1. INTRODUCTION

This article explores spatial concepts of urban design led by Camillo Sitte (1843-1903) and its influences. Sitte infused the fervor of city planning as an initiator, and his achievements affected Adolf Loos (1870-1933). Thus, this thesis, with regard to Sitte’s penchants concerning urban design, focuses on two matters in order to understand Camillo Sitte’s efforts to invent a new method on modern city planning and its influence on an architect: first, it deals with his urban studies, theories, and practices on city planning that consider communal living and everyday life and urban typology as well; second, it discusses how his urban ideas are accepted by Adolf Loos. Conclusively, through the investigations on Sitte’s movement on city planning and its influence on Adolf Loos, this study clarifies Sitte’s efforts to improve urban life and its milieu, and then Loos’s efforts to adopt Sitte’s criticisms and then re-interpret them in tune with the modern way of living as well. As a result, this thesis shows that they suggested new methods in performing dialectic designs, depending upon the picturesque and modern tradition, although their difference is differentiated from the sense of space, exterior vs. interior, i.e. Raumkunst vs. Raumplan.

2. SITTE’S URBAN DESIGN LANGUAGE

2.1 Urban Concepts in the Late Nineteenth Century and Sitte’s Urban Aspects

Since the Industrial Revolution, urban elements had been synchronically in a semiotic system. The Industrial Revolution yet led to a radical transformation in two points, following natural and inventive urbanization. In the first place, due to the new agglomerations of the population, gridiron plans particularly in the interior. Both concepts pose a sharp contrast to Otto Wagner’s idea of space.

Therefore, this thesis focuses on two matters in order to understand Sitte’s efforts to invent a new method on modern city planning and its influence on Loos. First, it deals with his urban studies, theories, and practices on the city planning that consider communal living and everyday life, and urban typology as well. Second, it discusses how Adolf Loos employed Sitte’s urban ideas in his architecture. Conclusively, through the investigations on Sitte’s movement on the city planning and his influence on Loos’s interior space in Villa Strasser, Villa Moller, and Villa Müller, this study clarifies Sitte’s efforts to improve urban life and its milieu, in addition to Loos’s efforts to adopt Sitte’s criticisms and then re-interpret them in tune with the modern way of living as well.

As a result, this thesis shows that they suggest new methods in performing dialectic designs, depending upon the picturesque and modern tradition, although their methods are differentiated from the senses of space exterior vs. interior, so-called Raumkunst vs. Raumplan.
United States were created through new traffic and infrastructure systems. (Choo, 1969, 7-9) Meanwhile, the old towns were gradually extended outside the city. The urban spread shaped a new political aura. In this social situation of urban development, new thoughts were formed in the European metropolitan areas. On the one hand, artistic tendencies by William Morris and John Ruskin appeared in England. They argued to practice a return to thorough handworks. Social conflicts in England reached ultimate stages in many parts. For the solution they chose the most illustrious and religious methods of English cultural development: i.e. it was the revival of the Gothic style. Both the Gothic revival and the resurgence of true feeling under the desperate social circumstances were a natural consequence. The Gothic culture was also the proper correspondence on the demand for spiritual reassurance, serenity, and social stability. (Crouch, 1985, 298) On the other hand, another trend was an introduction of picturesqueness. The picturesque notion embodied more aesthetic idea ever exerted by England over European architecture than any other Italian and French. The picturesque landscape provided the experience of a carefully considered and composed irregularity, featuring the richness and variety of natural materials, appealing to eyes that do not only rove across extensive scenery but apprehend its varied aspects. (Hunt, 2002, 8-10) The informal English gardens in the early eighteenth century, originated essentially from the English fondness for paintings of natural scenery, were introduced through a number of publications on the descriptions, illustrations, and pattern books. The picturesque scenery for performance on stage, by contrast, was represented through an ensemble and views seen not at once but one after another in time. The scenery in pictures and theaters might then seem to be essentially the same because they offer their compositions to vision. The picturesque works through the duration of viewing, unlike pictorial works which offer their contents all at once, spanned the full spectrum of human and natural history: i.e. recollection and oblivion vs. growth and deterioration. These tendencies affected the well-planned, economical, and harmonious layouts between all parts, and even the standardization of all garden plans. (Leatherbarrow, 2009, 272)

Both aesthetic and picturesque trends climbed to the summit in the Ringstraße plan with the varied and personalized character of the buildings. They were made up of the revivals of the historical styles; some of which were the Gothic with classicizing ornaments, others Renaissance with the Gothic and the Baroque ornament (Collins, 2006, 43). The variety became more apparent when the Ringstraße was compared with Haussmann’s work in Paris. In the crux of the Gothic and Baroque revival, the creation, extension, and the organization of cities were reflected on the plan of the Ringstraße in the Fin-De-Siecle through three patterns such as the Baroque or Neoclassical geometrical form, the essentially British residential pattern, and the colonial checkerboard schema. On the situation, Sitte was horrified by the strict and ruthless urban layouts of the decade. So, on the basis of the analysis of democratic and economical connections of urban elements in medieval townscapes, he proposed three significant points: first, the center of plazas flanked by buildings should be empty for communal living places with visual continuities between each element and meandering routes situated around plazas, streets, and buildings, but recollecting Gothic plazas; second, to extend a visual view, monuments should be empty at the center of streets with avoidance of straight, but in fact championing Baroque straight imagination; third, meandering movement in villages and cities encountered a series of settings through a picturesque effect. (Sitte, 1965, 48) As to Sitte’s ideas, the persistence on avoidance of the straight lines of movement and on promotion of the meandering route was the same as the early designers of the picturesque garden. Sitte’s notion in urban design then might nurse a perennial double meaning. He might advocate irregular and symmetrical shapes with minimum scale from Renaissance to Baroque, as well as recognizing needs for enclosed spaces and picturesque views.

2.2 Sitte’s Publication, and Its influences

Camillo Sitte wrote Der Städtebau nach seinen künstlerischen Grundsätzen (hereinafter Der Städtebau, and it is translated as City Planning according to Its Artistic Principles in English) in 1889 to condemn the emperor Franz Joseph’s Haussmannisation of the Ringstraße Ring, as Adolf Loos saw it “Potemkin Ring.” The geometric arrangement such as endless straight streets and extensive open plazas, destroying a number of old cities, became as symbolic means of the imperial power. Like this, the urban planning of the time was divided into both functional and aesthetic penchants: the one was Otto Wagner who criticized the projects focused on excessive historicism like the Ringstraße as Sitte’s antithesis and who esteemed the grid and its colossal uniformity as the basis for urban expansion and design (Schoriske, 1961, 73-83); the other was Camillo Sitte, Hoffman, and Adolf Loos, who advocated a return to the ancients, i.e. a revert to a basic building tradition free of the trappings of styles and of ornaments.

![Image](https://via.placeholder.com/150)

“Der Städtebau nach seinen künstlerischen Grundsätzen, 1901” and “L’art de bâtir les villes : notes et réflexions d’un architecte, 1902”

Figure 1. Sitte’s books published in Germany, French, Japanese, and English (clockwise from top left)
A remarkable thing, however, is that Sitte sought for the both tendencies. (Collins, 1986, 241, 248; Kostof, 1991, 83-84) Sitte did not contradict the use of the rational gridiron system, while he preferred for the application of the picturesque theory. He unwearingly investigated the best urban spaces of the past and tried to derive from these examples general rules. By analyzing spatial organization, urban aesthetic values, and city planners in the past, as well as his experiences from urban spaces, he began to identify the fundamental role of urban space, and to diagrammatize an objective urban form including his ideas. Der Städtebau was published by his efforts. The book created a big sensation at that time continuously publishing the third edition.

Sitte’s learning from Rudolf von Eitelberger was helpful in improving his urban philosophy. Through Eitelberger’s teaching, he recognized a city as an expression of culture and social system from the past to the present. So, he proposed that an architect should have the ability to express urban culture and social system as a spiritual entity like humans. Meanwhile, Der Städtebau, the sixth edition, was published by Siegfried Sitte (1876–1945) after Sitte’s death. His son as an urban planner, Siegfried Sitte produced a reprint with additions and emendations, excavating new architectural ideas of his father, and made an effort to announce Sitte’s urban architecture through a variety of exhibitions. As the results of such efforts, Russian edition was successively published in 1925 after French edition (L’art de bâtir les villes: notes et réflexions d’un architecte) in 1902 by Camille Martin (1877–1928). Spain in 1926, and then the United States in 1945 by Charles T. Stewart. His book was also published in Japan as the title of “広場の造形 (the shaping of plazas)” in 1968. But, the big problems of the books were that they all re-translated Martin’s version into their languages. The edition artificially fabricated the state of the time. Martin even added his personal opinions and excluded the Austrian and German cases. Rather, Martin complemented French cases. Such reasons resulted in Collins’ study with the Fulbright Fellowship. He re-translated it comparing with Sitte’s original edition and referring to his archive. The book’s title was “Camillo Sitte: the Birth of Modern City Planning” published in 1986 (Collins, 1986, 14-34). (Fig. 1)

Another noteworthy point is that Sitte’s book includes various diagrams depending on his urban ideas. The diagrams are helpful in expressing conceptual drawings in an initial plan to architects and urban planners concretely. They are more simply well-arranged and easier to read than the previously published books which included many details and varied cases of facilities of all parts to use as occasions demand. Though his diagrams are not to use it immediately, the diagrams apparently suggest the aesthetic principle of urban design as an objective tool because of diagrammatizing them with the same drawing basis. The diagrams also show close rapport between buildings and streets, street furniture and plazas, and plazas and buildings. The relationships could be compared with those of rooms and furniture enclosed along the walls of the room in a house, rooms and corridors, and rooms and stairs. It shows that Sitte’s ideas in the diagrams are ultimately influenced by Alberti. Alberti addressed long time ago, “the city is a large house and the house is a small city (Alberti, 1988, 1.7, 19).” This means that Alberti regarded a house as a small city, and that the entire systems of the house have in common with those of the city. The rooms, corridors, and staircases of the house play an important role in binding different functions and forming varied networks in the house as a small unit among urban tissues, as urban spaces interlocks links with buildings, streets, and plazas.

Sitte’s diagrammatizing-based tendencies likewise lead to publishing other similar diagrammatizing-based books dealing with a causal rapport between urban elements and inhabitants, such as the books of Gordon Cullen, Kevin Lynch, Aldo van Eych, and Christopher Alexander. Aldo van Eycy says, “a house is a tiny city, and a city is a huge house (van Eyck,Smithson, 1968, 41)” The house and city become one system well-organized with a logical sequence. It means the re-establishment of the continuity through in-between spaces between the both. This view regards all elements of a city as urban tissues interwoven with various networks, even more hierarchically. The occasions will be continuously changed according to the movement from one place to another or the meeting places or points for people, considering the flow of time. So, houses and urban spaces in the city will come up with a spatial network along the in-between spaces based on streets, plazas, and courtyards, as an interventional role, and it will develop a pattern or a type in urban structure. After all, a city is a collection of patterns produced between humans and physical circumstances (Collins, 1986, 16, 20).
These principles are, as a more advanced approach, exactly the same as the ideas of Christopher Alexander, who interpreted the cities in a structural frame (Alexander, 1979, 68-70). The standard patterns of events vary from person to person, and from culture to culture. They cannot be separated from where they occur. The action and space are indivisible. The action is supported by this kind of space while the space supports this kind of action. Both of them form a unit and a pattern of events in space. (Fig. 2) In his “Townscape Casebook,” by contrast, Gordon Cullen reinvigorated a picturesque way of seeing and then set forth a basis for the design of the environment based on picturesque principles. Cullen proposed the concept of the townscape to develop a comprehensive “field of vision” that gathered heterogeneous elements into a unified whole - an idea that influenced the work of the American urban theorist Kevin Lynch.

2.3 Sitte's Ideas on Cities, and his Urban Studies

Camillo Sitte’s study can be largely classified into two studies; first, laying-outs on streets, plazas, buildings, and monuments in plazas, and, second, picturesque interplays surrounded by medieval townscape through the civic and artistic nature of European towns. Speaking concretely, firstly, in Der Städtebau, he attempted to systematize the compositional elements of Classical, Medieval, Renaissance, and Baroque spatial organization. The “solid and void” interplays were used to establish the dialectic criteria of openness vs. enclosure, symmetry vs. asymmetry, and regularity vs. irregularity. It provided a guideline for a return to the old and balanced system of urban compositions. As for the application of picturesque theory, secondly, the picturesque irregularity became a good model for the urban planning. The irregularity of urban blocks brought about attractive resolutions and effects. Through the mixtures of both Medieval with Renaissance models, the relationship between irregularity and regularity became more and more consolidated and organized.

To maintain the dialectic criteria, the urban space around plazas should be enclosed by adjacent buildings to function effectively, and should be void for people and monuments. The main requirement for an urban plaza, like a room, is the enclosed character of its space, and buildings around plazas play a role of the background toward the plazas to give a sense of enclosure. Further, along with a model of urban enclosure, Sitte described the good models of urban organization as a complex mixture in plazas, in which buildings never stood in isolation but kept the continuity of urban tissues. Streets in the city were connected to plazas, forming densely interlocked networks and systems within the city (Collins, 1986, 14). Possibly, the ideas were derived from the comparison of the city with the house by Alberti: i.e. plazas vs. rooms, streets vs. corridors or stairs, and street furniture vs. room furniture.

Besides, Sitte suggested, taking aim at formal and abstract planning exclusive of the reality of life, the replacement of rational models which integrate both picturesque and perspective townscape. Because streets had different forms according to the sense of pedestrian sight and the size of plazas, the identical scale should be very required to represent a sense of idealistic space, insofar as possible, with the absolute measurement of plazas (Collins, 1986, 181-183). The Baroque perspective and picturesque scenery to accommodate a maximum of objects in space was introduced at the same time. With the application of the perspective method, expression in a capsule form revealed concavity in the search for artistic demands, in contrast to convexity in the exploitation for building sites: the former is related to emotionally artistic views in visual continuity, while the latter is rationally (Collins, 1986, 271) Through both balanced territories in urban space, a shape was embodied. The design methods were very useful in solving the serious problem of a compact square space with a cubic mass of four almost identical facades, equal in height. The square spaces which resulted from a gridiron system in modern cities could not feel an immediate total impression of the whole and could be only viewed not one after another in time but at once in a longish walk. The effective public squares then would be produced replacing dark and deserted interior courtyards.

In an advanced way, Sitte, by acknowledging the potentially vast ability of the city's physical setting to affect the human soul, empathetically added the urban tissues with a public authority which could regulate its citizenry, in addition to a functional means for ordering a city’s population (Collins, 1986, 265-6). This is comparable to Vitruvius's rule which decide the size of a forum in accordance with the number of inhabitants. The forums should not be too small a space to be useful, nor look like a desert waste for lack of population (Vitruvius, 1914, 132). This is both efforts to adjust human lives and resistance against modernity with its vastness of scale and its emphasis on speed as well. Sitte's design of plazas used the idea of theatrical perspective that came from Baroque townscape methods to enclose the squares like outdoor rooms. Through Sitte's physical settings, also, a sense of picturesque was appeared together in grotesque confusion between interior and exterior motifs. Sitte paid attention to a medium to cause at once one spot on the ground level and on an upper floor. Sitte, as the medium, pointed out staircases, galleries, and balconies as the middle one that is very significant in connecting the inside to the outside. (Collins, 1986, 246) The staircase was precisely the interior use of exterior architectural elements to interlock buildings, streets, and plazas. Finally, on the foundations of these explorations, he made the principle of civic design as practical plans and spatial arts. Sitte sought a special sort of continuity of effect in urban fabrics. The interlocked shapes of the fabrics were uncovered in the practical plans and spatial arts. The elements were interconnected with both dialectic criteria and balanced forms in picturesque ways, enclosed by urban tissues and even dwelling upon eclectic approaches of the Gothic (Medieval) and Baroque.

2.4 Sitte's Practices in Urban Design

The dialectic criteria and balanced forms in Sitte's picturesque ways were shown in the plan of the Votivkirche (the Votiv Church), the Ringstrasse in Vienna. With a series of proposals for re-organizing the western part of the Ringstrasse in Vienna, Sitte applied his historical analysis to the area surrounding the Votivkirche. The church is a work by Heinrich von Ferstel, his teacher, who won a competition for the church in 1855 and completed in 1879. The Votive church was constructed as a monument for patriotism and devotion of the people towards Emperor Franz Joseph (r. 1848-1916). In 1853, he had brush with death by a Hungarian nationalist who tried to assassinate him. He thus hoped to construct the church as a memorial symbol of the incident. Following an international competition, twenty five projects submitted to the completion were all Gothic styles. The
Neo Gothic was not the revolutionary style in Vienna at that time, but very eclectic and universal style. The stylish choice indicated a return to the roots of the empire to express the pan-German spirit. The church had varied sculptures, traceries, and stained glasses, and the plaza in front of the church was not separated from the streets. Prior to this competition, there was a precedent competition of Altlerchenfeld church in 1848, as a result of which the commission was transferred to Johann Georg Müller who taught at the Hochschule. However, because he died the next year, his successor Franz Sitte succeeded to him. Franz Sitte (1818-1879), father of Camillo Sitte. Franz Sitte met Müller in Munich and assisted him with the comprehensive plans, as well as the participation of the competition (Collins, 1986, 23, 336). He was in charge for more than twenty years (possibly 1845-1865) with the works of Müller's building plans and finishing its decoration. A notable thing is that the Altlerchenfeld Church rested on the fact that they did not only have established the principle of civic projects being open to public competition, but also its stylish changes to ecclesiastical form such as Rundbogenstil (so-called round-arch style with a mixture with Romanesque and Gothic shapes), not renaissance (Collins, 1986, 23). In this point, the competition of Altlerchenfeld church had its resonance in that of the Votive Church. The both projects had attempts to express the German spirit of the time in urban space and architecture through the medieval styles such as the Gothic and the Romanesque types albeit Franz just took part in the competition of the Votive Church. Likewise, they shared a common theme with Camillo Sitte's experiences. Sitte assisted his father between about 1860 and 1873 before Franz appeared to break with his son when, in 1875, Camillo abandoned a life of artist to accept a bureaucratic position in Salzburg. On the other hand, Sitte entered the atelier of the architect Heinrich von Ferstel at the Technische Hochschule, upon finishing the Piaristen Gymnasium in 1863, taking up residence in the Piaristen parish house which his father built (Collins, 1986, 23-24). At that time, as Heinrich von Ferstel was still making progress toward the completion of the Votive Church since 1855, so Sitte possibly participated in the project. Until 1875, as a result, he experienced design practices in the both ateliers of Franz Sitte and Heinrich von Ferstel respectively. Therein he understood the artistic tendency of the age to show the German emblems in urban spaces and architecture by combining the Gothic with Romanesque types. He also studied the physiology of vision and of space perception, which brought about his guidebooks of drawing and perspective at the Technische Hochschule.

Depending on the design practice and academic experiences, Sitte concluded that the Votive Church stood isolated on its own with an unsuccessful feature. (Fig. 3(R)) Sitte attempted to interconnect the isolated church equally with its neighbors, such as the university, the chemistry building, the Rathaus, and the Burg Theater. The partitioned territories, using a series of arcades and new constructions adjoining the church, were interlocked. The void spaces and streets along the arcades were represented with various sequences, stressing kinetic movement and visual direction. The urban landscape was intertwined up to the adjacent buildings along the streets and boulevards in the Ringstraße. Accordingly, the two plazas were newly created with enclosures and rich networks for pedestrians. The plazas were really enclosed with a square plaza whose sides were no longer than the width of the church façade, but not irregular. Also, at the entrance, (c), (d), and (e) higher on the street side were separated from uninterrupted arcaded gallery. Within the both long sides of monuments or frescoes, other decorations were considered as a beautiful means as well. Complexes (G and H) included a small guard room, accessible from the arcades, and the plaza (D) would be a remarkable accomplishment as regards public health as a main passage of winds. This inactive design corresponded to his words, borrowing Vitruvius's design, that the choice of street directions should be

Figure 3. Sitte's Re-arrangement of Rathaus (Left), Votive Church plaza (Right)

Figure 4. Sitte's suggestion for the western area of the Ringstraße
carefully considered in accordance with both the quarters of the heavens and the prevailing winds. (Collins, 1986, 268) The building (G) harmonized with the already existing structures and the same applies to the exterior of the apartment buildings on lot (H). As main points, a monumental archway at (e) was placed as an Italian High Renaissance style by his stress. The two taller façades at (f) and (g) at the both sides of the archway (e) deployed large fountains. Further, the buildings (G and H), naturally formed by the plaza (D) and lined with the streets, played significant roles in making plaza (E and F), desirable for a side view of the church and corresponding to an edifice (J) and constructing an archway (a) at the same time. Like this, Sitte's methods mediated the size and perspective effect of the plaza by applying dialectic criteria such as regular vs. irregular, symmetrical vs. asymmetrical shapes appropriately, but more balanced and well-planned over time. The dualistic spaces in the city with the opposite elements were then created stressing the existential value of space from the Baroque and Medieval tradition.

His historical and empathetic analysis was attempted in other projects such as the Rathaus (city hall) at the Vienna Ringstraße and the suggestion for the Ringstraße. (Fig. 3(L), 4) By the same token, the Rathaus of Vienna certainly included both an enclosed and a broad plaza of reduced dimensions and of stylistically harmonious design. (Fig. 3(L)) The vacant area was too large for a proper Rathaus square (G). By contrast, corresponding to the four small towers of the Rathaus façade, the towers were erected at the corners (e, d, e, and f). For this same reason, lots (E and F) actually composed of both parks were filled with the full height allowable for Viennese apartment buildings with one or two floors. The plaza wall at (a) and (b) were deployed along the triumphal arch monuments. The enclosure at the plaza (H) was considered to be interrupted by a street even from the building (A). The fountains at spots (g and h) were installed. The new structure (B) was planned, interlocking building (E) and building (F) with (c), (e), (d), (f), and even with (a) and (b). To connect between building (B) and theater (A), a colonnade from (l) to (m) was considered, making a plaza on the ground. Thereby, though theater (A) and building (B) were asymmetrically located, the overall lay-outs was shown as a symmetrical shape because the irregular points of the theater was removed naturally by accepting the symmetrical and perspective spatial structure of the Rathaus and because the fountains (g and h) were placed on right and left side with an outstanding balance.

2.5. Sitte's Urban Design Languages and their Characteristics

In this project, urban tissues and structure such as fountains, furniture, monuments, and streets were deployed according to Sitte's artistic rules. From his point of view, after the decision of the number, size, and approximate form which are demanded in public buildings, urban design begins with the most advantageous setting, grouping, and their necessary interrelationships which should be solved. Continuously, several points are more emphasized over the proper arrangement of the public buildings and parks, following dialectic criteria of openness vs. enclosure, symmetry vs. asymmetry, and regularity vs. irregularity. Also, some public gardens are placed at an equal distance between streets, as well as keeping a balanced distance between a building and a plaza. Most of gardens should not be left open to the street, but surrounded by buildings, approachable through two or more gateways. It then is possible to see an instantaneous total feeling of the full. Likewise, the size of the open plaza surrounded by buildings equals to a monumental building responding to the plaza, keeping a regular distance. It helps generously expose them to the eyes of all passersby.

Meanwhile, unlike the dispersal of gardens, buildings are united in an interlocked way along with streets and plazas, e.g. parish house, public school, and related buildings adjoining the church. The streets and adjacent buildings in the city are also connected to the plazas. Along with them, monuments, fountains, and public buildings should be integrated as far as possible, and then bring out plazas in more impressive effect, combining the plazas as a group instead of scattering several plazas. Through the size, shape, and character of plazas, perspective vistas are to be considered based on the manner of ancient atriums to the Baroque. Churches and monumental buildings should not be isolated, but rather constructed along the plaza walls (buildings), creating suitable spots for the future placement of fountains and monuments around the edge of the plaza with irregular compositions. The spots and monuments then offer an easy sense of orientation within the maze of streets. (Collins, 1986, 266-7)

Sitte found the positive precedents in Italian cities because they reflected antique urban settings better than northern European cities. In the southern Europe, especially, ancient cities in Italy partially preserved their original layouts. The civic customs were long maintained unchanged. The public squares of cities truly matched the type of the old form up to the modern time. For Sitte, the Baroque was not only a mediating historical moment between the past and the present, but the Baroque planning also adapted to the contemporary planning. To put it differently, in the Baroque plans, everything was well thought out and judged as to its eventual appearance. The calculation of perspective effects in plaza design was really the strongest points of this style, accomplishing a unique high point in the art of town planning (Collins, 1986, 219). Sitte accepted his positive points through the previous thought rather than the traditional origin because he had a sense of critical sights about the contemporary situation. The negative views of Baroque/Gothic revivals were complemented to his new concepts through the scrupulous analysis of all plazas. As a result, his primary inspiration included lasting adjustments to the counter-requirements of inside and outside and their inflection with all the business of everyday life.

3. THE INFLUENCE OF SITTE’S URBAN DESIGN LANGUAGE UPON ADOLF LOOS’S RAUMPLAN

3.1 Loos's Interpretative Approaches in Villa Strasser

There were very interesting parallels between Sitte and Adolf Loos. Loos advocated a return to the ancients, and to basic building traditions free of the ornaments of styles. Loos’s Raumplan also had a certain affinity with Sitte’s Raumkunst and analysis of the continuum and complexity of the plazas and streets in ancient towns (Collins 1986, 14-15). They emphasized the vernacular design methods passed down from traditional crafts, and they suggested that the vernacular ways should be the important means to solve urban conflicts. Sitte is known for space-plan while Loos is for space-art. Loos’s interior organization, like a townscape that Sitte argued, was unexceptional and empathetic settings for human
activities, feeling a freedom towards individual egos. The images of the plazas surrounded by colonnades, buildings, and monuments were depicted in the interior organization by Adolf Loos. In case of the Raum of Villa Strasser (1918/19), first, the rooms were in the simple application of the typical principles of the Raumplan, and were divided into two parts by inserting a marble column within. The entrance hall prompted a clean stop prior to entering the purified environments. Villa Strasser's residents or visitors passed through a cloakroom and a lobby at the ground floor. The both rooms combined a sitting room with a dining room at the first floor by means of a flight of stairs. The staircase played a significant role in combining the partitioned rooms. At the first floor, the sitting room, music room, and dining room were individually partitioned off with their own part of the interior of the house. The house's interior was interlocked with spatial volumes, separated or connected to one another by means of levels. The central void of the stairwell acted as the core of the spatial units, shown to a three-dimensional connection. In particular, the music podium for a concert had a raised platform, and the opening in the wall was replaced by a marble column for the load-bearing inside wall. It was separated by the both rooms in the spot that the level between the music room with a grand piano and the sitting room changed.

Loos likewise created a typical ambiance of dining rooms under the influence of American interiors and English atmosphere. Loos's dining rooms had a big table at the center to promote social intercourse and formed a family bond, whereas extra chairs, cabinets, shelves, fireplace, mirrors against inner walls were attached. The trials were more characterized by the following considerations. In other words, window's irregularity in size and arrangement from the outer walls, level changes of each room, furniture disposition, asymmetrical façade, and the irregular and visual inflow of exterior light, sustaining its dialectic soul. To my mind, they were strategic inventions to accommodate inhabitants' demand and experience, and a practice of architectural metonymy. They then are analogous to the expression of "monuments" proposed by Sitte's ideas. His ideas are obviously coined from Vitruvius's principles for constructing a forum from lessons learned by a case study of the Forum at Pompeii (Fig. 8, 9) (Vitruvius, 1914: 131-2, Introduction, Book IV; Collins 1986: 144).

Vitruvius writes "The Greeks layout their forums in the form of a square surrounded by very spacious double colonnades, adorn them with columns set rather closely together, and with entablatures of stone or marble, and construct walks above in the upper story. But in the cities of Italy the same method cannot be followed, for the reason that it is a custom handed down from our ancestors that gladiatorial shows should be given in the forum. Therefore let the intercolumniations round the show place be pretty wide; put the bankers' offices in the colonnade; and have balconies on the upper floor properly arranged so as to be convenient; and to bring in some public revenue."

The ancient plazas, particularly the Greek agora and Roman forum, had their monuments and statues around the plaza and corridors. The plan of the Forum at Pompeii shows that it was lined with public buildings on all four sides. At the short northern end
only, there rose an isolated building, the Temple of Jupiter: around the rest of the forum runs a screening two-storied colonnade. The central place of the Forum was absolutely void, a great quantity of large and small monuments being placed around its edges along the colonnades. A feeling like a large concert hall with a gallery showed a strong influence on the enclosed space, the void space at the center, and the limitation of opening streets, which were proposed by Sitte. (Fig. 6, 7)

As a design method similar to that, Adolf Loos regarded a city as a Raum, and performed furniture disposition, like a monument and statues of the ancient plazas, against the inner walls of the Raum. Sitte pointed out that the center of plazas, flanked by buildings, should be ‘empty’ or ‘void’ for a communal living place, while Loos pushed all furniture and equipments against the wall, and only a table was placed at the center of the room. (Fig. 3, 6, 8) The table, as aforementioned, was for promoting social intercourse and forming a family bond. Thus, Loos’s attempt was identical because Sitte also mentioned “it may be surprising to say that one of children’s favorite location. As a matter of fact, the snowmen with which they amuse themselves… are located. Snowmen are built between the paths. It is at such points, similarly dispersed from traffic, that the ancient communities set up their fountains and monuments (Sitte, 1945: 14).”

Sitte recognized that all places for the communities were positioned between streets and in plazas. The places shared people’s playing behavior for communities including children, and were near the flow of pedestrians, as most of statues and monuments were placed on the edge of the ancient forums and agoras because people passed through them along the colonnades. On the contrary, Loos tried to separate ideas for an architect from an artist as a stonemason, and emphasized community spaces like a living room and a dining room as a pivotal place, fusing with everyday life, in his houses while he was passive in using aesthetic codes and patterns in his buildings. Unlike Loos, however, Sitte obviously highlighted artistic principles to unravel conflicts between town and buildings, and psychological mind to satisfy universal needs of communal living built upon his experiences from daily uses.

3.2 Interpretative Approaches in Villa Moller and Villa Müller

As shown by Sitte, Loos’s houses show dialectic criteria due to the alteration of different atmospheres and the contrast between light vs. dark, high vs. low, small vs. large, intimate vs. formal. They contain geometrically harmonic proportion with a regular distance, axial symmetry, and the simplicity of form, which must be Sitte’s influence. They might follow the popular use of regulating lines, common practice for architecture students. Their exact division in half in the facades obviously resembles Sitte’s trial which divides a block in half with regular distance, and keeps the one for private buildings and the other for public plazas. Their attempts obviously show the persistent uses of the classical language in the era that the avant-garde championed asymmetry, and at the same time partially tried the avant-garde’s deformations and asymmetries in their designs. Sitte uses the design methods for the open spaces at the both sides of the Burgtheater. (Fig. 3)
the interior is a little dark. The house thus embodies the double standard such as private vs. public, object vs. subject, symmetrical vs. asymmetrical, and balanced vs. non-balanced. Such actions by Loos might blindly follow Sitte’s dialectic criteria of openness vs. enclosure, and regularity vs. irregularity. Although the house’s facade is manipulated with the balanced division of solids, the interior space is considered as two separated parts with the combination of a dinning room with a music room and that of ladies’ lounge with a hall. In contrast, the exterior facade maintains a balanced proportion through a composition between windows and balconies although the site slopes down gradually from the road towards the south. (Fig. 10) Also, the hall as a living room integrates the circulation area like an open space attempted by Sitte. It is centered on each room with different functions and levels. The rooms are grouped pivoting on the central hall. One of them, the ladies’ lounge situated in a bay window by a closed parapet and above the front door is abutted higher than the level of the hall (Fig. 12), while the music room is situated at the same level on the rear facade, and the dining room also is abutted on the rear facade. The music room is larger than the dining room. Both the music room and dining room are connected on their common axis by a square opening with sliding doors. The dining room floor is roughly two steps higher than that of the music room. (Fig. 13, 14) The staircases through Loos’ design are used as a medium like what Sitte did. The medium leads to the integration on the ground level and on the upper floor simultaneously. Thus, Loos, like Sitte, might consider the staircases as the middle one because they played a trigger role in joining each room. He also sought for a special continuity by borrowing the elements of urban fabrics through Sitte’s language.

Outside the rear facade there is located a garden. From the raised sitting of the ladies’ lounge a gaze flows towards the back garden via the hall and the music room, and simultaneously the eyes turn towards the exterior view from the bay window. (Fig. 11, 12, 13) The ladies’ lounge controls a pivotal view like a theater. A sofa therein reminds us of a theater seat. Residents in static positions oversee the hall and the piano from the sofa of the music room, while they, like spectators watch a play, see the hall from the sofa of the ladies’ lounge with a raised sitting area. As Beatriz Colomina says, residents in the central hall and the adjacent rooms can be actors or spectators in a play. (Beatriz, 1992, 120-121) Loos’ theatrical notion like acts on stage in a performance is the same as Sitte’s idea of theatrical perspective based on eclectic approaches of the Gothic (Medieval) and the Baroque landscape. They both are asymmetrically organized with picturesque ways. Likewise, the central hall encircled by various activity areas such as bay window, library, music room, dining room, and kitchen can be seen as a living level. The continuum of the living areas takes place in the central hall at the same time. Such method is the same as Sitte pointed out arrangement continuously linked between plazas and streets forming densely interlocked networks and systems within cities. Meanwhile, the central hall acts as a consolidated space for everyday life as the plazas do it. As urban plazas are surrounded by the closest possible buildings, the central hall as well as the abutted rooms such as ladies’ lounge, music room, and dining room enclosed by furniture. The furniture such as sofas, selves, mirrors, and bookstands is placed at the foot of a window to position the occupants looking over the rooms. Sometimes the room can be occupied or void. Such case appears in the dining room. It can be stocked with a dining table with chairs or empty. As the urban plazas are void or for people and monuments, the rooms are filled or circled by furniture. (Fig. 14, 15)
Furthermore, a flight of stairs merges each interior space. Inhabitants have to turn around climbing a flight of six steps to the cloakroom right after going through the entrance. (Fig. 16) The once again a flight of stairs comes up, and then the final destination appears in the core hall of the house. The central hall guides the visitors to each room with open access. The flight of steps are both separated and connected to one another by means of levels. The central void of the stairwell works as the heart of the spatial units and allows for a three-dimensional connection. (Fig. 17) Likewise, this penchant appears in Loos's other housing plans, especially Villa Müller which is situated on a hill with gentle topography overlooking Prague. However, the method that uses a flight of stairs is completely different from Villa Moller.

Villa Müller uses a flight of stairs for an escalating sense of privacy from the drawing room to the dining room, and then the library and the lady's room (Zimmer der Dame) with the raised sitting area on the threshold of the private, which sets apart form the household traffic, while Villa Moller uses them for an increasing public sense going through a house with a gaze from the raised sitting of the lady's lounge to the back garden via a balcony. (Fig. 12, 18) Their conspicuous characteristics might be consistent to what Loos said, “Window is there only to let the light in, not to let the gaze pass through” (Le Corbusier, 1925, 174) The both Villas share a common employment of furniture that there is a sofa placed at the foot of a window so as to position the occupants with their back in it, facing the room. The windows in the sitting area in the lady's lounge of the both villas look into interior spaces. The sitting area is like a stage for a dynamic performance.

Villa Müller also has three territories with about the same size, which have dialectic characters with different functions dwelling on the public vs. the private. The public functions are separated into utilities such as kitchen, dining room, living room, and library while the private is divided into two folds as places for man vs. woman. (Fig. 18)

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methods inside the house and in the town create meandering movement. Sitte talks about staircases established in an exterior area on a few town halls of Brussels, of Hague, etc. But, he mentions that it is not good to use these staircases in the exterior area because they cause the snowdrift and slippery ice in the winter although they provide romantic illusion, and thus they gradually become interior architectural elements such as staircases and galleries, dependent on the essential ingredient in the charm of ancient and medieval designs. In such point, Sitte said “for us modern stay-at-home stairs are exclusively an interior motif.” (Collins, 1986, 246) In modern time, Loos might recognize this transformation of wooden staircase through Sitte’s thought. Each of Loos’s interior spatial units is comparable to Sitte’s composition of exterior elements. The interior meandering reflects the variety and wealth of the neighboring geography. It is tantamount to that Sitte found the meandering movements in the town because Sitte said “it was necessary to adapt the layout of the street to its terrain.” (Collins, 1986, 199)

4. CONCLUSION: RAUKUNST VS. RAUMPLAN

Loos’s attempt in urban perspective on inner rooms inside houses is analogous to Sitte’s exterior works on urban spaces. His villas then result from the internalization of the landscape through screen walls and partitions. Loos uses two instruments to unite each room in these houses viewed as representative of the modern way of living. The first is a flight of stairs and open stairwells with large landings in the interplays with differentiated levels and heights of each room, and the second is a central hall in the interaction with marble columns, open circulation spaces, fireplaces and bay windows in living spaces, open galleries in halls, terraces, and rooms within the whole ensemble fitted together. These two devices are tantamount to those employed by Sitte’s urban design. For Sitte, by contrast, along streets and plazas, buildings are united with an interwoven manner, for instance, parish house, public school, and a series of related buildings adjoining the church. The streets and adjacent buildings in the city are also connected to the plazas. Along with them, monuments, fountains, and public buildings should be integrated as far as possible, bringing out plazas in more impressive effect, combining the plazas as a group instead of scattering several plazas. Raumplan then can be regarded as a gathering of interior spatial volume while Raumkunst is an assemblage of exterior spatial volume. If the Raumplan is regarded as a gathering of interior spatial volume while Raumkunst is an assemblage of exterior spatial volume. If the Raumplan is dependent upon the interpenetration and flow of space from room to room, for the Raumkunst urban space flows from street to street, plaza to plaza, blindly following good precedents in the early antique and medieval cities. Commonly the unity of urban space or house is produced through the interconnection and sequence of enclosed spaces, proportionally well-divided, revealing traditional rules of spatial thinking. The spatial configuration for Sitte and Loos is a psychological-perceptual work of gathering rather than a work of separation, addition, and extension.

While the gaze that goes through each room in Loos’s Villas unites the private and the public for everyday life, the visual line which connects streets with plazas in Sitte's urban design combines communal living with everyday life. They then employ the Baroque straight perspective and the picturesque irregular basis to accommodate a maximum of objects like events on stage in a dynamic performance. Their designs also come from dialectic criteria such as private vs. public, object vs. subject, symmetrical vs. asymmetrical, and balanced vs. non-balanced as for Loos, in contrast with openness vs. enclosure, symmetry vs. asymmetry, and regularity vs. irregularity as for Sitte. They provide a guideline for a return to the old and balanced scale between residential interior and urban exterior compositions each. Sitte and Loos interpret spaces as a defined entity, which is a kind of society, whether small or big, and which represents the presence of the individual or the community, interconnecting each space around them. Their difference is discerned from senses of space such as the exterior vs. the interior. But, they have common in space as enclosure, space as sequence, and space as expansion of empathetic body. They then amalgamate spatial constructs into a consistent shape, representing traditional urbanism and dwelling.

Sitte likewise take notice of densely-interlocked networks and picturesque movements through plazas and streets with the exterior urban furniture such as galleries, fountains, and statues. Loos respond in like manner. He unifies each interior room with meandering movements through the subdivision and the differentiation of settings according to room levels and ceiling height, open stairwells, marble columns, and central halls, as seen in Villa Strasser, Villa Moller, and Villa Müller. By contrast, Sitte and Loos’s design sometimes show the preference of the Baroque perspective with straight lines.

In conclusion, Sitte’s influence on Loos is that Sitte and Loos share with each other the functional changes from the exterior furniture to the interior, and the idealistic picturesque composition through the apparent mixture of the interior with the exterior. Although Sitte and Loos did not have any personal contact between them, it is obvious that Loos followed Sitte’s typology from the combination between the exterior Raumkunst and the interior Raumplan. Hence, they are obviously represented through the articulated square of Raumkunst vs. a distinctive room of Raumplan, which have formed the basis for urban designers and architects until now.

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ENDNOTES

1 George Collins and David Leatherbarrow talked about a notable relationship between Sitte’s Raumkunst and Adolf Loos’s Raumplan resting on the picturesque tradition. Thus, this study, as well as the new findings of the picturesque tradition between their concepts, adds new interpretations about the understandings between Sitte’s urban languages and Loos’s architectural languages.

2 Sitte conceded that “a straight street is extremely boring to walkthrough,” when automobiles arrived at the height of Sitte’s influence on street design. But, he clearly wasn’t interested in the pedestrian perspective for streets were for driving. (Macarthur, 2007, 161-67)

3 Sitte’s last essay ‘Enteignungsgesetz und Lageplan (Land Expropriation Act and Layout)” was published in the newly issued monthly magazine on city planning Der Städtebau in 1904 after his death. In this essay, Sitte tried to overcome the Land Expropriation Act (Enteignungsgesetz) by planning the streets which maintained the existing borders of lands.

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