A Comparison of Modernists:

Jean Canneel-Claes and Mirei Shigemori

Georgiana Templeton

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Introduction

The purpose of this report is to compare and contrast two 20th-century modernist landscape architects. The study will examine the background and influences, theories and principles, key works, and design process through research and analysis to provide a comprehensive understanding of the designers' primary philosophies and how they differ.

The Rose Bowl site at Leeds Beckett University will then be used in the report to apply the theories and principles of one of the designers. The design will explore how the designer would approach the site in their individualistic manor.

Figure 1 – Yurin no Niwa, by Mirei Shigemori (Tschumi C. , 2007, p. 132)

Jean Canneel-Claes

01 Background Information

Jean Canneel-Claes (1909 – 1989) was a modernist landscape architect born in Schaerbeek, Brussels, Belgium. His early development as an artist was influenced by his great-grandfather, a painter, and his uncle and Father, both sculptors (Imbert, 2009, pp. 1,23).

Canneel studied at L'École Nationale Supérieure des Arts Visuels de La Cambre (La Cambre), graduating as a "Garden Architect" in 1931. The broad curriculum at La Cambra helped to shape his multidisciplinary approach and the focus on functionalism and aesthetics within architecture came to provide a theoretical framework for Canneel's future practice. (Imbert, 2009, p. 23).

As a young designer Canneel was influenced by the post WW1 Modernist Movement. While still a student he commissioned Le Corbusier, a protagonist of the modern architectural movement, to design his own residence (Imbert, 2009, p. 29). This commission demonstrates both Canneel's affluence and his ambition to forge links with the Modernists. However, Le Corbusier was dissatisfied with the outcome following disagreements over the external landscaping. He removed all traces of Canneel from his "Euvre complete", publishing the design under the anonymus heading "Maison pour Mr X a Bruxelles" (Imbert, 2009, p. 30).

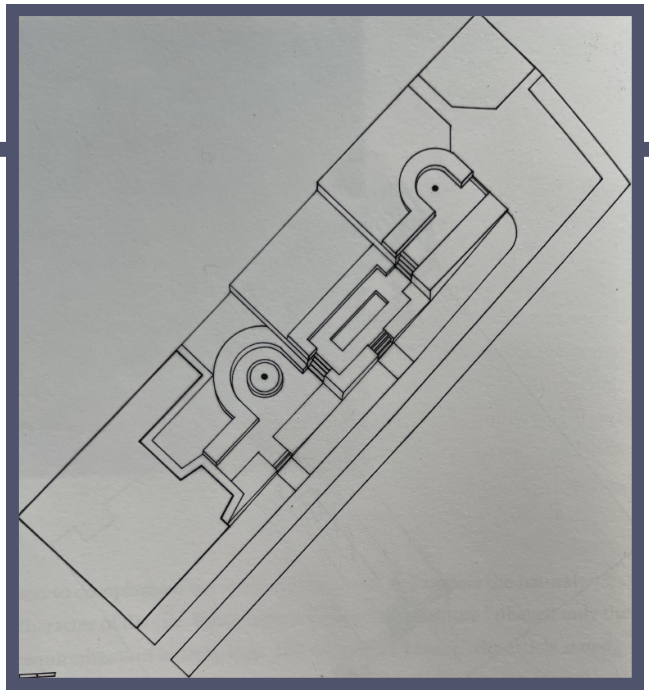

Figure 3 – Buzon Garden, Jean Canneel-Claes, 1929.(Imbert, 2009, p. 68)

Figure 2 - Jean Canneel-Claes, Exposition of Waters, 1939 (Collection Archives d'Architecture Moderne)

The association with Le Corbusier, however, enabled Canneel to forge links with the Modernists, providing opportunity to develop his ideas of the functionalist garden. Initially his work began at garden scale evolving to landscape architecture as he received increasing international recognition.

Overall, Canneel was best known for founding the Association Internationale des Architectes de Jardins Modernistes (AIAJM) which was part of the Exposition Internationale des Arts et Techniques dans la Vie Moderne held in Paris in 1937 (Woudstra, 2011).

02 Theories and Principles

Functionalism, within architecture, requires the "form of a building to be determined by practical considerations, such as, use, material and structure" rather than conforming to a preconceived idea (Functionalism Architecture, 1998). Canneel applied this principle to his designs, extending the systematic rooms of a house into the garden, creating "a useful and logical continuation of the dwelling" (Imbert, 2009, p. 71)

Influenced by Le Corbusier's theory of eurythmics, which refer to the harmonious proportions of a design or building, Canneel repeatedly called for "spatial rhythm and harmony" within design. For Canneel, "geometry provided a structure for design and resulted in emotional wellbeing: function was aesthetic" (Imbert, 2009, p. 66).

Like the rooms of a house, Canneel designed components of his gardens to fulfil a specific purpose. For example, the J.P.Buzon garden (Schaerbeek 1929) was purely functional, "a setting for modern life with a seating wall wrapped around the linden, a children's wading pool on the intermediate terrace, and a driveway… and garage at the back of the plot" (Imbert, 2009, p. 68). This design illustrates how Canneel sought to create a relationship between function, pattern and the decoration of space seen in many of his designs.

Canneel's approach was flexible and applicable to a variety of scales and sites, "coupling leisure and productivity". The geometric structures allowed for innumerable adaptions to the functionality of the garden: "sunbathing terraces, exercise equipment, orchards or vegetable beds". His gardens were both "systematic and site-specific, modern yet stylistically timeless" (Imbert, 2009, p. 72).

Canneel predominantly designed for wealthy clients, but "his vision echoed the modernist ambition of making everyday design accessible to the wider reaches of society". In 1933 Canneel published "Un Jardin Complete Pour Une Habitation Moyenne", (A well rounded garden for an average dwelling). He described the development of a small site, "keeping his plant list to a minimum, he emphasized spatial articulation and physical over visual experience. The project reflected a concern for economy and health, with half the surface dedicated to the production of food and to exercise." (Imbert, 2009, pp. 72-73)

03 Key Works: Heeremans House and Garden, Liedekerke, 1937

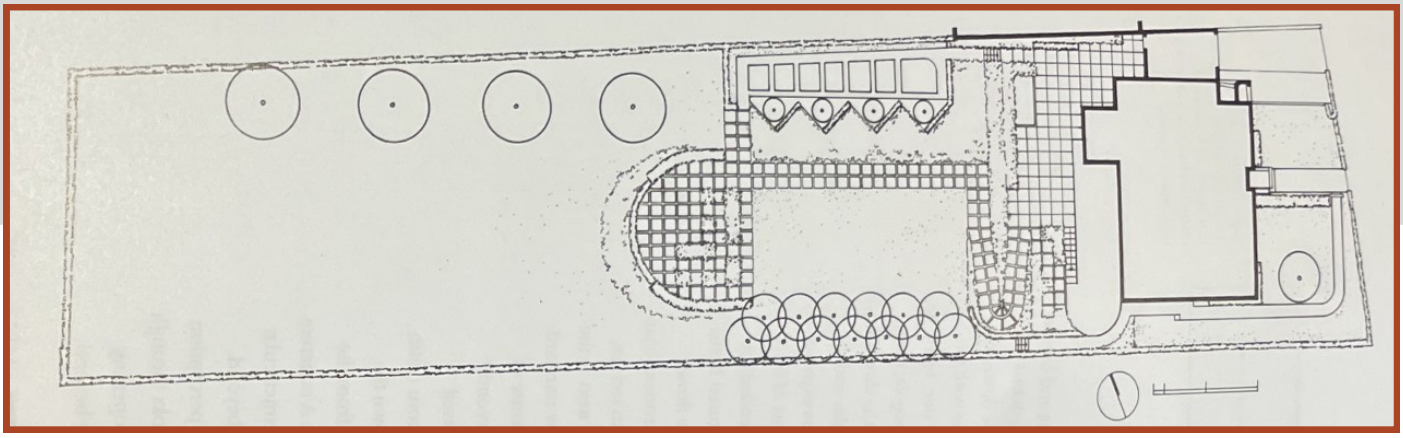

Figure 4 – Plan of the Heeremans Garden (Imbert, 2009, p. 86)

Canneel collaborated with architect Huib Hoste to create a functionalist design for the physician, Karl Heereman. Hoste was sympathetic to Canneel's landscape vision, and also admired the work of Corbusier and participated in the Modernist Movement (Imbert, 2009, p. 77).

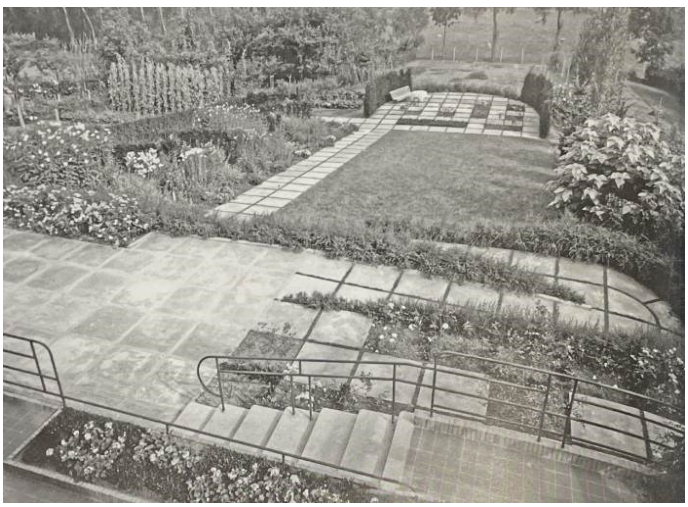

Figure 5 – View from the terrace, Heeremans Garden (Imbert, 2009, p. 89)

Hoste's plan for the house was designed to allow for the pairing of domestic and professional activity while maintaining privacy. Canneel designed landscape elements with a geometric layout for the outside space, softened by vegetation, and taking advantage of the topography. (Imbert, 2009, p. 82)

Canneel sectioned the sloping topography at the back of the house into terraces which integrated the modern architecture of the house out into the surrounding valley. Hoste recorded the sequence "terrace-lawn-grove-pasture" (Imbert, 2009, p. 84). The upper level split into two: the left acting as a threshold to the garden and play area for children and on the right an opening from the living room which reflected the semi-circular extension from the house. The middle a sunbathing terrace that overlooks the grass lawn on the lower level that merges into the pastoral landscape. (Imbert, 2009, p. 85)

03 Key Works: The Exposition of Waters, 1939

In 1939, Canneel gained the commission to design the grounds to the 1939 International Exposition of Waters (EoW) (Imbert, 2009, p. 129). This provided Canneel with the opportunity to expand his functionalist garden designs into the public urban landscape and developed his position on the garden city.

The EoW was a test for a practically formed green city with increased open green space and opportunities for leisure, to promote a healthy future for Liege (Imbert, 2009, p. 134). Canneel approached the 60-hectare site as a series of gardens "conceived with two timeframes in mind: temporary gardens for immediate impact and landscape infrastructure for the future growth of liege" (Imbert, 2009, p. 140).

A monumental entrance framed Canneel's Checkerboard Garden. "The 88 squares of alternating pink hydrangeas and pools animated by forty-four jets of water formed a floral carpet and a transition to the large fountains and the river beyond".

To the east, a rose garden with yellow, pink, red and white roses and 1200 jets of water would spray water intermittently. Further east the site narrowed towards the permanent and zoological gardens.

West of the entrance, the Dahlias Garden was cut through by spiralling pathways. This was an artificial space but retained mature vegetation from the previous park. The paths led to the Falise's plaine de jeux, a playground and sports track hidden by screens of poplars which would shelter the space.

Finally, the Water Garden was designed, "with exotic vegetation intertwined canals, paths, sitting areas and footbridges along half a kilometer". The area was highlighted with fountains, multicoloured lighting and glass sculptures which attracted people to the site at night (Imbert, 2009, pp. 141-150).

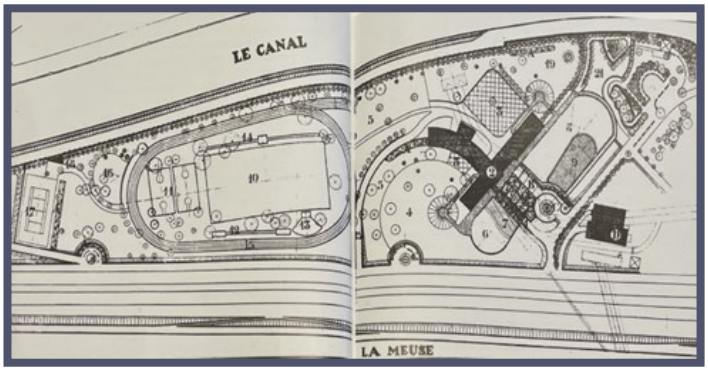

Figure 6 – Exposition of Waters Site Plan (Imbert, 2009, p. 148)

04 Design Process

Figure 7 – Grimar Garden, Jean Canneel-Claes, Axonometric (Glaudel)

Canneel's designs concentrated on the utility of the space and the user's experience. He analysed the existing space, orientation of the house and elements of scenery to develop an efficient use of the existing landscape. In order to create an immediate structure and bring geometry to the site, Canneel frequently kept mature trees and shrubs in place. His aim was to establish a relationship of coexistence and completion between house and garden, having set the geometry of the house as its compositional basis (Glaudel, n.d.).

Throughout Canneels career he tailored his gardens to acknowledge an architectural audience (Imbert, 2009, p. 57). Inspired by the architectural and artistic avant-garde of De Stijl, Bauhaus and Le Corbusier, Canneel expressed his designs through axonometry. This allowed him to explore the spatial relations of the site and design asymmetrical spaces suited to particular functions. Axonometry "symbolised modernity, efficiency, and real space with a simultaneous description of plan, elevation, and section to scale" (Imbert, 2009, p. 61).

Canneel used photography to exhibit his work in publications, manipulating photographs to show a mature and maintained state of completion. He worked with

architectural photographers Willy Kessel and Vandeberghe to document his work. Their dynamically framed photographs formed abstract compositions in black and white that convey the experience of the gardens (Imbert, 2009). By taking the photos from a low angle aerial view the photos appeared as an axonometric perspective revealing the organisational aspects of the design (Imbert, 2009, pp. 57-58).

Canneel would manipulate the photographs with India ink and gouache to simulate the mature site. For example, in Figure 8 he introduces mature hedges and blooming parterres in the 1930 Grimar Garden in Genval. Unlike architecture, the soft scape of the garden would take years to mature into a desired state, so in order to publish his designs at their best and receive the publicity he required edited visuals to portray his modern functionalist designs (Imbert, 2009, p. 58).

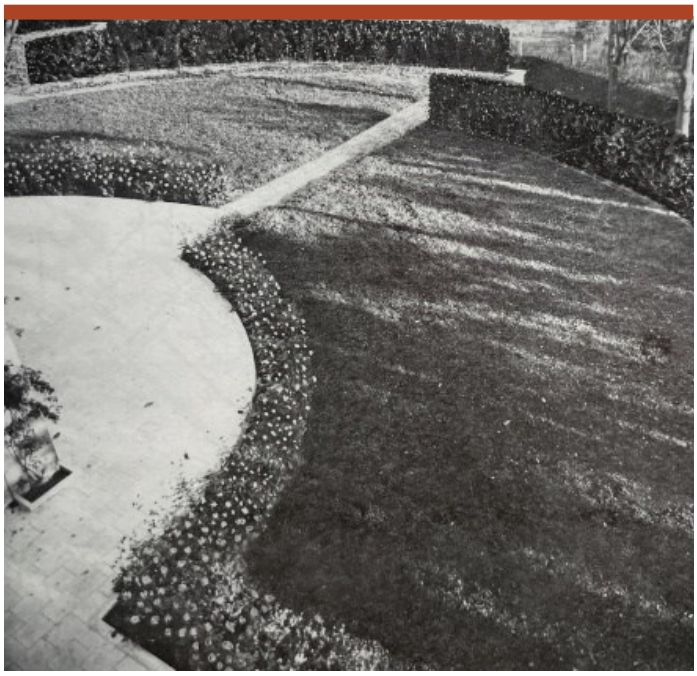

Figure 8 - Grimar Garden, Jean Canneel-Claes 1930 edited photograph (Imbert, 2009, p. 59)

Figure 9– Image of Mirei Shigemori (Tschumi C. , 2005, p,19)

Figure 10 – A sketch of the big survey (Tschumi C. , 2007, p. 32)

Mirei Shigemori

01 Background Information

Mirei Shigemori, a landscape architect, garden designer and scholar who dedicated his life to the development of the contemporary Japanese garden.

Shigemori (1896-1975) was born in Kayô-chô, Okayama Prefecture, Japan into a wealthy family. He was educated in the art of Ikebana (the art of flower arrangement), Nihonga (Japanese Painting) and the Tea Ceremony as a teenager (Tschumi C. , 2007, p. 25).

He graduated from the Tokyo Fine Arts School well versed in traditional Japanese arts, but also having developed interest in contemporary aesthetics, art history, philosophy and European culture.

Throughout his Career Shigemori wrote a total of 81 books, designed 230 gardens, and spent over four years surveying 242 historic gardens across the country, and published the first detailed account of Japan's ancient garden tradition in the 26-volume Nihon Teienshi Zukan (Tschumi C. A., 2006, p. 110).

02 Theories and Principles

Japanese garden design has a deep-rooted tradition within its arrangements, function, and its aims to recreated nature. Strict rules of tradition were set in the Sakuetiki, "believed to be written in the mid to late eleventh century, during the Heian Period" (794-1184) (Keane, 2008, p. 4) making it the oldest existing gardening manual.

Shigemori felt the development of the Japanese garden was so anchored by tradition, that new gardens lacked creativity and simply replicated the elements and arrangements of the past. Resultantly, he wrote the Shin-Sakuteiki (New Sakuteiki) where he argued that "one can make gardens according to the ancient meanings or according to the ancient forms, but in actuality the person who is designing the garden and building it is from nowhere other than the present day. The fact that we are people who live in the present means that we are unable to make gardens that carry meanings of olden times. If we try, we can only make a garden that is an imitation, and this is meaningless" (Tschumi C. , 2005, pp. 19-20).

The most accurate representation of Shigemori's philosophy is noted in a summary of his approach to Ikebana, but illuminates the nature of all of his designs.

"It is true that in the art of flower arrangement the most important thing is to bring nature to life. But this doesn't necessarily mean to bring it alive in a realistic way. Bringing nature to life means to translate it inside myself. And in order to make it a thing of myself, all or part of nature has to be transformed: transformed from the field of nature to the field of art, emphasizing the distinction between nature and art."

(Tschumi C. A., 2006, pp. 113-114)

Shigemori aimed to design gardens based on the history of the site and acknowledging the significance of nature but ensured that he displayed his own creativity. By leaving some of the historic traditions behind it allowed him to design gardens for the 20th century and develop a new contemporary Japanese garden.

03 Key Works: Tofuku-ji, 1938

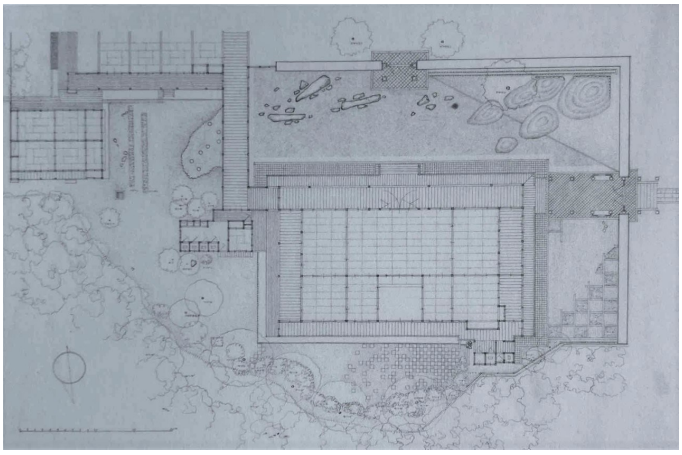

Figure 11 - Plan of Hasso no Niwa (Tschumi C. , 2007, p. 79)

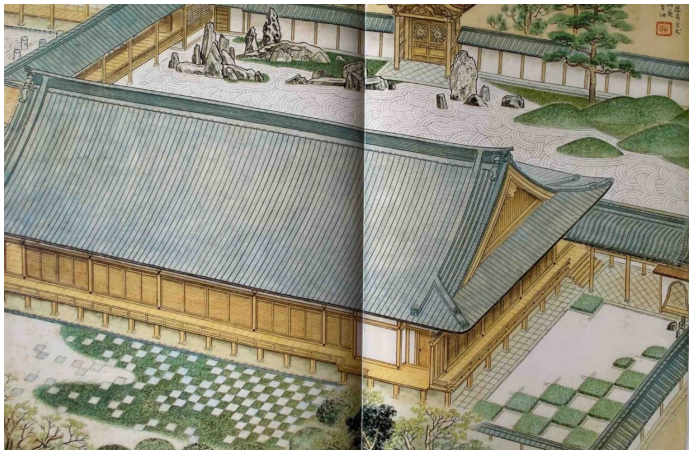

Figure 12 - Visualisation of Hasso no Niwa (Tschumi C. , 2007, p. 77)

In 1938 Shigemori was approached by the head priest of Tofuku-ji temple to improve the gardens of the hojo (the residence of the head priest). Shigemori agreed to waive his fee for the project in exchange for complete freedom in the design. The only requirement was that he should reuse elements and materials of the existing site, where possible, as the Rinzai Buddhist sect believe that nothing should go to waste (Tschumi C. , 2007, pp. 75-81).

Tofuku-ji is potentially Shigemori's most outstanding and globally recognised design. The garden named Hassô no Niwa (Garden of eight views), refers to the eight viewpoints he created within the garden, which is positioned along the four sides of the building (Tschumi C., 2007, p. 81).

The most iconic design, the North Garden of "framed grid of stone plates sitting in moss" fades out towards the north east. Shigemori took his inspiration from the "grid pattern on the sliding doors of Kyoto's Katsura Rikyû and the tea houses of Shûgakuin Rikyû, both famous garden and building complexes built in the 17th century" (Tschumi C. , 2007, p. 81).

The east garden "features a big dipper stone arrangement, reusing the foundation stones of the former toilet building" to recreate a star consolation "appropriately set in a cloud shaped area of white sand" (Tschumi C. , 2007, p. 79).

The south garden, made up of "four stone settings representing the Isle of the Immortals, and further west, five moss covered mounds, symbolizing the five zen sects of Kyoto. A straight diagonal line from the northwest corner divides the area of moss from the white sand and gives quite a modern accent to the layout" (Tschumi C. , 2007, p. 79).

Finally, the west garden was inspired by "the look of rice fields in the landscape" and creates a geometric layout of azaleas and white sand sectioned by recycled stone curbs. The trimmed azaleas create a "contrast in colour, texture and three-dimensional variation" (Tschumi C. , 2007, p. 79).

Shigemori success at Tofuju-ji, came from the reduction of its symbolism into "the simplest possible form" (Tschumi C. , 2007, p. 81) to create a modern and contemporary Japanese garden, breaking away from tradition.

Figure 13 - Hasso no Niwa, West Garden (Tschumi C. , 2007, p. 78)

Figure 14 - Hasso no Niwa, East Garden (Tschumi C. ,2007, p. 80)

Figure 15 - Hasso no Niwa, South Garden (Tschumi C., 2007, p. 78)

Figure 16 - Hasso no Niwa, West Garden (Tschumi C. , 2007, p. 78)

03 Key Works: Kogawa Residence, 1958-1965

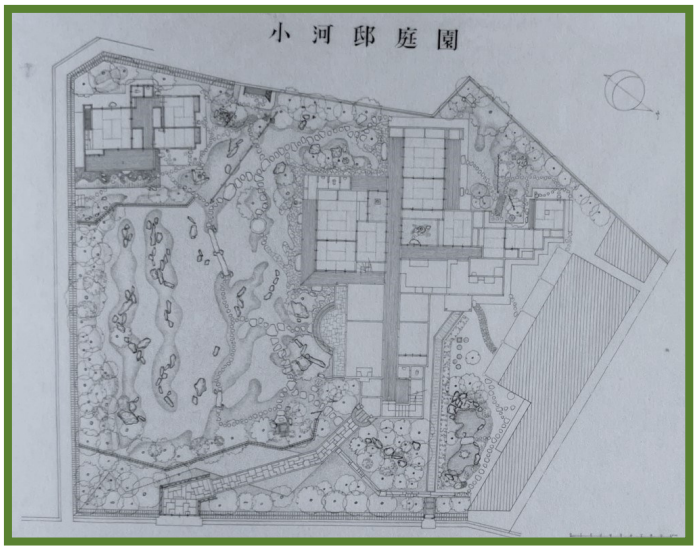

Figure 17 - Plan View of the Kogawa Residence (Tschumi C. , 2007, p. 175)

The Kogawa Residence was the largest private garden designed by Shigemori for Mr Kogawa, president of Iwami Kôtsu Bus company. Construction started in 1958 but the project was completed in phases due to Shigemori's overall work commitments. However, Mr Kogawa also continued to buy surrounding land which extended the scope and forced Shigemori to modify his designs for the larger site (Tschumi C. , 2007, p. 173).

Shigemori designed a stroll garden "called Daimyo Garden, for visitors to walk through. The main purpose of these gardens is leisure and reflect a variety of themes" (Naka, 2016, pp. 5-6). This was a revolutionary idea, combining Shigemori's karesansui designs with a stroll garden and tea houses, and "in true Karesansui style, the water is replaced by white gravel" (Tschumi C. , 2007, p. 177).

Figure 18 - Kogawa Residence, (Tschumi C. , 2007, p. 176)

Figure 19 - Fusuma, featuring grid pattern and undulating line (Tschumi C. , 2007, p. 178)

The stone settings around the garden were a recreation of the "local landscape, ... the area along the Japan Sea, from Izumo to Iwami". This was a traditional idea applied in a new fashion by "combining upright and flat lying stones, in such a massive and powerful setting, is simply overwhelming" (Tschumi C. , 2007, p. 177).

Although the Kogawa residence is not considered Shigemori's most outstanding designs it incorporated synthesised traditional aspects of the Japanese garden to create something new and contemporary. Many aspects are traditional, but "his specific techniques (and their results) are thought provoking" (Tschumi C. , 2007, p. 177).

Figure 20 - Kogawa Residence (Tschumi C. , 2007, p. 176)

04 Design Process

Shigemori's Shin-Sakuteiki outlined three ways to design a garden: by "pursuing a strict conservation and classic and traditional style (the traditionalist approach)"; by "making the best use of classic or traditional styles in the modern times (the approach most congruent with Shigemori's position)", and finally; "completely ousting classic or traditional styles and creating something new (the modernist approach)" (Tschumi C. A., 2006, p. 114).

Shigemori, a modernist, did see the attraction of creating something completely new, but felt that with the loss of all tradition he would be unable to articulate his designs and creativity. He believed that the memory of the past should appraise the identity of the present, making the past a source for contemporary inspiration (Tschumi C.A., 2006, p. 115).

An example of this would be Shigemori's integration of Iwakura into his designs. Shintoism, the prehistoric native religion of Japan, holds the belief that natural elements in the landscape are the home of gods (Kami). Giant rocks called Iwakura would be enshrined, believed to be places for Kami to dwell and as such are traditionally placed in japanese gardens (Goto, 2003, pp. 9-11).

Shigemori understood that the original purpose of Japanese gardens was "to reengage nature as it is

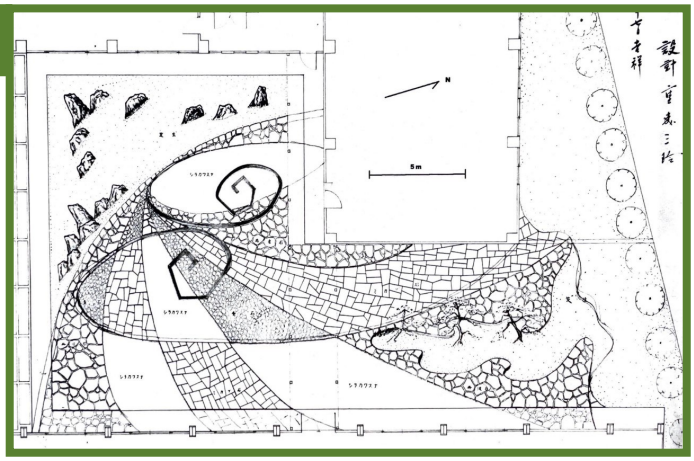

Figure 21 - Yurin no Niwa Plan view (Tschumi C. , 2007, p. 134)

Inhabited by the gods" (Tschumi C. A., 2006, p. 116) and believed that this should remain present within his contemporary gardens and so included many Iwakura rocks in his designs.

When approaching a design, Shigemori aimed to represent the history of the site symbolically using new materials and forms. An example of this would be Yûrin no Niwa, a Kimono inspired garden which "refers to a local kimono famous for its colourful noshi design". Noshi is "strips of dried fish/seaweed tide in a bundle of good luck and unlimited happiness" (Tschumi C. , 2007, p. 133). The garden is constructed of a variety of contrasting materials that create the intricate design of noshi. The aesthetic design and symbology were strong creating a truly contemporary Japanese garden.

Similarities and Differences

Jean Canneel-Claes and Mirei Shigemori were both from privileged backgrounds benefiting from a broad education in art and philosophy enabling them to draw from other disciplines and forms of art to create their designs. Both applied their broad education within their approach to and exploration of design.

Within their design philosophy and process, function was a key element, but how this is expressed reflects the society and culture in which they predominantly operated. Inspired by the modernist movement, Canneel focused on the direct functions of a space, designing for practical uses to create efficient and productive landscapes. To Canneel function was aesthetic (Imbert, 2009).

Mirei Shigemori, also created function within his designs, in the context of the traditional and symbolic heritage of Japanese gardens. It is important to recognise that over time the Japanese garden evolved from its Shinto heritage, to places of contemplation, movement, celebration, escapism, and relaxation (Naka, 2016, pp. 4-6). Shigemori designed gardens to achieve these same purposes, but also aimed to create contemporary gardens, relevant to the present, incorporating new forms and materials.

Both Canneel and Shigemori are similar as they can be described as modernists and took inspiration from the post WW1 Modernist Movement. Through his designs, Canneel aimed to create modernist spaces for functionality, efficiency, and productivity, creating boundaries that would influence a way of living. He came to these principles through his education at La Cambre and the influence of the 1920's architectural movement.

In contrast, while Shigemori revolutionised the Japanese garden, and brought it into the present, he felt a need to acknowledge the past. In many ways he disliked tradition, claiming that "vitality had drained from the Japanese garden" and many had "lost much of their creative character they possessed in earlier times" (Tschumi C. A., 2006, pp. 110-112). However, he didn't believe that a total loss of tradition was the answer, retaining the symbolism and ideologies of the past but implementing the designs with new and current purposes and materials.

Both Canneel and Shigemori are acknowledged to have left a significant professional legacy which again mirrors their design philosophy.

Canneel was the founder of the forward-looking Association Internationale des Architectes de Jardins Modernistes (AIAJM) where he aimed to "foster connections among members of a small professional body and resist the clear boundaries of professionalisation." (Imbert, 2009, p. 108). The AIAJM aimed to advance theoretical debate on landscape architecture and strengthen its links to art, architecture and urbanism.

In contrast, Shigemori was one of the foremost experts on historical Japanese gardens. For his publication Nihon Tei-enshi Zukhan (Illustrated book on the History of the Japanese Garden), Shigemori surveyed and recorded 242 historic Japanese gardens (Tschumi C. A., 2006, p. 110). Following typhoon damage "he was concerned as to how these gardens could be restored when hardly any records of their original layout were available..... He decided if nobody else was going to do this survey, he would go ahead and do it himself" (Tschumi C. , 2007, p. 33). The outcome was 26-volumes produced over a four year period. This historically founded legacy clearly demonstrates Shigemori's respect for the traditions of the Japanese garden and the need to preserve this for future generations.

Conclusion

In conclusion, Jean Canneel-Claes and Mirei Shigemori were both modern landscape architects of the 20th century whose theories and principles were applied through their designs. For both, function was a key element and they both took inspiration from the Modernist Movement. Both men benefited from a broad education and through their work aspired to develop the profession of landscape architecture.

However, the application of these similarities were profoundly different. Canneel's broad education at La Cambre influenced his philosophy towards designing spaces for literal functions, creating static and geometric designs. He founded the AIAJM to expand horizons in the development modern landscape architecture.

Opposingly, Shigemori held great respect for the history and symbolism of a place, due to his in-depth education in Japanese arts, and made a great effort to preserve and execute this subtly in his designs. Yet, he also applied his revolutionary use of materials and contemporary shapes to achieve a contemporary feel within the Japanese context.

Inspired Design Sketch

Applying the theories and principles of Mirei Shigemori on the Rose Bowl Car Park

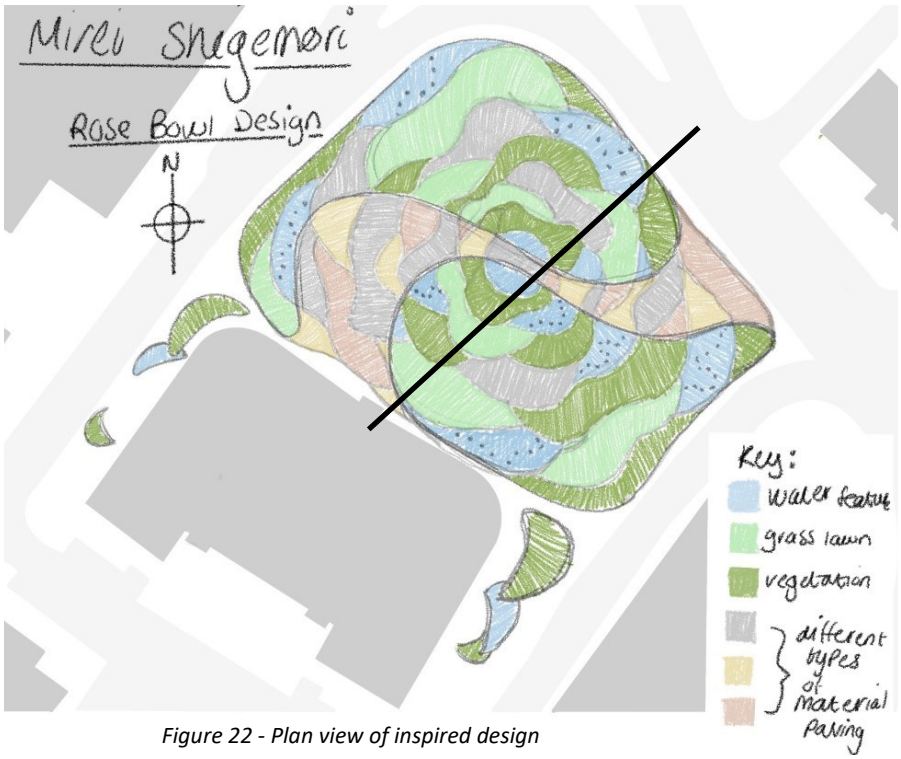

Figure 22 - Plan view of inspired design

The Rose Bowl at Leeds Beckett University is currently a car park, with little to no vegetation and lack of interest. The site has a gradient of three meters, dropping towards the south west.

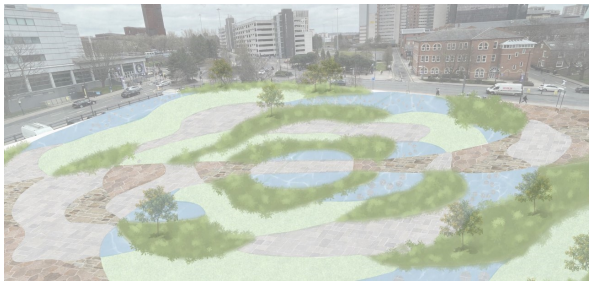

Figure 23 - Basic visual of inspired design

Referencing Shigemori's use of symbolism, for this site I selected the rose, emblem of Leeds Beckett University and Yorkshire, as is a subtle yet symbolic reference.

Shigemori introduced both new and traditional forms within his designs, for this site I replicated the rose petal as a form throughout the design. Each petal of the rose contains, or is constructed from different elements, applying Shigemori's use of contrasting modern materials.

The pathway through the middle illustrates Shigemori's famous undulating line and is experienced through the change in material. Pale coloured steppingstones through the water petals allow pedestrians to explore the unique environment rather than having to take the main route, while referencing the Yorkshire flag, a white rose on a blue background.

The design offers people a contemporary open space to socialise and relax upon the grass lawn in the summer.

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