Small House
Kazuyo Sejima

EVDA 621: Intro to Design Theories
Case Study: Part 1
Due: October 30th, 2012
Nadine Vroom I 10072885
Small House | Tokyo, Japan

Program: house
Total floor area: 76.98 m²
Site area: 60.03 m²
Structure: steel frame
3 stories, 1 basement
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Small House: is a tiny private residence designed by the internationally acclaimed architect, Kazuyo Sejima (SANAA), in the affluent Aoyama district of Tokyo, Japan. Situated on a small infill lot measuring 60 m², Small House is a bold example of architectural ingenuity amongst the dense similitude of the surrounding urban landscape. Completed in 2000, Small House is representative of simplistic design, encompassing a complex logic predicated on the principles of function, place, culture, and the intimacy of home. Small House delicately balances itself within the urban fabric of Tokyo; a representation of clean, modern architectural form imbued with layers of history, culture, and the embodiment of life.
Small House is a small rectangular tower, its edges and surfaces skewed on the diagonal to create a dynamic geometrical shape. Its form provides unique contrast to the neighbouring residences; their planar surfaces demarcating the vertical and horizontal planes in the masses. Small House provides the outward semblance of bold form but maintains the identity and character of a private home; unique, individual, proportionately-scaled and intimate.

The striking appearance of Small House is a testament to Kazuyo Sejima’s propensity towards form-finding as the fundamental means by which to achieve the embodiment of meaning, identity and presence in architecture. In her words, Sejima states that “architectural design can only proceed through forms. Making architecture, if we can say this without fear of being misunderstood, is surely a question of creating new forms....Designs are recognized by their forms, and moreover, the public or social aspect of architecture resides precisely in an understanding of the architecture and its relations to the structures surrounding it” (Hasegawa 2005, p.12).
Due to the constraints of a small site, the optimal and efficient use of space was of key concern to Sejima in the Small House project. In collaborative consultation, a strict program was developed to maximize the needs of the clients while balancing the opportunities of the site. Sejima approached the project in true Modernist spirit, closely obeying Louis Sullivan’s mandate of “form ever follows function, and this is the law” (Sullivan, p.208), in the creation of the shape, of Small House.

In a reductive manner, the program was divided into four distinct functional areas: a master bedroom; a guest room for future re-appropriation into a children’s bedroom; an area for living, dining and the kitchen; and a bathroom with a private terrace. Each functional unit was carefully considered in terms of its occupancy requirements, and was designated its own slab according to spatial requisites.

The slabs were organized and stacked vertically on the site, and connected by a single load-bearing spiral staircase providing programmatic continuity between slabs. Exterior cladding materials were affixed between the various sized slabs, resulting in a slanted, zig zag profile of the house.
Despite her mimetic affinity towards functionalism, Sejima acknowledges a degree of flexibility in the physical manifestation of the functional approach to form-making. Sejima maintains that although function is used to generate the form of the house, that the house can also generate the function. A dynamic and mutual relationship exists between form and function, and by understanding how form or lack thereof affects function, the architect can program a space to relate to its overall form. Sejima believes in the neutrality of space; allowing open program to promote spontaneous, fluid transmissions and interactions. Architecture is merely a neutral backdrop for life to occur, and therefore program should be dictated around communal spaces of interaction with private and service spaces accessory to the main, open spaces. Architecture is the platform for which life takes stage; a platform for transitory human activities. In Sejima’s words, “the signs of human activity may create spatial rhythm that liberates architectural elements from their respective limitations, always changing and renewing themselves with the active participation of nature and people” (Rubio 2007, 171). Hence, Sejima permeates each floor slab in Small House with only the spiral staircase connecting each slab together, to promote the greatest level of flexibility, openness and interaction in her design. The slabs are skewed around the staircase to allow for maximal floorspace on each slab.

Sejima’s placement of the communal living/dining/kitchen space in between the private bedrooms and the semi-private bathroom/terrace ensures the communal living space will always remain a dynamic, engaging space whether passing through or collecting within. It is an open space, free to be inhabited by people, and not by architectural determinism. Organizing Small House in this manner is reflective in its form, with the communal space bulging towards the top of the front of the house, or the south elevation, and creating the most dramatic angles of incidence along the profile of the form. Organizing the house along different parameters, beyond functionalism and its interactive programmatic layout, would have resulted in a significantly different form.
In Small House, Sejima also displayed a conscious appreciation of site and place. Echoing Paul Rudolf’s Six Determinants of Form (1956), Small House reflects Sejima’s acknowledgement of the site and of the surrounding built landscape, culture and history. Small House is carefully scaled in line to the surrounding buildings, in terms of height and proportion, thus achieving Rudolf’s first determinant of environment of the building, in which he states that “a truly successful building must be related to its neighbours in terms of scale, proportions and space created between buildings...and that houses should not dominate our environment” (Rudolph 1956, 213). Although Small House is distinct in terms of form to that of its neighbours, the scale of the house as well as material selection reflect a calculated integration into the existing urban fabric.

In terms of Rudolph’s second criteria, functionality has already been discussed. His third criteria relates to the particular region, climate, landscape and natural lighting conditions. Sejima addresses the lighting conditioning by skewing the top of the Small House inward on the south side of the building to allow more natural daylighting in, in an otherwise dense and dark neighbourbood landscape.
In terms of Rudolf’s fourth determinant, materials, Sejima accentuates her Modernist aesthetic with simple, uniform panels of glass, aluminum and metal mesh screen. These cladding materials are all affixed to a light structural steel frame and the load-bearing staircase in the center of the house. Her choice of materials is not only in line with her Modernist-like design, but it also brings attention to Rudolf’s fifth criterion for form-making: psychological demands of the space.

In Rudolf’s words “we must learn anew how to create a place of worship and inspiration; how to make quiet, enclosed, isolated spaces; spaces full of hustling, bustling activities pungent with vitality; dignified, vast, sumptuous, even awe inspiring places…” (Rudolf 2006, p.214). Sejima addresses this criteria with a powerful architectural response. Historically, in Japanese culture, the spiritual belief system of Shintoism, wherein human life is understood as part of a large system or atmosphere. In Sejima’s words, “you are living in the atmosphere, not the building. You are living in the building, but with the atmosphere” (Rubio 2007, p.16). In Small House, Sejima incorporates the historically- and culturally-relevant philosophies of Shintoism in her design by attempting to blur the boundary between interior-and-exterior through the extensive use of glass and translucent, light material. Each facade on Small House is clad differently than the next, as corresponding to the view and visual landscape connection.

With her simple, clean aesthetic; flexible open spaces in the interior; and her thoughtful incorporation of Shinotism principles, Sejima succeeds in producing a house that appear light on the ground, ephemeral to the eye, and spiritually significant to the self.
Small House is designed along the metaphor of life as a fluid, dynamic and ever-changing presence; a defining characteristic within the architecture of Kazuyo Sejima. Sejima's deep understanding of the intimacy of the home and her affinity towards an architecture celebrating the natural patterns of life is evident in her design of the Small House and its many relationships and references to the human body.

According to Anthony Vidler, there are three relationships between the body and architecture: 1) representational in that the body and forms of the body are projected in the shapes and relationships of the architecture, 2) the projection of bodily states and the evocation of physiological, emotional and psychological reactions and 3) animism or the projection of bodily attributes onto the inanimate objects of architecture (Vidler 1990). In regards to Small House, the body is represented as projection within architecture according to Vidler's criteria.
Initially, this is evident in the overall shape of the building wherein the form depicts a propensity of the architecture to move. The mass of angled projections along the south façade or entrance of the house, countered by the lack of mass on the opposite, or north façade, predicates the illusion of a directional movement or a state of temporary instability. Analyzing the form through this lens, allows for the interpretation of a human body in motion. During a standing position, the body maintains a vertical axis; however, this axis becomes skewed according to the gait of a person walking or running. A similar axis is represented in the overall form of the Small House, wherein the axis is tilted towards the south, resembling a body in motion in line with the point of entry and exit into and out of the house.
A similar representation of the body can be interpreted in the structural staircase permeating the four slabs of the house. The staircase is designed as the main structural element in the house, but functions as the vehicle through which movement, interaction and communication occur. In a similar vein, the spine in the human body functions along the same parameters, in both its structural capacity as well as in its organization for the circulation of neural activities. The main staircase in the Small House, can therefore be understood as a representation of the human spine.
Additionally, Sejima acknowledges the role of experience in her minimalist design of Small House. In line with Jorge Otero-Pailos’ *Phenomenology and the Rise of the Postmodern*, Sejima acknowledges and imbues the deep historical link of Shinto ideology into the experiential quality of the open spaces of the home, which are deeply connected to place and environment in terms of materiality and space. Sejima’s minimalist approach for Small House allows the homeowner to have the space to openly reflect on the notion of being. As an experiential quality of being confronted with a transparent exterior-to-interior boundary, blurred by a dynamic interplay of light and shadow, reflection and reproduction of environmental affects, a culturally-ingrained sense of “spiritual reference emerges, perhaps, the essential meaning of what architecture is based on this, in providing the horizon to understand and confront the existential human condition (…)granting us an experience of ourselves as corporal and spiritual beings (Rubio 2007, p. 171).

Although a product of functionalist ideology, the design of Small House overcomes the rigidity of machine-like references, for a fluid, ephemeral and delicate connection to the human body.
A potent theme in Kazuyo Sejima’s architecture is her capacity to integrate a sensation of lightness and fluidity in her projects. As is exemplified in her design for Small House, Sejima’s shows a deep appreciation for the nature of life, and for the connection of her architecture to the dynamic and honest reality within with it is situated; across time through environment, place, society and culture. Sejima translates the fluidity of life into her architecture by articulating her projects through a fourth dimension, that of time, or in other words, the inclusion of “chronological elements such as events and actions” (Hasegawa 2007, p.181).

Sejima finds importance in allowing life, and all that it represents from the ever-changing presence of the natural environment to the hustle-and-bustle of everyday society to animate, even to penetrate into her architecture, and vice versa, as she sees this as a more representative, genuine articulation of reality. This view, again, stems from traditional Japanese belief in the principles of Shintoism, wherein human life is understood as part of the larger system or atmosphere. Consequently, in traditional Japanese architecture, as well as in Sejima’s architecture, the dichotomous distinction between exterior and interior is replaced with a view of the two as continuous, fluid elements (Guzmán 2007).
Similarly, Sejima maintains that architecture exists beyond the physicality of built form, and that it inhabits the space of time, interaction, contemplation, as well as the connection to place, nature and spirituality. For Sejima, the objective of architecture is to discover and to translate these intangible, yet ever-present aspects of life, and its dynamic, fluid nature, into the physical space of the built environment. Recognizing the necessary physical dimension of architecture, Sejima strives for a high degree of transparency in her designs, allowing the sensation of lightness to become the vehicle for which the fluidity of time and nature inhabit her designs. Sejima's architectural intent follows the notion: “transparency is an ally of light, which in turn is an “agnostic instrument to describe the spirituality and otherness of architecture” (Guzmán 2007, 169).

The technique through which Sejima realizes her visions for her architecture, and through which she designed Small House, is a process that takes place between her affinity towards the rigor of Modernist functionalism and her ability to actively deconstruct structural elements, materials, and even programmatic organization into their most primal requirements. As Sejima states, “we think about the function, but we also try to think of a degree of freedom from that function” (Sejima 2007, p.15). It is through the process of organization, and disorganization, or disaggregation (Fernández-Galiano 2007), that the complexity Sejima seeks to incorporate into her architecture is manifested in simple, neutral, minimal design, such as can be seen in her Small House project. The simplicity of her designs allows for the complexity of action, event, life and time to unfold spontaneously, in a seemingly continuous, fluid manner.
In the Small House project, Sejima was faced with a particularly small site. As previously mentioned, in a formulaic manner, Sejima divided the functional needs of her client into distinct spatial units, and then stacked them to make up the form of the house in order to maximize programmatic requirements. From this, Sejima used the functional programming of the house as a platform for developing her ambitions for achieving the fourth dimension: that of time, and event or action, in her design for Small House. Sejima utilized the efficiency of functional programming, to allow her the space and freedom to explore, even to maximize, her ability to manifest a sense of fluidity and time- in her eyes, the reality of life- in the architecture of Small House.

Sejima began by deconstructing the interior programming, and overall structural requirements of Small House, in order to understand how she could imbue the space of the house with the transparency and lightness she seeks in her architecture. Through this technique, “the wall is reduced to its minimum, to eliminate the hierarchy that exists between structure and partition, in a way that the weight of materiality of each of the elements- plan, door or wall- may be the same. [Similarly], unnecessary interior interferences are totally disregarded in order to open up the space to perception, as in the case of the Small House, where the main structural system is to be found in the stairwell” (Guzmán 2007, 172). As a result, the superfluous is omitted and the structural system of Small House is reduced to a minimum, allowing a level of transparency to emerge throughout the interior space and between the interior and exterior environments. It is in the openness and transparency of this space that Sejima encourages flexibility, spontaneity and the emergence of new actions, functions and events to take place. “By eliminating the usual structural elements such as columns and transferring their supporting functions to those other indispensable elements in design, they generate open spaces or create a diversity of relations through elements that visually or conceptually connect spaces” (Fernández-Galiano 2007, p. 177).
Sejima mediated the level of transparency in Small House by adjusting the various floor plates around the staircase “in such a way that the various forms of outside space are drawn inside the rooms” (GA Architect 2007, p.102). Sejima further articulated the transparency and lightness of Small House through materials, in such a manner so that spaces open to the public surrounding the house, both the streetscape and the neighbouring park space, are visually prioritized over those that face the surfaces of adjacent buildings. In such a way, Sejima utilizes extensive transparent glass facades, and semi-transparent mesh facades to invite the exterior environment into conversation with the interior environment. What emerges from this is a fluid transmission of visual information across the exterior-to-interior boundary; a space which the body cannot transgress but where the being, mind and imagination engage in contemplation and participation in connections to place, time, nature and spirituality. “Through boundaries of transparency, an enormous amount of information flows through. It is up to each individual to take in, imitate, or ignore. The physical body cannot move over the boundary, however, the “informationalized” body already shares the space beyond the boundary” (Hasegawa 2007, p. 185).

In contrast to traditional Japanese architecture, wherein transparency was achieved through more conservative measures, Sejima responds to the agency of the contemporary ‘Information Age,’ by permitting the personalized, interior space of Small House to be accessed visually by the public exterior to it. In such a way, Sejima’s design for Small House is closely linked to Jean Baudrillard’s notions of the pornography of information, in that all information is in a state of fluid transmission, and can be accessed by anyone, at any time (Baudrillard 1983). In line with Baudrillard’s reasoning, Small House becomes a screen for the interplay of information, from the privacy of the home to the public environment surrounding it, and vice versa. Sejima recognizes the importance of this transfer of information in defining a sense of place and being for the clients of her Small House home. Consequently, the transparency Sejima sought to achieve in her design of Small House aligns closely with the traditional principles of Shintoism, and her aspirations for a sense of continuous fluidity between interior and exterior spaces, but also acknowledges the prevalent nature of communication and information flows in contemporary society.
In her Small House project, as in much of her other architecture, the spatial potency that Kazuyo Sejima attempts to create within her designs occurs beyond the limitations of physical and material space, although it is conditioned by it. For Sejima, “architecture could be a temporary phenomenon that appears in an action-maker’s awareness and images, while actions move across the locale.” (Sejima 2007, p.17). It is conditioned and created by time, in a dynamic space within which reacts in accordance with intrinsic reality. Consequently, the space created by Sejima’s designs, exists beyond its formal physicality, and occurs as a temporary, fluid space, true to its essence and accessible by the primal senses of intuition, reflection, contemplation and desire. As is expressed by the statement, “the spatiality of kawai and kehai (sign, or not-yet-manifest indication of something), where demarcation remains vague and influx- here is an origin of an imagination that countenances an undifferentiated, intuitive space going well beyond any mere mechanistic articulation” (Guzmán 2007, p.172), the space Sejima attempts to create in her architecture is closely connected to notions of Being, to a sense of place, and to a sense of belonging.
According to Heidegger, building is the physical manifestation of dwelling, and dwelling is the essential expression of Being. (Heidegger 1993). Heidegger argues that dwelling, and what it means to Be, is to find harmony within the fourfold of Earth, Sky, Divinities and Mortals. The physical manifestation of architecture allows for a space of inherent contemplation, within which the elements of the fourfold and one's place within the four-fold can be observed and understood. In Small House, Sejima, through her open, transparent and light design facilitates the space through which contemplation can occur, and through which one is constantly connected to the elements of the fourfold. In her design for Small House, Sejima attempts to imbue the home, the most primal manifestation of Being, with the constant visual and psychological expression of the fourfold, to create a space of contemplation in which her clients can, at any time, appreciate and observe their own sense of Being, and their own sense of Being in relation to their place in the larger context; and experience that meets the principles and directives of Shintoism. Consequently, Sejima states, “transparency also means clarity, not only visual, but also conceptual” (Sejima 2007, p.15).
The transparency characteristic of Sejima's Small House design is intended to allow the fluidity of action, event and time to occur across physical space. As Castells argues, ‘space is the material support of time-sharing social practices’ (p. 411), in which flows of information, or the fluidity of action and event, are organized in physical space. In her architecture of Small House, Sejima “creates numerous spaces and openings that provide the inhabitants the freedom to generate new relationships or sociological behaviour” (Guzmán 2007, p.170). Consequently, the physical space of Small House is constantly in a state of organizing, de-organizing and re-organizing actions, events, time and the fluidity of environment. As Macgregor Wise would argue, as the clients inhabit the space within Small House they are constantly creating, deconstructing and re-creating assemblages of information, as a 'constellation of singularities and traits deducted from the flow- selected, organized, stratified- in such a way as to converge (consistency) artificially and naturally’ (Macgregor Wise 2005, p.78). As such, the space experienced by Sejima's clients in her Small House project, is one that is dynamic, evolving, ever-changing and intimately connected to the natural flows and patterns of life beyond the walls of its structure.
It is within this same vein of thought that it could be argued that the architecture of Sejima's Small House exists between the striated and smooth spaces, as proposed by Deleuze and Guattari (1987). It is through the openness of her floor plan and through the creation of transparency in her design for Small House that Sejima allows the fluidity of time to pass through the space of the home; to inhabit, animate and temporarily change its physical characteristics. “The simple gesture of a line may unite environment and edifice: or where apparent signs of human activity may create spatial rhythm that liberates architectural elements from their respective limitations, always changing and renewing themselves with the active participation of nature and people” (Guzmán 2007, p.171). As such, Small House is in a constant state of being smooth and striated, fluid and rigid, and continuous and intermittent, both at the same time. It is within this space that Sejima finds balance between the necessity of the physical space of architecture, and her affinity towards a fluid, time-oriented architecture that is representative of the reality and flows of life and environment.
references


