

## Architecture of Workplaces 1. Lecture 7

### Questions of today and challenges of the future

#### Work environment, lighting, air, temperature. Colour, space, material, comfort design, prestige Satisfactory vs. wasteful spaces

19-20. These buildings became known as “Model factories” and their design as the “**Kahn Daylight system**” being based on a regular grid of column, beam and slab. Concrete sections were fully exposed and external wall spaces were glass filled with slender glazing. Kahn was to develop this design in numerous subsequent factories, all single storey, all lit from above to enable the floor to be kept clear for machinery and processes. Services such as lavatories and offices were placed at a higher, often mezzanine level.

His factories became known for their open floor spaces created by the use of long span steel trusses and their generous natural lighting and ventilation facilitated by **large strip windows and roof monitors**.

34. continuing the characteristic agricultural landscape with the roof landscape inverted pitches enable lozenge-shaped openings for efficient, even day-light

35. Transfer place, flexibility, large storing capacity, even day-light conditions. Facade made of transparent polycarbonate panels + inverted pitches enable lozenge-shaped openings for efficient, even day-light  
Intense light appearance above, solid base

36. Expensive watch manufacture, precision, reliability, precise manufacturing process. Double roof construction, plain glazed envelope of glass panes continues on the ceiling with a layer of aluminium louvres above

37. Nagler used a cladding of **translucent** honeycomb panels of polycarbonate. It ensures a **diffuse** light, so a pleasant light intensity. The building high polycarbonate panels are joined with tongue and groove. At the bottom they are restrained, at the top sliding to allow thermal movements.  
Through the transparent façade the inside the structure, production process can be seen, and vice versa the exterior also influences slightly the interior through **changing light intensity**. The appearance is changing with different angles, from an angle looks like a shiny surface, standing in front the inside structure appears as well.

38. A new pallet storage, a high bay storage for semi-finished products and packaging, the structure of the building is formed by the racks themselves, the steel structure of the racks is shown from outside, the transparent and translucent panels give the envelope thus providing the sight deep in the building. Longitudinal facades are clad with double-layered profile glass, the gable facades clear glazing made of large format glazing panels, this ensures effective day-light for the whole high-rack area.

43. Wright wanted to create a closed, sealed space lit from above.  
The main workroom is determined by **white concrete columns forming a forest**. At the top they spread and end in circles, with **skylights** in between. At the corners the walls stop short of the ceiling and so glass tubes continue up, and connect to the skylights.

58-61. Airbnb has revealed its new headquarters in Dublin, which mark the first time the company has been able to determine the architectural layout of one of its offices.  
The new headquarters, dubbed The Warehouse, was designed by the company's in-house environments team in collaboration with Dublin-based practice Heneghan Peng Architects.  
The Warehouse, which has been designed in collaboration with Dublin-based heneghan peng architects. The new space has been designed to cultivate **collaboration, interaction and a sense of community**.  
Feedback from employees on the design of the Airbnb Portland office highlighted that **employee visibility** was challenging for management teams, due in part to the varied spaces in the office which are not all in the same line of sight. In response to this, the Airbnb Environments Team incorporated a ‘**neighbourhood**’ **concept** which still reflected Airbnb's ‘Belong Anywhere’ ethos with a choice of work spaces and configurations, but allowed for teams to gather together in one dedicated base to encourage collaboration.  
The Warehouse is divided into **primary and secondary work spaces**. The primary work spaces consist of 29 **neighbourhoods** with identical components, for up to 14 people each. Every neighbourhood comprises of one large table, personal storage, one or two sit stands and one lounge spot.  
Individual desks have been replaced by one large **central communal table** which facilitates sharing in a way that individual desks cannot. The neighbourhoods also include custom-built furniture by local fabricators including tables by Burke Joinery.  
Secondary work spaces include the ‘**Agora**’, **the kitchen area and the meeting rooms**. The central staircase forms the main point of focus of the office. Coined the ‘Agora’, it connects the first floor to the basement, unifying the various floors.

The staircase serves multiple purposes, from a large conference space and community event space for up to 400 people to a 'lounge style' working environment.

65. for a good, precise design we must be aware of the dimensions

68. dimensions in 3d

71. **Notion definition:**

There are architectural tools belonging to the "no data" category; with the help of which **variable spaces** can be created. These variable spaces beside their basic primary function can serve as places for regular, or irregular events. These can be "static" spaces, or "mobile" ones with moveable walls e.g. Big advantage is, these can flexibly react on changing needs without building extra spaces for these needs. Thus these are area- and cost sparing.

72. One special example is the Osram Headquarters designed by Walter Henn as one first example for open plan office.

In the 1950s, Quickborner – a team of management consultants in Germany – developed a new office layout concept called "**Bürolandschaft**" (Office-Landscape). As a critique to the cold and rigid array of desks, this new plan looked free and organic. Desks were scattered in a seemingly random fashion, and clustered in **work units** of different sizes. Large plants softened the environment, and created some degree of differentiation and privacy. In fact, this overall arrangement was anything but random. It was **based upon** an intensive **study of patterns of communication** – between different parts of the organization and different individuals. The Quickborner team put company staff of all ranks together on one open floor, creating a **non-hierarchical environment** that encouraged communication, discussion, and debate, and at the same time allowing for future flexibility.

73. The workers, teams working together are marked with dashed. It is obvious how this organization can flexibly react on the constantly changing tasks, members, number of team. Further advantage is being non-hierarchical, thus not emphasizing the subordination relation.

75. Let us see a few examples of education spaces as examples for free, multiple useable spaces.

76. The floorplan of Scharoun's school is rather unusual. In the centre of the volume there is the lecture hall, surrounded by room-extensions of four education units.

78. classroom designed for no frontal education without any bound directions, free useable spaces, one outer terrace belonging to each classroom

79. instead of a simple corridor, a variable community space, a series of realizable spaces adequate for smaller, or bigger school events as well.

80. ways of education in 1930 and 2014

81. education space with connected internal space extension and outer terrace

82. space extension for variable use

83. furniture: with-board closed and open, tables and furniture with rollers

84. corridor today = education landscape

85. space in space: stage, lecture space, bound and mobile use

86. activating walls of offices and education rooms, and the connected space separations

87. stadium-like spaces, foyers, can be breakout rooms and lecture halls as well

88. smaller rooms with steps can be "found spaces", that is through space extension new rooms are created inducing new kinds of uses

89. Prezi is an innovative cloud-based presentation platform that helps presenters engage with their audience in a more interactive way. Currently, Prezi has two offices. One in Budapest, Hungary and one in San Francisco, California.

In 2015 the company has moved in a used-to-be telephone centre of 1903. Characteristic requirements were: the 200 employees are changing their tables every week, there is bound work time, need for variable spaces.

The result: instead of offices and corridors, there are café, open-plan workspace, game room with a foosball table, an arcade machine and a ping-pong table, huge breakout space with a stadium-like seating. The goal was to create "unfinished" spaces to inspire the staff to creatively use them.