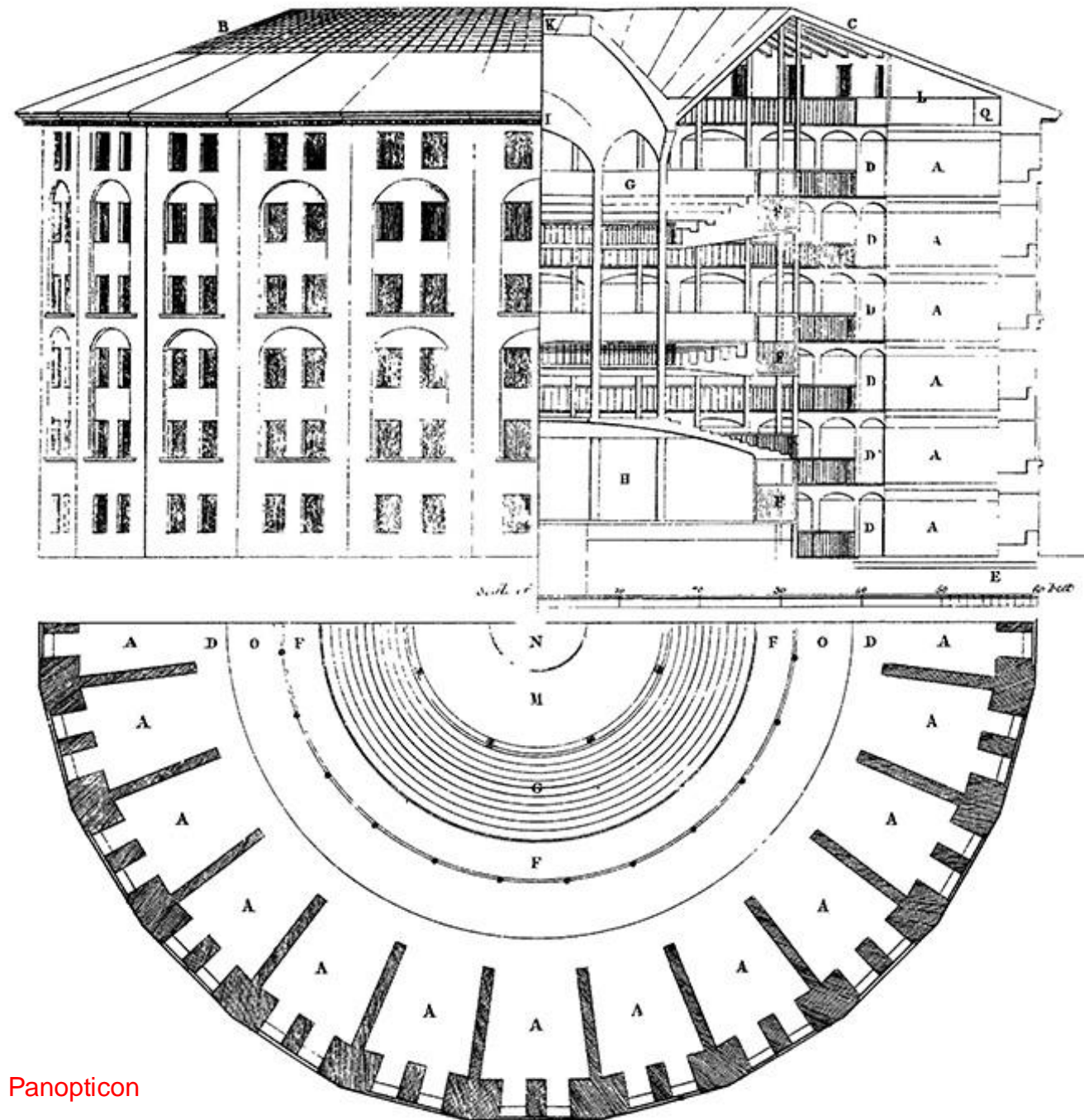
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### 1. Panopticon



Willey Reveley's 1791 drawing, commissioned by Jeremy Bentham, illustrating the Panopticon  
(from *The Works of Jeremy Bentham*, vol. IV)

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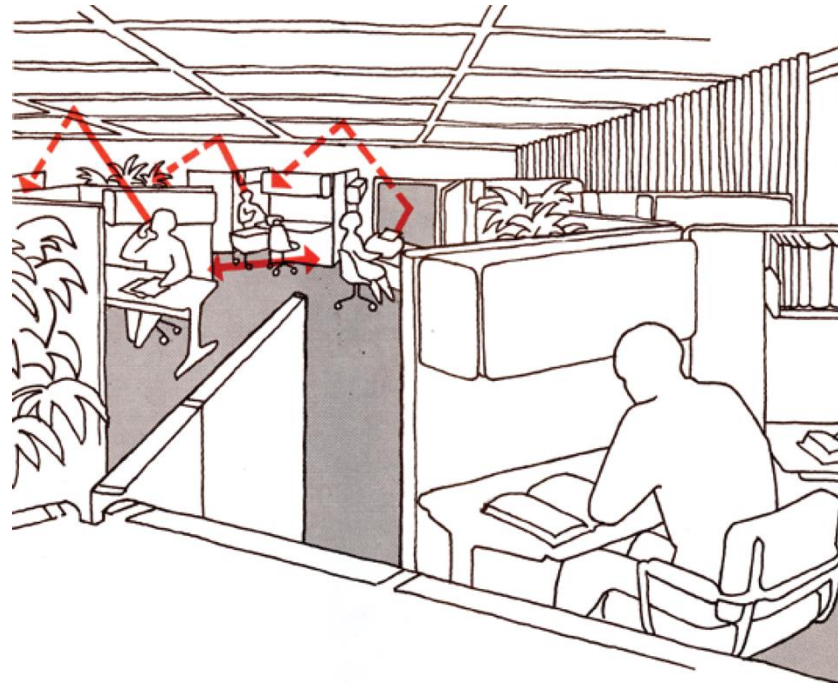
C. Ideological or other assaults on privacy

1. Panopticon

2. Open office/ open plan

a) Allegedly supports  
“communication” in office  
settings; but may compromise  
visual and acoustic privacy

b) "The persistent belief among  
advocates of the open plan  
that more communication was  
inherently good, no matter the  
context, meant that there was  
generally very little  
consideration given to the  
problem of unwelcome  
communications and  
interruptions in the open  
plan." Kaufmann-Buhler, Jennifer.  
*Open Plan : A Design History of  
the American Office*, Bloomsbury  
Publishing USA, 2021, p.69.



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a) Rowe and Slutzky, *Transparency: Literal and Phenomenal*

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c) Reitveld-Schroder house

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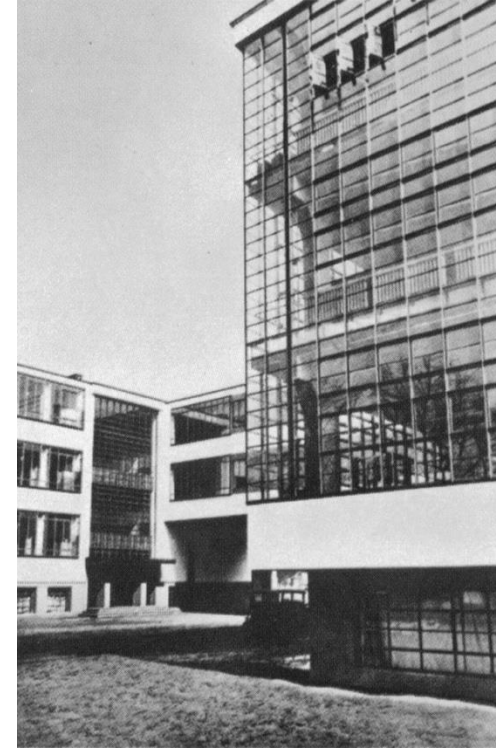
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a) Rowe and Slutzky, *Transparency: Literal and Phenomenal*:

One of the more explicit ocularcentric manifestos on architecture — one whose advocacy of visual connections abstracts entirely from questions of privacy and, in particular, visual and acoustical privacy.



At Garches, “Le Corbusier proposes the idea that, immediately behind his glazing, there lies a narrow slot of space traveling parallel to it; and, of course, in consequence of this, he implies a further idea—that bounding this slot of space, and behind it, there lies a plane of which the ground floor, the free-standing walls, and the inner reveals of the doors all form a part.” This is the architectural version of “the Cubist ‘discovery’ of shallow space” and its alleged value is contrasted with what the impoverished beholders of the Bauhaus must experience: “Denied, by these means, the possibility of penetrating a stratified space defined either by real planes or their imaginary projections, the observer [of the Bauhaus] is also denied the possibility of experiencing those conflicts between one space which is explicit and another which is implied. He may enjoy the sensation of looking through a glass wall and thus be able to see the interior and the exterior of the building simultaneously; but, in doing so, he will be conscious of few of those equivocal emotions which derive from phenomenal transparency.” In this way, the phenomenal enjoyment of “looking through a glass wall” (what Rowe and Slutzky call literal transparency) is dismissed as trivial and banal, while the “equivocal emotions” one gets by internalizing a metaphorical transparency that cannot be directly sensed but must be intellectually constructed from ambiguous spatial clues (mischaracterized by Rowe and Slutzky as phenomenal transparency) is valued. Ochshorn, unpublished paper

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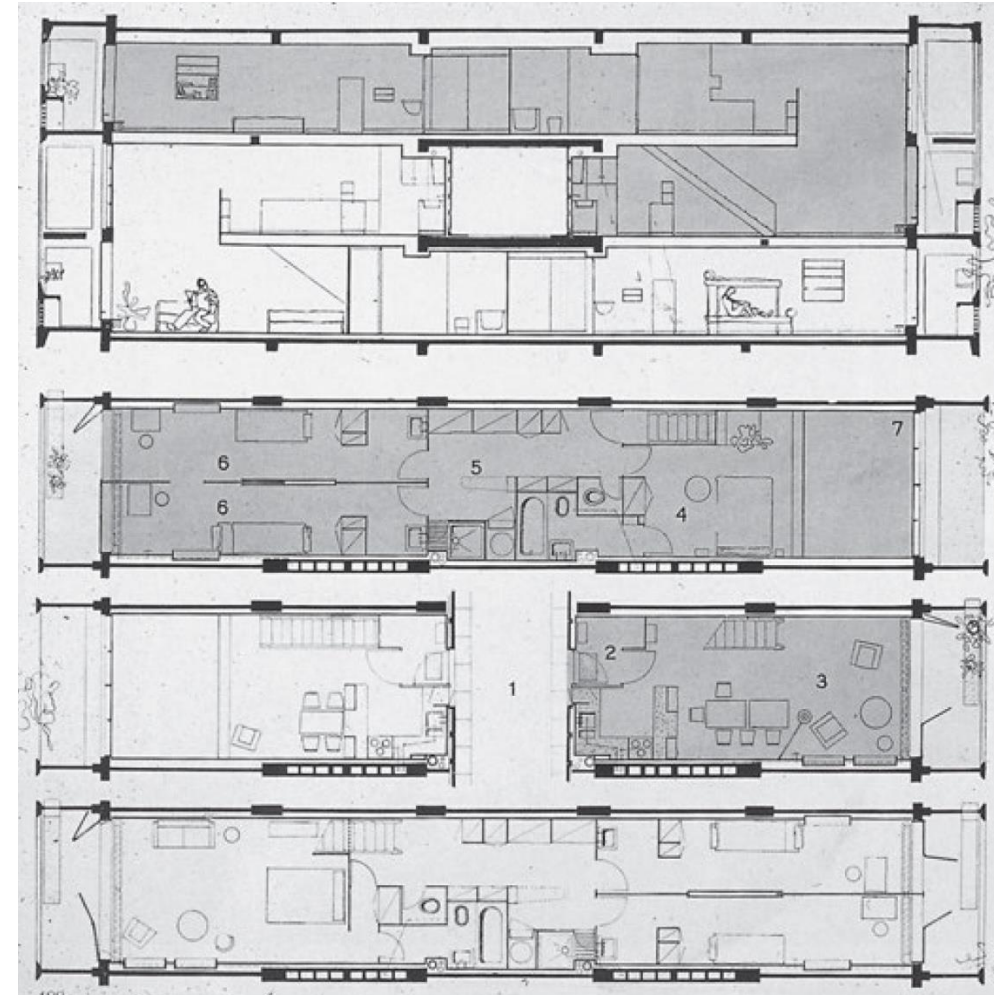
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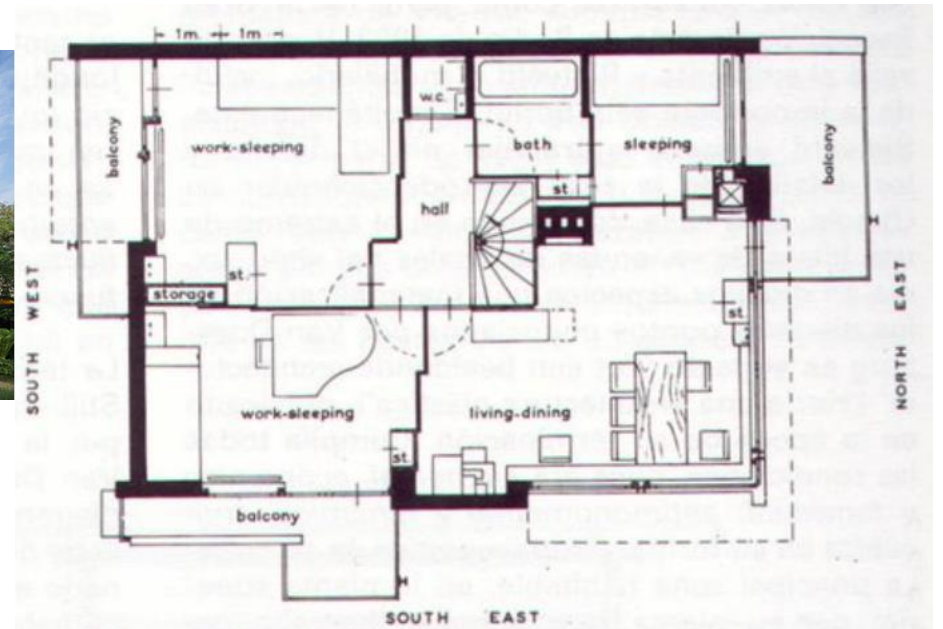
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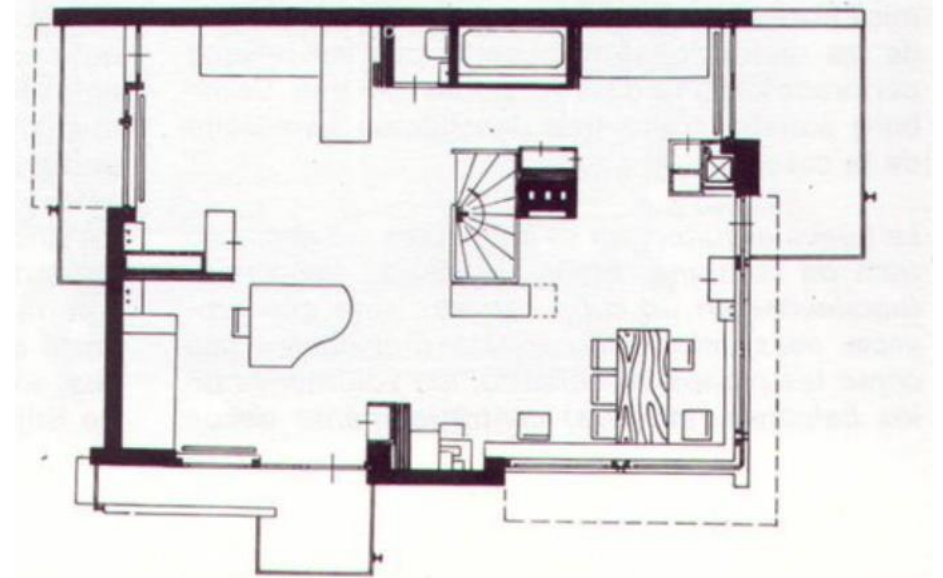
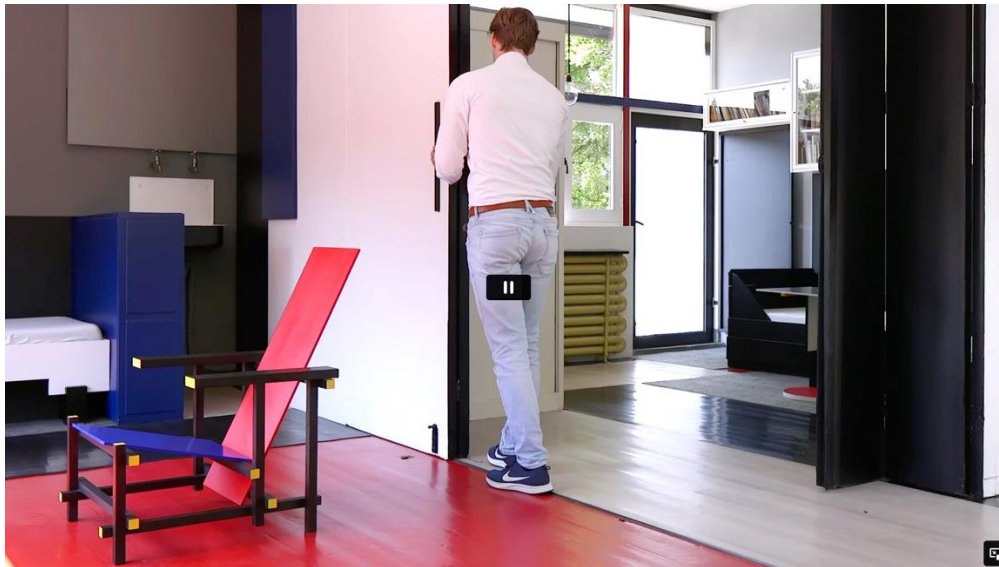
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b) Unite d'Habitation

c) Rietveld-Schröder house



52. Schröder House, plan, upper floor, closed



53. Schröder House, plan, upper floor, open

See film clip at: <https://youtu.be/zyZZktZgamI?si=-n6hP7dO6f4drrXt>



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Lack of visual privacy and acoustical isolation are related to each other and are particularly problematic in Milstein Hall. Their relationship is clear: a visual sightline, unless mediated by transparent glazing, is also an acoustical connection. In many cases where a visual connection is desired by architects seeking to overcome the spatial boredom of separated rooms, neither the destruction of visual privacy nor the ramifications of acoustical interpenetration are adequately considered.

- Jonathan Ochshorn, *OMA's Milstein Hall*, ch.4





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