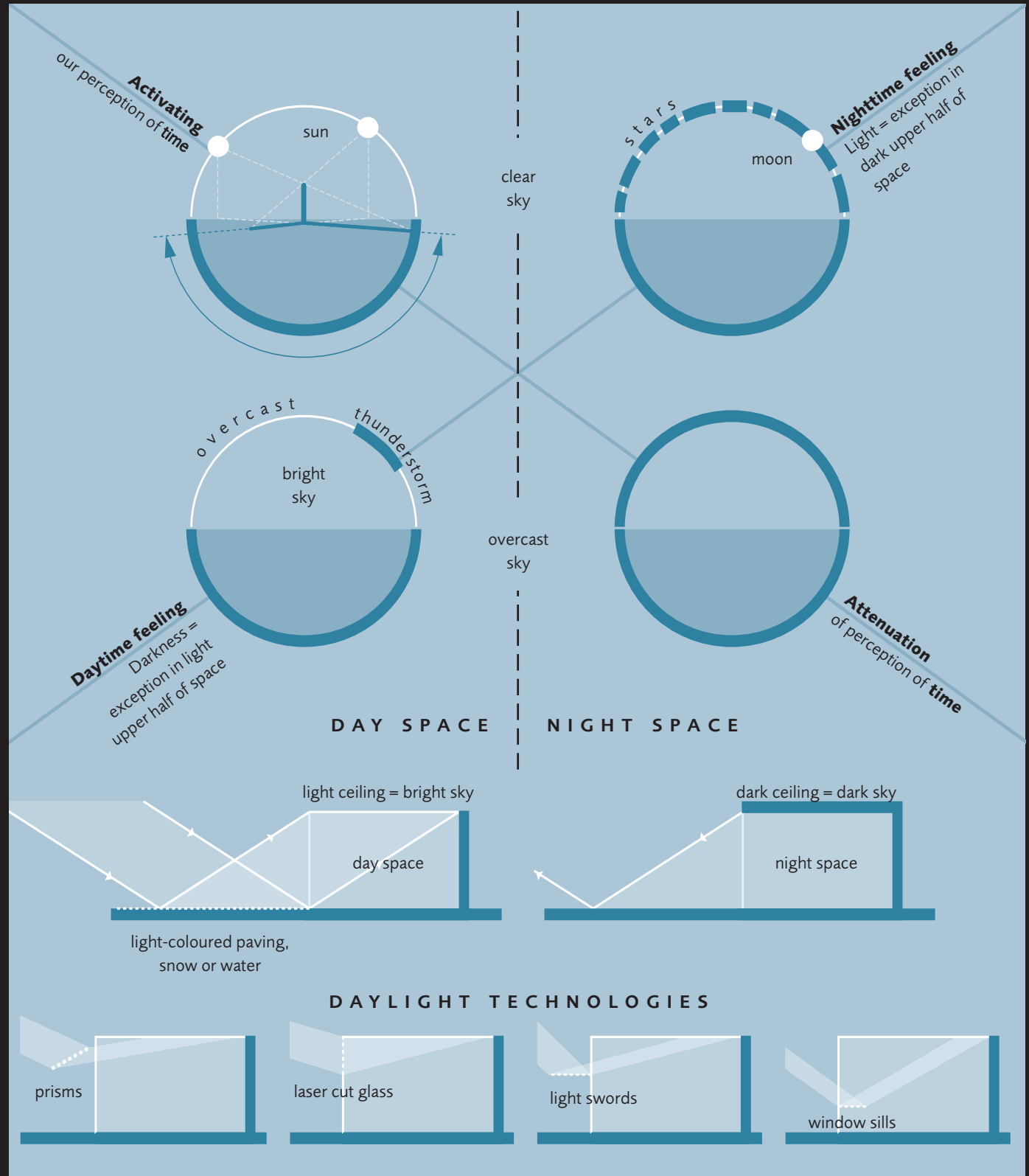


Series (7):

Daylight in interior spaces



In the drawings, daylight is treated from the point of view of daytime, space and technology. In the circles and rectangles, the thin lines represent light and brightness and the thick lines dark and heavy atmospheres.



Series (7): Daylight in interior spaces

Day and night

Man is active by day. That is to say, he needs daylight for his health and to be able to perform.

This can be made even clearer when we compare night and day.

Natural light comes from above. We experience a daytime feeling when the upper part of the space we are in has a light surface. This also applies to the sky as a surface, even when it is overcast. A dark thundercloud does not undermine this daytime feeling in any profound way, as long as a thunderstorm does not darken the larger part of the visible sky.

In the case of nighttime feeling, the opposite applies: light is an exception in the upper part of a dark space. Even a full moon does not make an exception, because the night sky remains dark. The light nights experienced in the northern hemisphere do not generate a nighttime feeling, just as we would never experience a daytime feeling on the moon, because the moon sky is always black.

The twin terms daytime feeling/nighttime feeling are juxtaposed to a second set of twin terms activation/attenuation of our perception of time. First we see an overcast daytime sky juxtaposed to a clear night sky, then a clear daytime sky opposite an overcast night sky. The sun is not necessary for our daytime feeling. Its special quality lies in the way it changes throughout the day. It is as precise as clockwork, but offers much more: colours that are related to the weather or times of the day or year. Through the formation of shadows direct sunlight creates an additional space in relation to every object it interacts with, making all the objects the world over part of a huge sundial. Sunlight activates our feeling for time. When the weather is dull for a longer period of time, our precise feeling for time is deadened and some people fall ill (depression). An overcast night sky offers practically no time information.

Day space – night space

In the circle that represents exterior space our daytime feeling is generated by the light upper part of the space. People in industrial nations spend 90 per cent of their lives indoors. The walls represent different perspectives and the ceiling the sky. A daytime feeling is generated in the space when the ceiling is sufficiently bright. Otherwise, it feels like nighttime in the space.

Daylight technology

For structural reasons, the majority of indoor spaces receive daylight from the side. This is wrong when it comes to generating our daytime feeling. The accepted rules for daylight control to date are:

- users of the space should not be sitting or standing in direct daylight (glare control).
- Daylight should be directed onto the ceiling to allow it to penetrate the depth of the space via reflections (uniformity).

A third basic rule has been missing up to now:

- The ceiling must be illuminated to generate a daytime feeling in the space (day space).

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