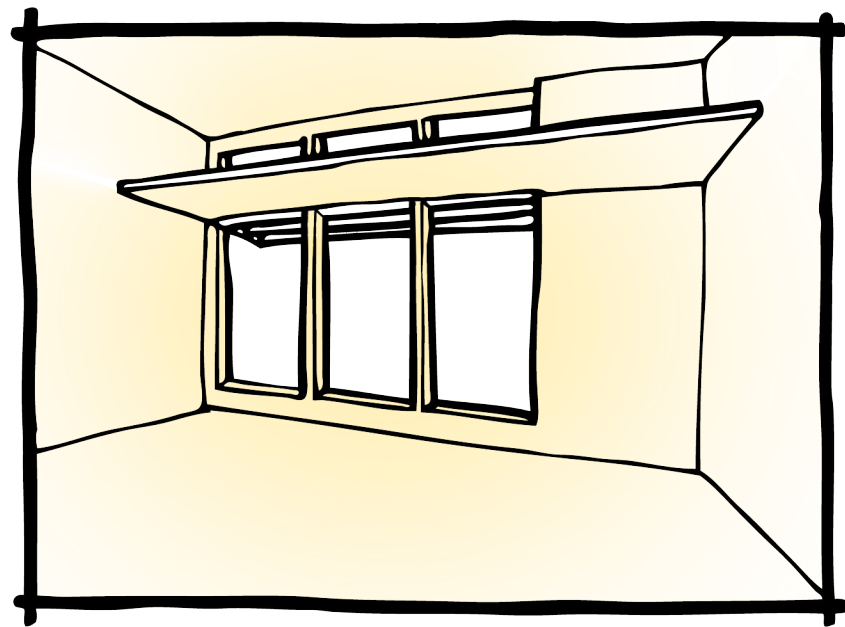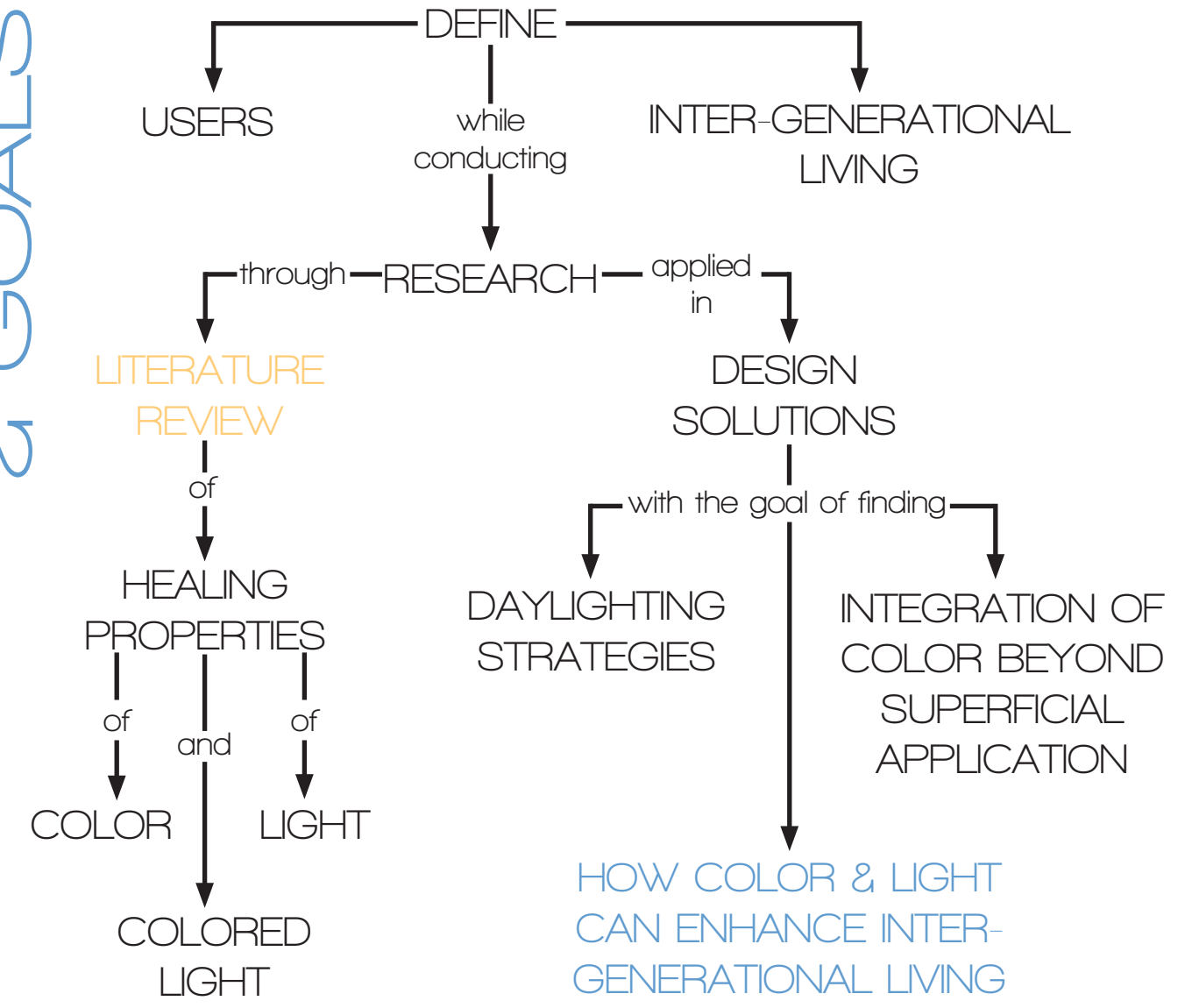# CREATING HEALING SPACES FOR LIVING WITH
COLOR & LIGHT

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ABSTRACT

Color and light have long been studied for their effects on people's physical and mental health. It is especially important that the environments in which people live and work contribute to their health and well-being. A sustainable living environment that supports and enhances inter-generational community living would benefit from the positive health benefits of appropriate usage of color and light. Research has shown that people who live or work in dark, colorless environments are at increased risk of depression (Tonello, 2001). Studies have been made as to which specific colors have the capacity to heal (Huang, 2009) and which colors most people—regardless of age, gender, or race—tend to prefer (Whitfield & Wiltshire, 1990). Research also indicates the positive health effects of daylight and certain wavelengths of artificial light (Rosch, 2009). These effects have been evaluated among elderly people—specifically studying whether light can improve aged people's mobility (Aarts & Westerlaken, 2005). The positive effects of color and light on wayfinding and people's ability to perceive the indoor (built) environment has been studied (Hidayetoglu, Yildirim, & Akalin, 2011). Through literature review, the proposed project will examine the ways in which color and light might contribute to sustaining a high quality of life, with a focus on the aging population and their ability to age in place. The purpose of this research is to understand how color and light can contribute to a healthy and safe inter-generational living environment.

METHOD & GOALS

DEFINE → USERS — while conducting — INTER-GENERATIONAL LIVING

USERS → through → RESEARCH — applied in → DESIGN SOLUTIONS

LITERATURE REVIEW of HEALING PROPERTIES of COLOR and of LIGHT → COLORED LIGHT

DESIGN SOLUTIONS — with the goal of finding → DAYLIGHTING STRATEGIES | INTEGRATION OF COLOR BEYOND SUPERFICIAL APPLICATION

HOW COLOR & LIGHT CAN ENHANCE INTER-GENERATIONAL LIVING


Ocular changes as we age cause our retinas to need more and more light in order to have the same visual input. A 60-year-old person will need 3-5 times the amount of light as a 20-year-old[1]. This dramatic increase in brightness raises issues of glare. One way to prevent glare is by use of a light shelf.
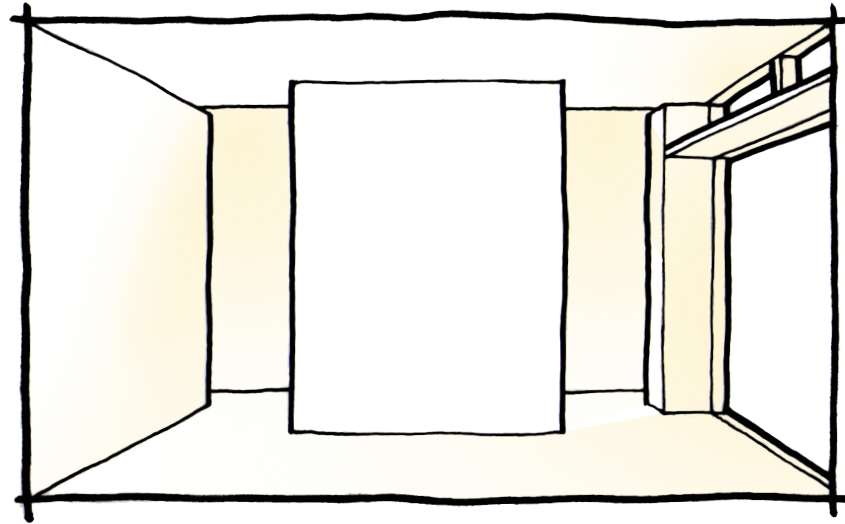
By combining a light shelf with windows in multiple facades, or even the ceiling, a large amount of light will be distributed evenly, thereby improving the daylight conditions within a space which can help compensate for declining visual performance.[1]
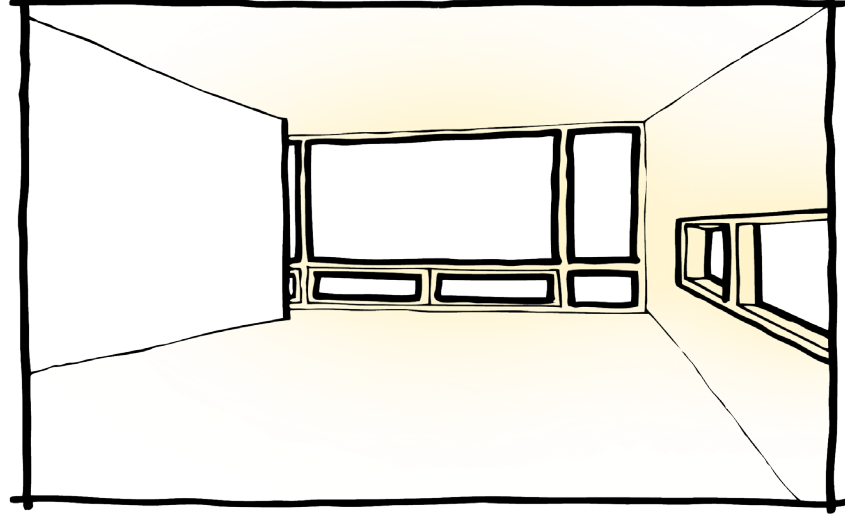
High or low windows are as effective as large expanses of glass when privacy is an issue. Windows along the floor can help to increase mobility as potential trip hazards will be illuminated. Continued mobility helps promote healthy living for all ages.
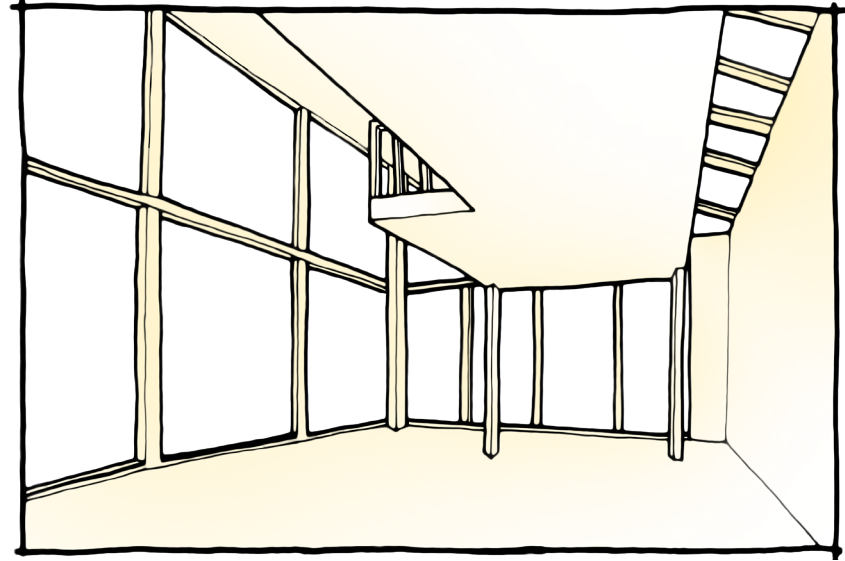
Double-height spaces capitalize on expansive windows while still providing protection from glare. Communal double-height spaces allow everyone to find their own comfortable spot while still a part of the community, promoting inter-generational living while also combatting SAD.
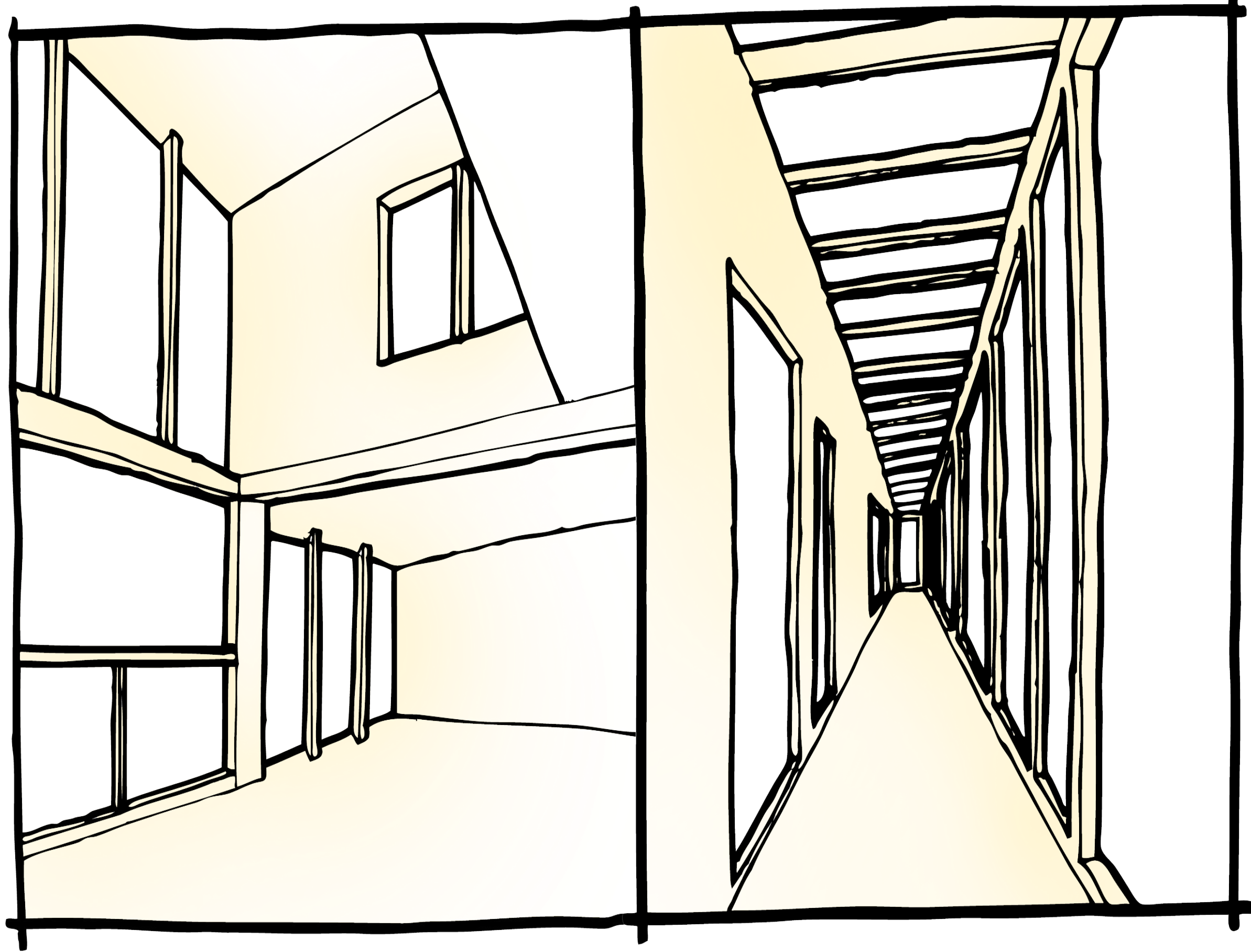
By combining all of these daylighting strategies, both individual and communal spaces can capitalize on the amount of daylight available, even on the most overcast of days. The circulation paths become sunny communal spaces, inviting residents to take advantage of the extra light and be open to the rest of the community. Then when they want to retreat into their private units, the connection to the community means they don't have to sacrifice access to daylight.

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wayfinding_warm path

wayfinding_cool landmark

healing color_reflectance

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