

Renovation Toolbox: The Vernacular Tibetan House

Guidebook for sustainable adaptations



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“Glass could be nuanced to a great degree — since it reflects surfaces to the point of opacity, its properties in relation to the sun are limited, its perfection is relative, it is fragile and is, in origin, a largely translucent natural rock.”

—*The Good Life: A guided visit to the houses of modernity*, Inaki Abalos

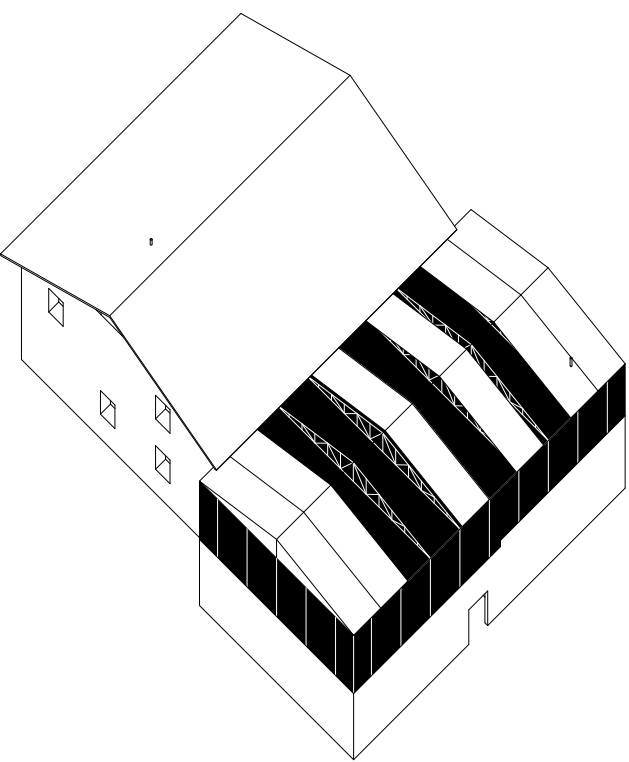


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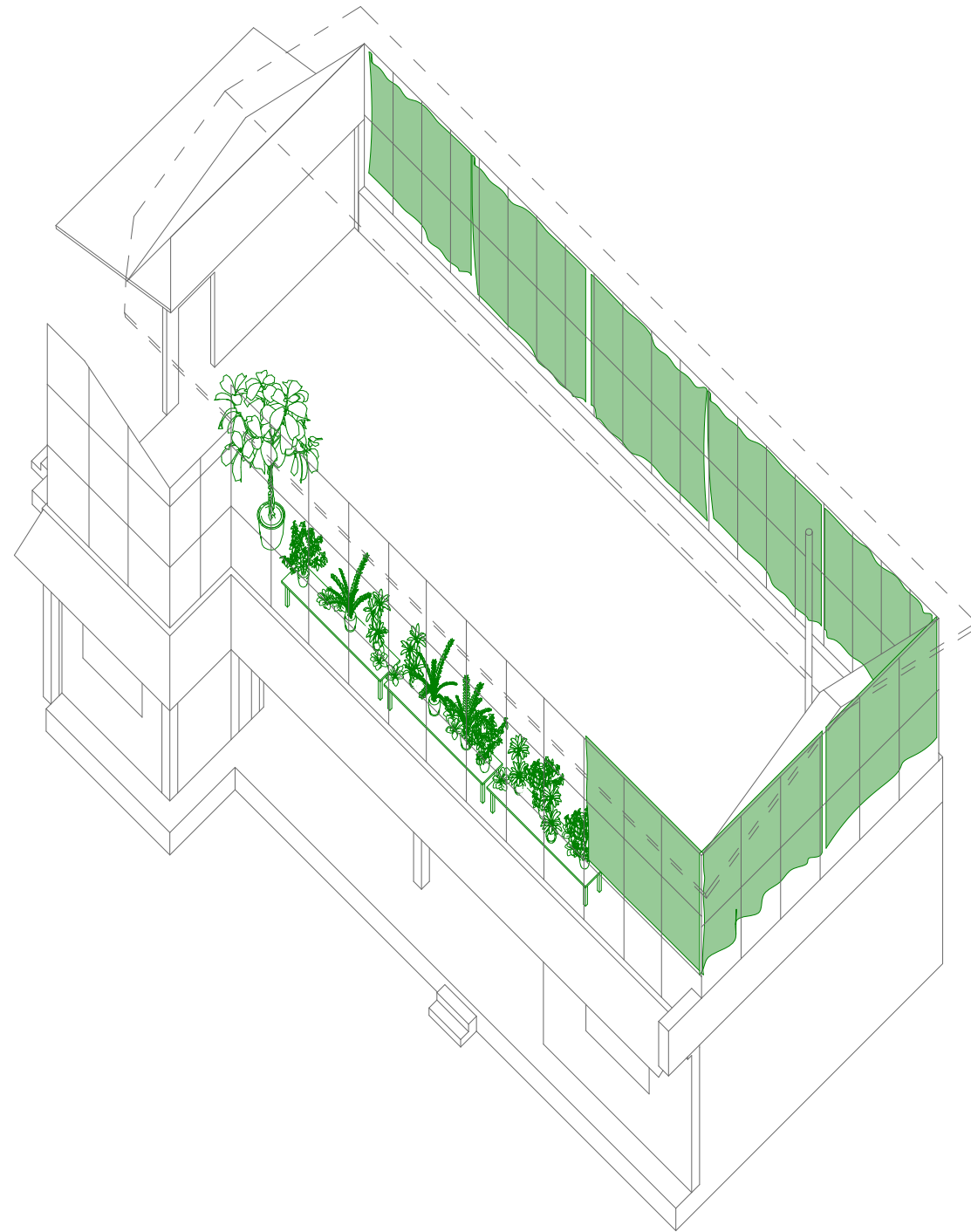
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City of glass

The dusk reveals the city of glass in its dazzling modernity. A roof-top silhouette of glowing boxes; suddenly lit-up and rendered transparent - revealing the private lives of its residents, going about their evening activities; seemingly unconcerned in each of their private gardens. The large earthen walls, many stories high have blended into the darkness, almost to disappear. It’s a big contrast from the daytime, where the heaviness and opacity of earthen walls dominate the city – in these walls are also windows, but small and recessed – so that the overall effect, walking along the streets of this city during the day is to be bounded on either side by impenetrable facades with ornately carved wooden entrance doors; leaving us to perpetually wonder, with only our imagination, the hidden ponds and lush gardens within. This is Shangri-la.

There is an ancient city here, where generations of Tibetans have built their homes intending to house many future generations. The process of building a traditional house is exceedingly slow – they are massive constructions, requiring enormous effort and care to attend every last detail. For example, each house must contain a significant wooden column at its center. This column may be passed down from generations and transported from other, dismantled houses. Wood is rare, especially the dimensions required for tree trunks up to (and sometimes exceeding) a meter in diameter. In addition, all other wooden doors, window screens and overhanging eaves are carved in intricate patterns and motifs. There is one room in each house which contains the most carvings, on every surface if possible, to contain a shrine, a traditional stove and nowadays, a large flatscreen television set. Incidentally the entire family of 3-4 generations will gather here every evening to drink tea. The rammed earth walls rising 10 to 15 meters from the ground is an undertaking that often required extended families and numerous people to dig, transport and slowly pound, layer by arduous layer. The wall itself is not solely earth, but a mixture of stones of varying sizes near the bottom and interspersed with layers of wooden twigs woven together. This may take many months to accomplish. All is all, the construction of a single house may take years to finish – depending also on the economic fortunes of the family. It is not only a house in a colloquial sense, but rather a fortress and a repository of wealth. Nearly all income is eventually invested in the building of a house that will last – a bulwark against the uncertainty of the future.

When we consider the unusual houses found in and around the region of Shangri-la, we are witnessing in real-time, an ongoing transition. The combination of unlikely materials and construction methods could be interpreted as either disfigurement/contradiction or adaptation/evolution. The case study houses presented later in this paper, are in various stages of transformation. The addition of steel and glass range from modest additions to becoming the dominant feature of the house.



New ways to use intermediary space enabled by greenhouse

glass boxes enable new uses in the intermediary space.

Gardens and vegetables are able to be grown year round

The greenhouses allow for natural features from outside to be brought in - sunlight, greenery, water features
partitioning for additional flexible bedrooms

Activities that traditionally take place in the courtyard become distributed vertically

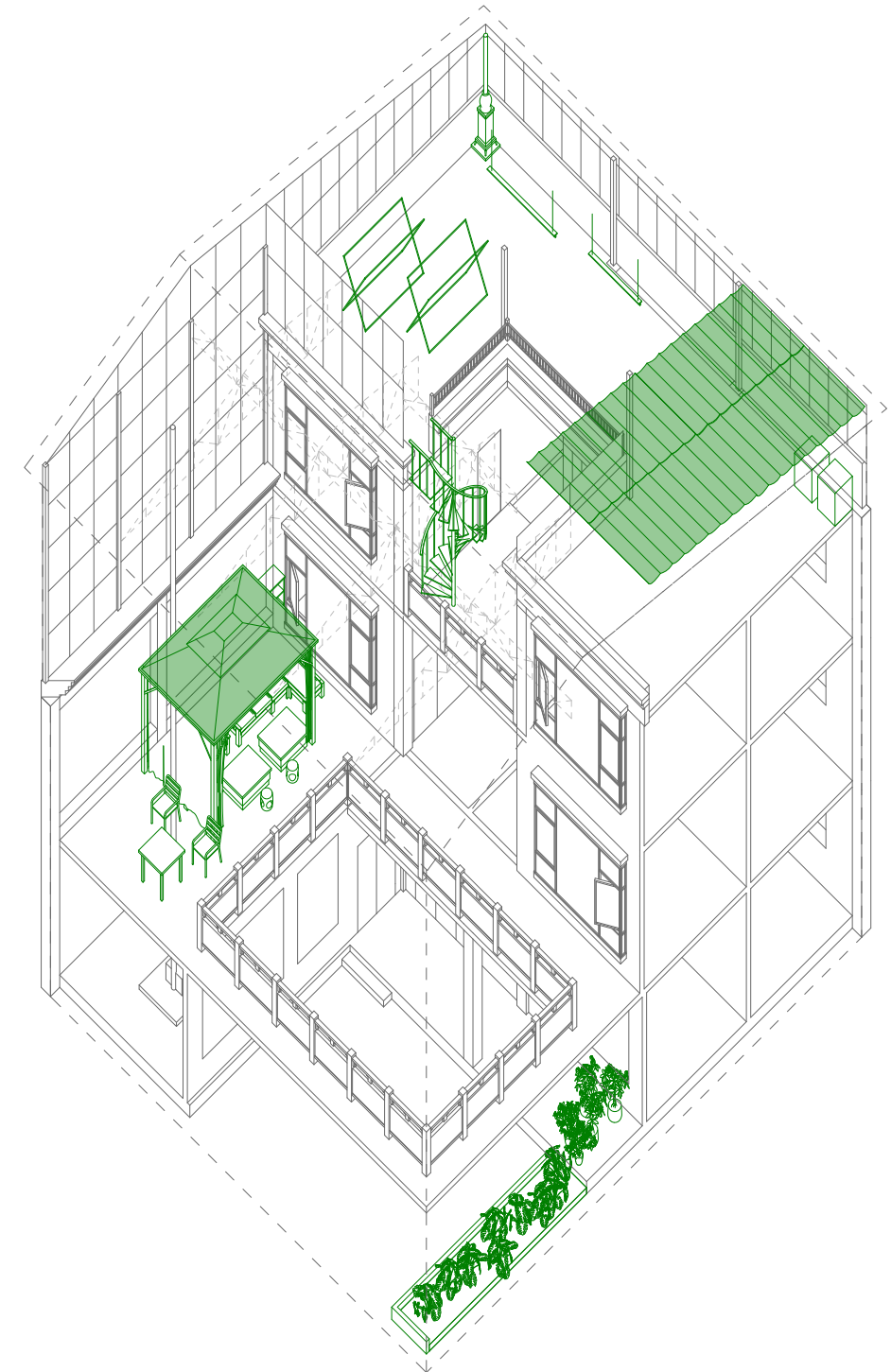
- gardening and water feature on the ground level

- a new social gathering space at the middle level

- a new occupiable roof level is used for laundry, bathing, as well as religious burning chimney. the top level has the greatest heat gain,

- maintaining the sacred/profane divide, profane and earthly on the ground level, the third story is a prayer room and bedroom for visiting lamas.

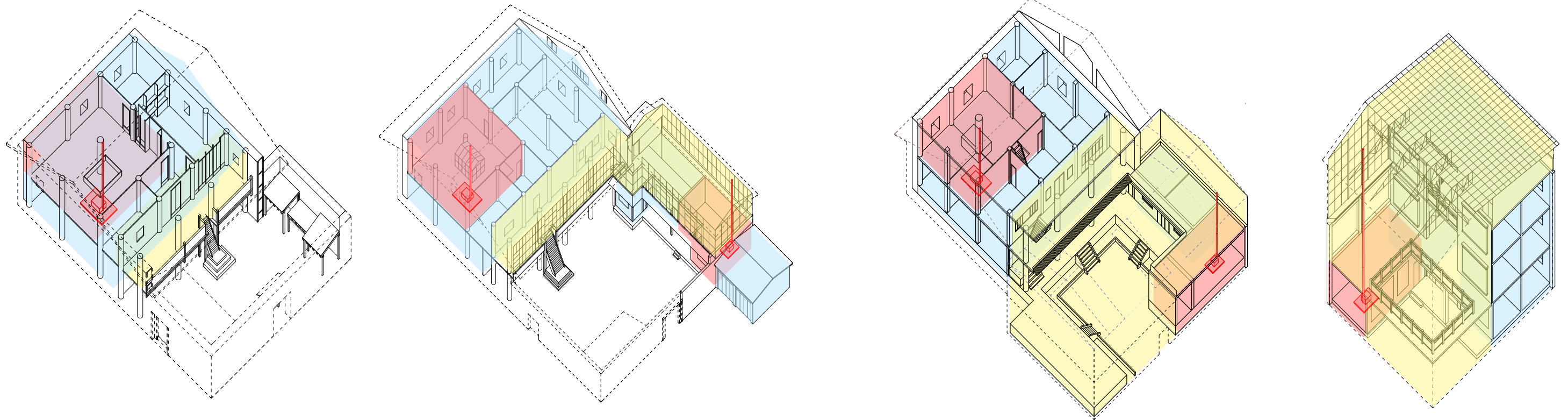
- loss of the central column



Permeable homes

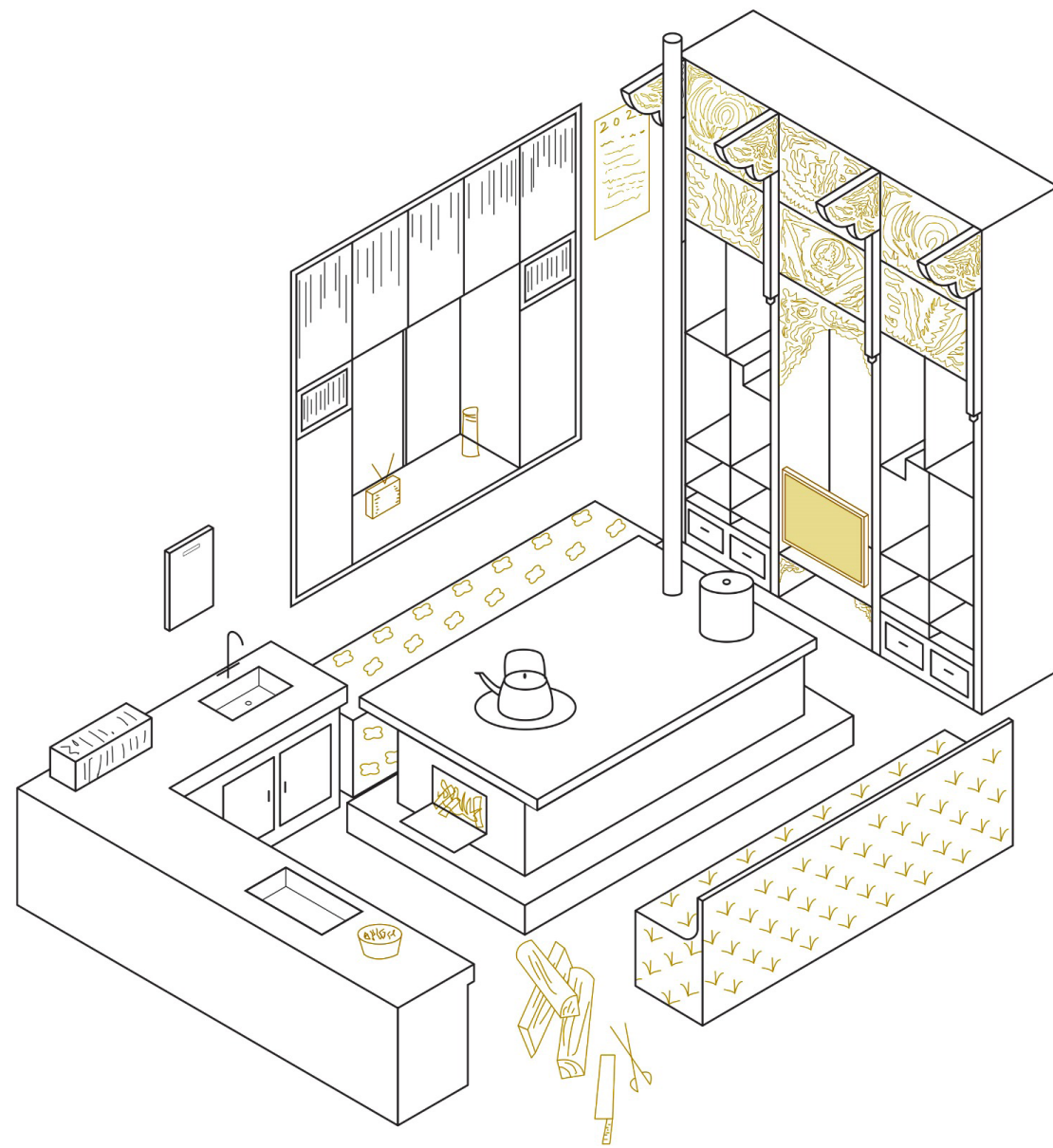
In the traditional Tibetan house, three sides are compacted earth, while the main facade is constructed of timber frame that allows for airflow. Animals would return at night to be housed on the ground floor. Heat generated from the animals and methane gas will rise through the wooden floorboards. The upper floors would situate a fire pit and sleeping chambers. Above the fire is an opening to the sky to let out heat and view the blue sky in the daytime.

The notion of a fixed enclosure doesn't really exist in these houses. Many types of walls and fabric modulate sunlight, heat and air. In ancient times, built without glass, several layers of wooden shutters would modulate air and light. Nowadays fabric is often used, with retractable fabric below the glass roofs, large curtains, even tent structures within the glass-enclosed atriums. The houses are built for heat dissipation and maximum adjustment, much like clothing.

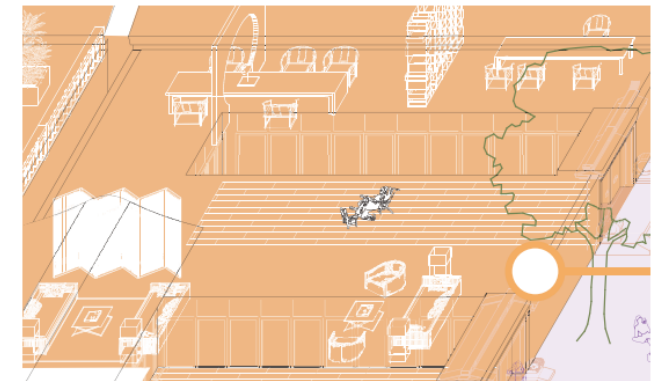
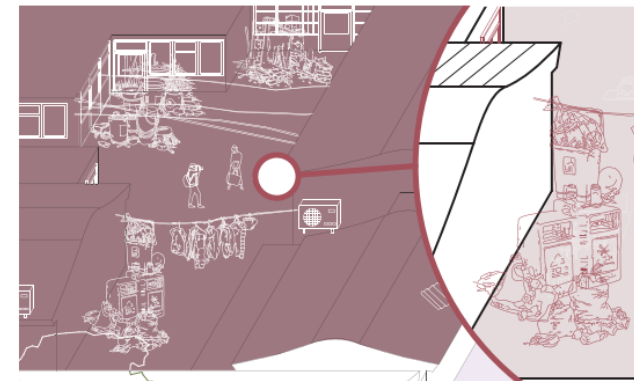
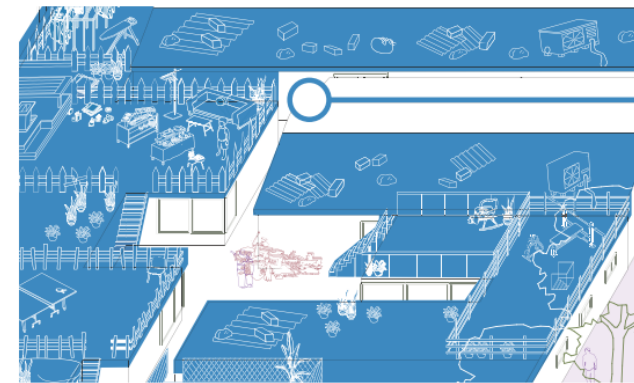


Fusion homes

In the traditional Tibetan house, the most important room is the fire room. It's a place for cooking, drinking tea and socializing. It's typically the warmest room in the entire house. Recently, a special stove is built which contains a fire with multiple cooking stations on top. There is always a pot of tea. At the end of the day, all the residents in the house gather in this single room for most of the evening activities. They may socialize or do solitary activities.



Because it's the warmest room, inevitably everyone gathers here. In addition, it is the room with the most ornately carved wood panels and facades. Even the TV sits in a receptacle surrounded by wood carving. The shrine might simultaneously contain statues of Mao, Tibetan gods, Buddha or Confucius – it's a fusion of cultural identities. Whereas the remainder the house may be stark, and some rooms empty with the exception of an appliance such as a washing machine or refrigerator, this room is a concentration of cultural artifact and transformation.



Migration homes

There are many different people who come to live in the house and yet the Tibetan house is not used for one nuclear family or even a constant set of residents. Residents rotate and migrate due to work, school, religious duty or celebration, etc. It’s a migrating usage – temporary, seasonal, based on festivals pilgrimages, where sometimes the entire extended family comes to a single house to stay. A more accurate description could be that a collection of houses is utilized by a large related group of people who either separate or come together in a single house. Therefore the houses have many spare bedrooms and large beds capable of sleeping multiple family members as needed.



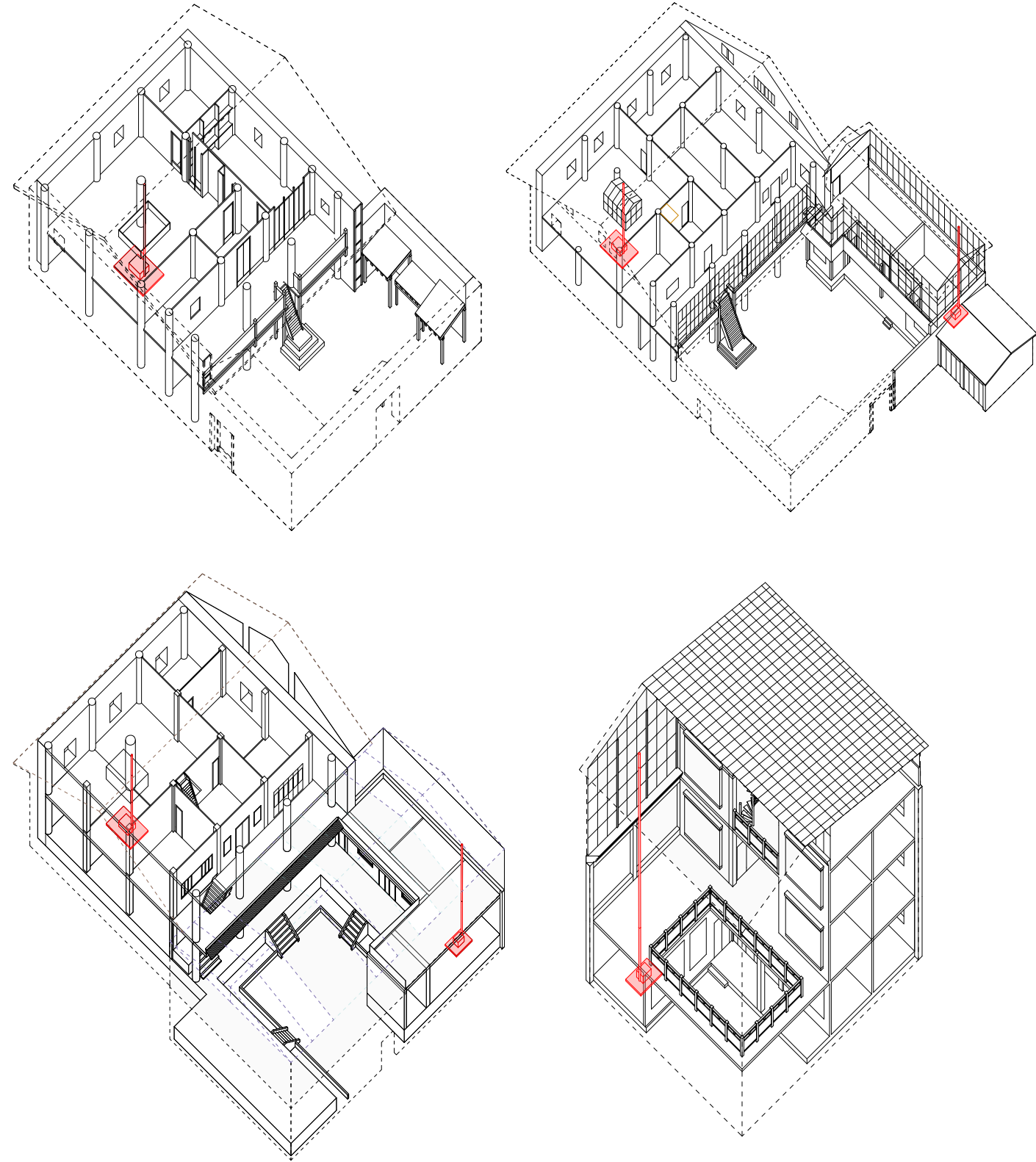
“Architectural history shows that comfort is not just an objective concept, nor the mere result of technical innovation, but a culturally constructed idea. It is therefore not something that can be simply determined, but a concept that varies in relation to diverse and complex factors that affect the relationship between space and the human body.

Perhaps for most of us nowadays comfort is a recognizable state in which the body is in equilibrium with its surroundings. We can observe that the development of the interior, from medieval hall to modern-day open plan apartment, has moved towards the pursuit of privacy and physical comfort. Yet, in earlier time, comfort defined a mental state of being at one with God, of spiritual, rather than bodily equilibrium. If comfort may then be understood as a changing phenomenon affected by cultural and historical forces, it may also continue to evolve into a condition that we may not yet be able to define or understand.”

—“The Idea of Comfort”, Stephen Bates



Our observations of the contemporary homes of Shangri-la – simultaneously modern and traditional at the same time, is seemingly a contradiction in building methods and lifestyles. Continuing from the tradition of Bernard Rudofsky's *Architecture without Architects*, our study articulates the inseparable connection between culture and architecture; a total connection between objects, rituals, furniture, and the buildings that contain them.



Our study of Shangri-la, though it dissects the environmental, social and cultural aspects of these dwellings is primarily interested in the intangible connections between these realities, to argue for an encapsulating narrative of sustainability; where technology and lifestyle are equally essential.

The world we inhabit is filled with instability, whether from climate change or socio-political transformations. An architecture of resilience could mean something different today than in bygone eras where stability and permanence were given priority in traditional dwellings. An architectural dwelling which fits for today, might be hybridized, adaptable, transformable, and ultimately, resilient.

