



Source: Le Corbusier. Global Architecture 30: Le Corbusier - Chandigarh. Yoshizaka, Takamasa., Futagawa, Yukio., ed. GA A.D.A. Edita Tokyo, 1974



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Chandigarh Capitol Complex + City Plan

Lauren Hackney

FIGURE : GROUND

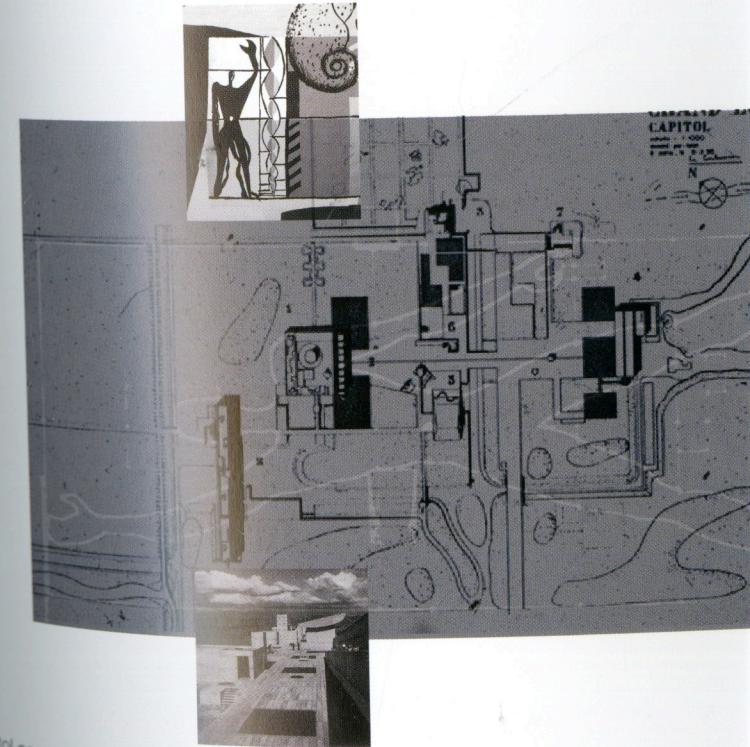
figure | percept, maneuver, play, perception, perceptual experience, design, pattern, flesh, frame, human body, soma [Hindu deity], physical body, te, fluxus.

ground | antonym of figure | terra firma, establish, anchor, found, land, earth, solid ground, perceptual experience, perception, percept, surface, soil, coat, place, position, background, connect, instruct, set, footing, basis.

figured ground | dynamic inhabitation of layered physical, political, cultural, and spiritual ground.

Chandigarh manifests an idea of figured : ground as the structuring theme of the earth and sky. By interweaving temporal and enduring elements of human, civic, monumental, and site operations, Le Corbusier establishes a complex relationship between the individual and the collective through a proportional ordering system based on human proportions.

Four interrelated themes illustrate this relationship of individual to collective. The first theme is the relationship of figure to ground: where humans structure the earth and sky. This permits the strata of constructed space to be ordered by articulated layered foundations some call basements or grottoes. Upon these foundations the figures of iconography and identity provide relationships to cultural and collective memory. This crucial connection of semantic content connects the modern to enduring cultural traditions. Precedent is the spatial manifestation of these connections through Le Corbusier's synthesis of intrinsic and extrinsic modern, ancient, classical, and vernacular influences.



capitol complex + city plan
chandigarh, india | le corbusier
city plan, 1950-57; capitol complex 1950-1965

Chandigarh Capitol Complex + City Plan

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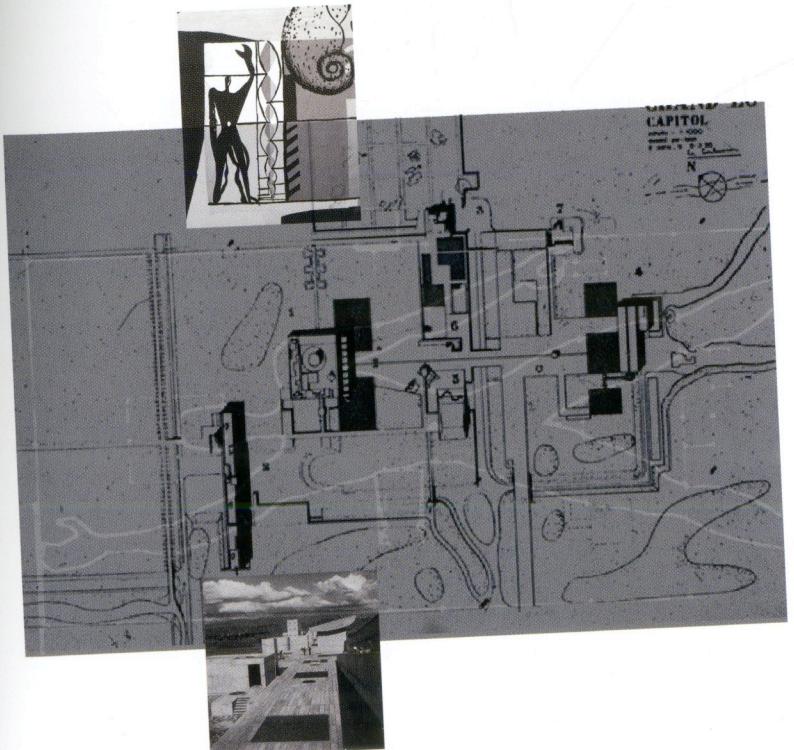
figure | percept, maneuver, play, perception, perceptual experience, design, pattern, flesh, frame, human body, soma [Hindu deity], physical body, terra fluxus.

ground | antonym of figure | terra firma, establish, anchor, found, land, earth, solid ground, perceptual experience, perception, percept, surface, soil, primer coat, place, position, background, connect, instruct, set, footing, basis.

figured ground | dynamic inhabitation of layered physical, political, cultural ground.

Chandigarh manifests an idea of figured : ground as the structuring theme for inhabitation of the earth and sky. By interweaving temporal and enduring cycles of human, civic, monumental, and site operations, Le Corbusier establishes a complex relationship between the individual and the collective through Modulor, a proportional ordering system based on human proportions.

Four interrelated themes illustrate this relationship of individual to collective. The first theme is the relationship of figure to ground: where humans structure an ordering system of center and edge. This permits the strata of constructed ground by articulated layered foundations some call basements or grottoes. Upon this constructed field the figures of iconography and identity provide relationships to cultural and collective memory. This crucial connection of semantic content connects the modern to enduring cultural traditions. Precedent is the spatial manifestation of these connections through Le Corbusier's synthesis of intrinsic and extrinsic modern, ancient, classical, and vernacular influences.



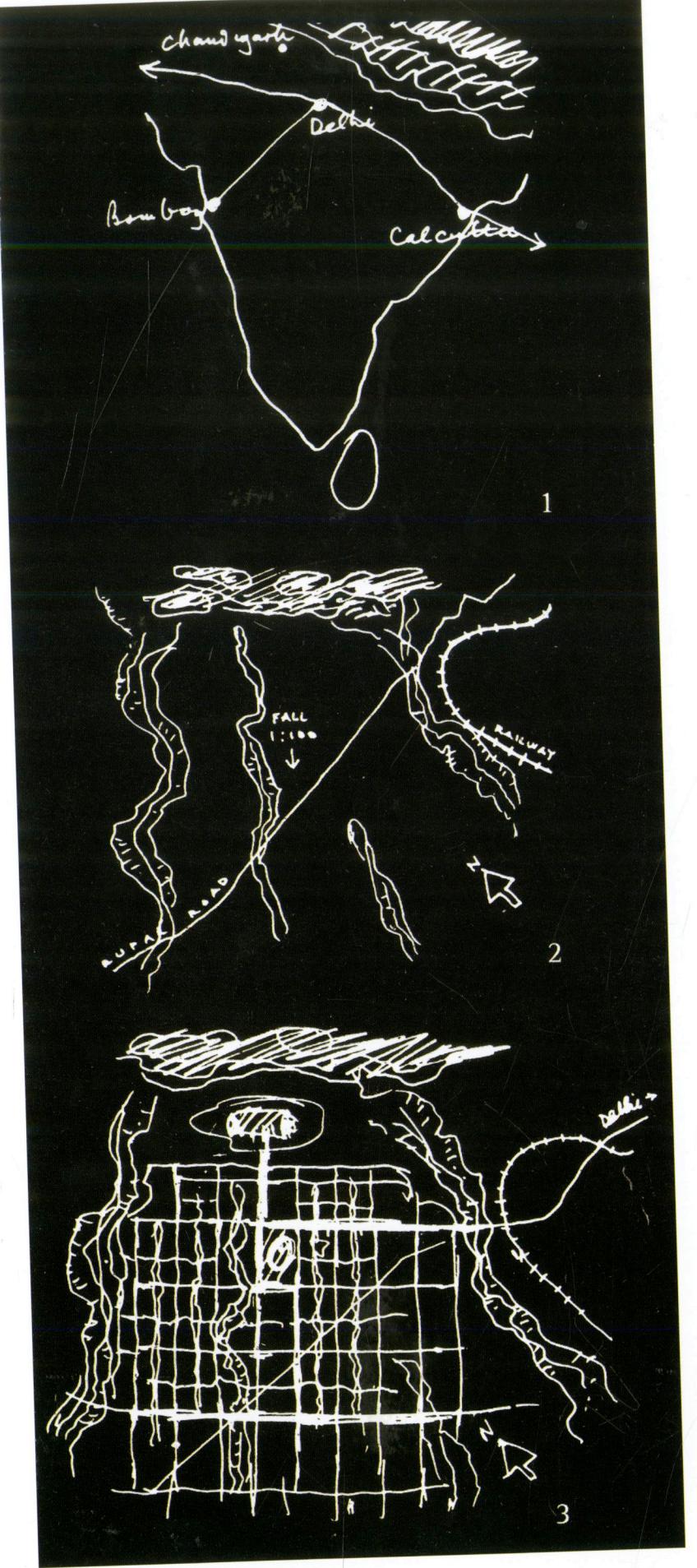
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CONTEXT

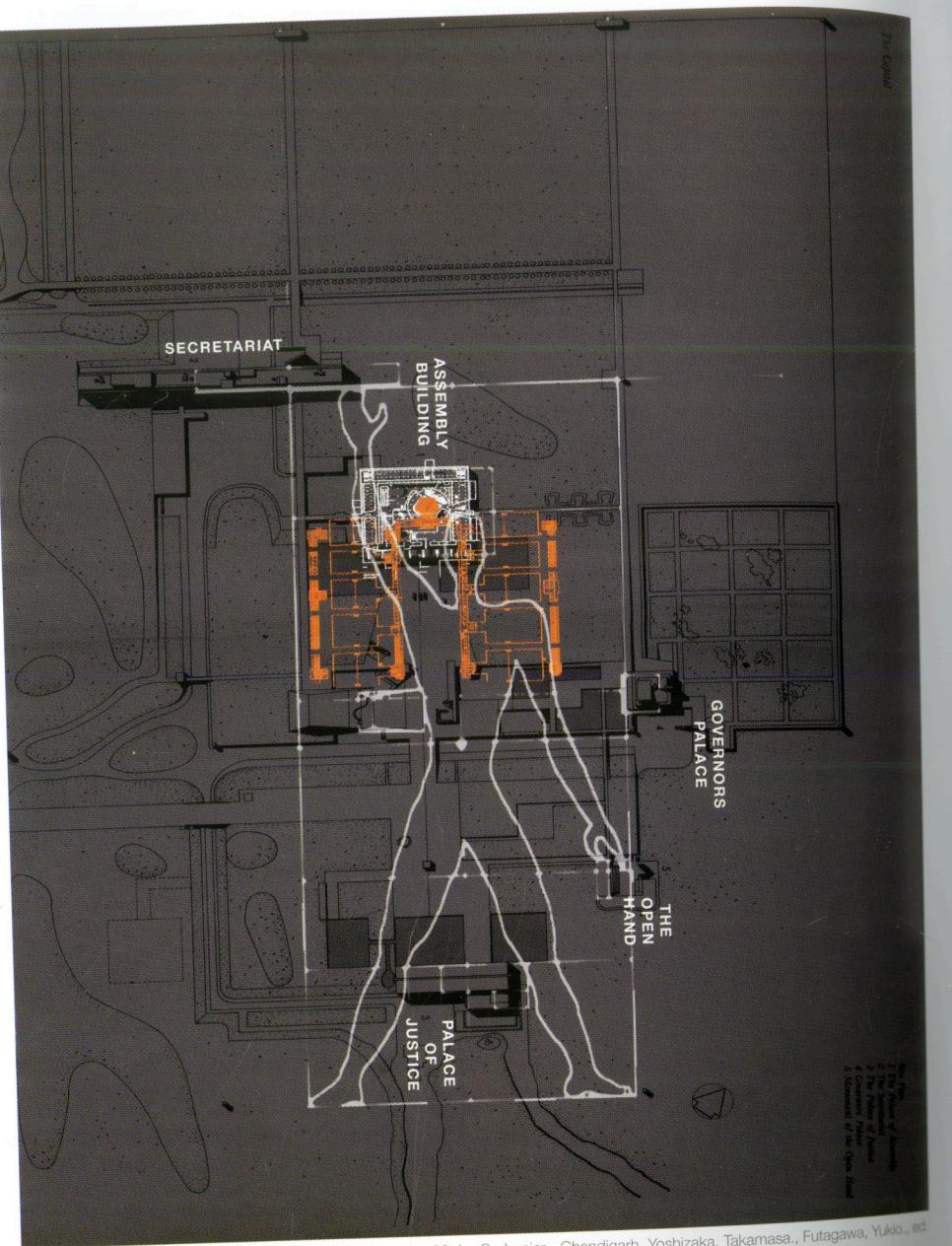
Chandigarh responds to political and cultural turmoil of Indian independence and, more broadly, to the post-war condition of the world through its reaction to modernity. Drawing of boundaries between Pakistan and India generated an extremely volatile political situation in the region, with the worst violence in Bengal (where Ghandi staged his protest fast) and in Punjab, where there were millions of refugees. Lahore, the ancient capital of Punjab, was annexed to Pakistan, leaving the region of Punjab without a capital and administrative center. In 1948, the government decided to build a new capital city that P.L. Verma, the chief engineer of Punjab, described as "possessing sufficient magnificence and glamour to make up for the psychological loss of Lahore."¹ Chandigarh, named for the ancient temple *Chandi Mandir* in the territory's vicinity, was to have an important and far-reaching symbolic purpose in building national identity. Nehru, the first prime minister of independent India, issued a "call to modernization" and what he termed an "aggressive effort to catch up with the west" – and, specifically regarding Chandigarh, he called for a "new city, unfettered by the traditions of the past, a symbol of the nation's faith in the future."²

Le Corbusier was commissioned in 1950 for the city Master Plan and Capitol Complex, and he worked on the project until his death in 1965. Chandigarh represents many recurrent themes in his later work, especially his disenchantment with modernism's detachment from social, human agency.³ Le Corbusier's post-war work draws from vernacular, cosmological influences and traditions, an interest in the connection between Man and Nature, and an interest in the mathematical abstraction and regularity of organic forms and enigmatic figures, particularly that of the human figure. Spatially, the recurrent theme of these figures registered against precise geometries, meters, and datums, particularly the horizon, characterizes his later work: the subversive new landscape in the sky at the Unite d'Habitation – the mythical and spiritual geometries and forms of the chapel at Ronchamp – and the enigmatic figures in the courtyard that register against the building and the sky at La Tourette.⁴

The political condition of Punjab profoundly shaped Le Corbusier's vision for Chandigarh as the dialectic of meter (the push toward Modern) and figure (ancient cultural traditions caught by this effort). Noted architectural historian + theorist Kenneth Frampton described Le Corbusier's reaction to the place and of the people as a "synthesis of modern technology with a timeless ... culture, the insertion of the one with the maintenance of the other, to the benefit of both."⁵ The Capitol Complex addresses this duality between the transitory state of India, exemplified by Nehru's catalytic ideas about a "transformative modernism to counter stasis" through progress, and what Frampton terms an "antique civilization with its rhythmic, cyclical notion of time and place."⁶ This cultural and political duality weaves through the project's conception and making.



Source: Preconditions. Yvi Ng



Source: Original site plan: Le Corbusier. Global Architecture 30: Le Corbusier - Chandigarh. Yoshizaka, Takamasa., Futagawa, Yukio., ed. GA A.D.A. Edita Tokyo, 1974.
Modulor overlay adapted from Gast, Klaus-Peter. "Chandigarh General Plan," in Le Corbusier, Paris—Chandigarh. Gast, Klaus-Peter. "Chandigarh General Plan," in Le Corbusier, Paris—Chandigarh, 98-113.

Ordering of the Capitol Complex: The overlay of the Modulor Man on the site plan registers the proportional system of the composition and also the relationship of pieces to parts of the body – the Assembly Building, where Parliament meets, is at the head. An overlay of the Academical Village illustrates the monumental scale of the Complex's buildings and public spaces.

Structure of the City: The grid juxtaposed with the alluvial landscape registers the sinuous form of existing streams, and recalls the agricultural precondition of the site. Layered systems of circulation connect the infill of independent urban sectors.

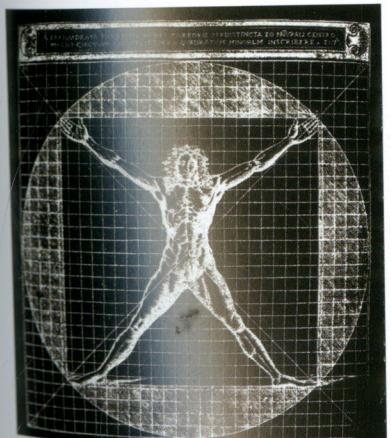
Modulor proportions (right) show the figure in an architectural space, metered with a dynamic/fluid condition. Humanscapes provide the frictional dynamics framed by static public institutions.

MODULOR: PROPORTIONAL SYSTEMS OF ORDERING

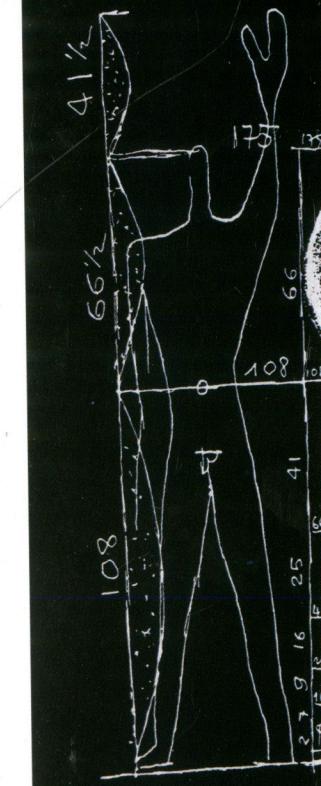
Modulor was a proportional system devised by Le Corbusier that is based on the module of a 6' man, as well as the principles of Golden Section and the Fibonacci series. Modulor references two historical proportional representations of the human figure as a system for ordering: the Vitruvian man and the Renaissance re-drawing of the Vitruvian Man by daVinci. The human figure is first inscribed in a square + circle as a demonstration of ideal geometries; the daVinci figure becomes more dynamic, the grounding square breaking the circle and the arms and legs of the man in motion.

The Modulor Man is drawn relative to a double square and a double circle derived from Golden Section. The figure is dynamic and asymmetric, demonstrating ideal geometries, engaging its context and reaching.⁷ The explicit relation between this representation of Man and Vitruvius's drawing is manifest in the figure's center of gravity vs. double square relationship, in the diagonals that frame rather than limit the figure's center of gravity. Here and at Chandigarh, Le Corbusier re-enacts the ideas of proportion and of the figure in space: the city plan juxtaposes organic and geometric systems, such as the overlay of the grid of transportation corridors.

Le Corbusier's deployment of Modulor as a structuring, ordering system for Chandigarh reflects his concern for what he calls "the fundamental unity of man with the cosmos."⁸



15 The Modulor



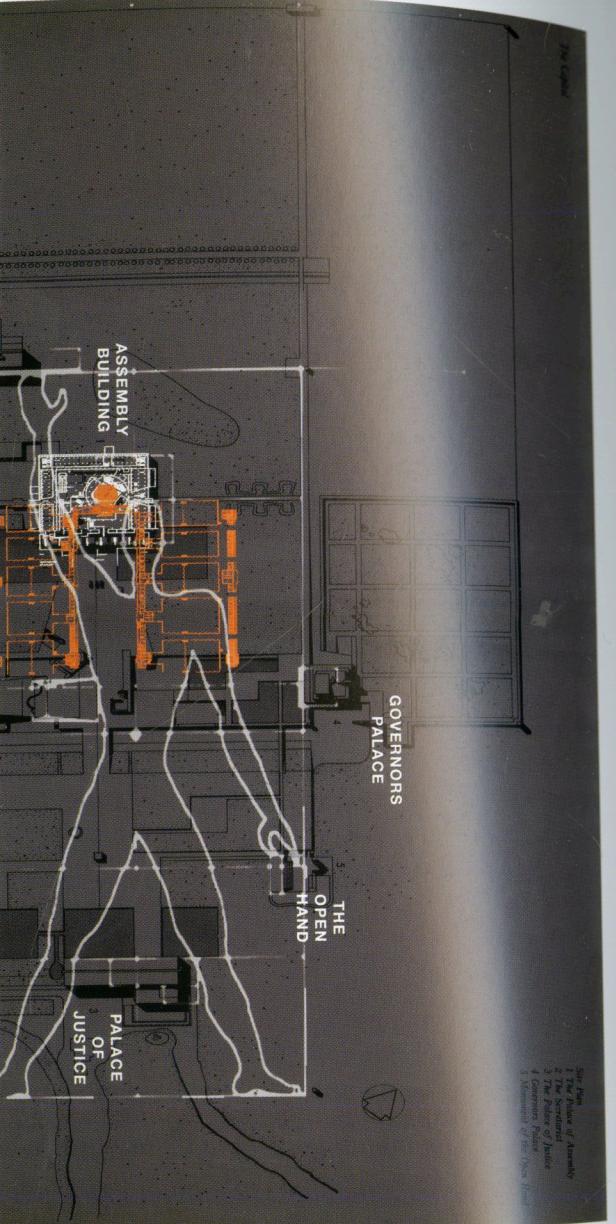
Source: Le Corbusier. The Modulor. Three Human Establishments. See Endnotes.

MODULOR: PROPORTIONAL SYSTEMS OF ORDERING

Modulor was a proportional system devised by Le Corbusier that is based on the module of a 6' man, as well as the principles of Golden Section/Spiral and the Fibonacci series. Modulor references two historical proportional/geometrical representations of the human figure as a system for ordering: the classical Vitruvian man and the Renaissance re-drawing of the Vitruvian Man by Leonardo daVinci. The human figure is first inscribed in a square + circle as a static object demonstrating ideal geometries; the daVinci figure becomes more dynamic with the grounding square breaking the circle and the arms and legs of the Vitruvian man in motion.

The Modulor Man is drawn relative to a double square and a double rectangle derived from Golden Section. The figure is dynamic and asymmetrical in its geometries, engaging its context and reaching.⁷ The explicit relationship between this representation of Man and Vitruvius's drawing is manifest in the single square vs. double square relationship, in the diagonals that frame rather than cross the figure's center of gravity. Here and at Chandigarh, Le Corbusier reframes classical ideas of proportion and of the figure in space: the city plan juxtaposes figural and geometric systems, such as the overlay of the grid of transport over stream corridors.

Le Corbusier's deployment of Modulor as a structuring, ordering system at Chandigarh reflects his concern for what he calls "the fundamental base which unites man with the cosmos."⁸

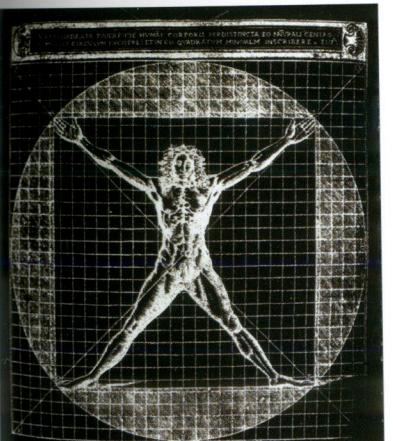


Architecture 30: Le Corbusier - Chandigarh. Yoshizaka, Takamasa., Futagawa, Yukio., ed. er, "Chandigarh General Plan," in Le Corbusier. Paris—Chandigarh Gast, Klaus-Peter, Paris—Chandigarh, 98-113.

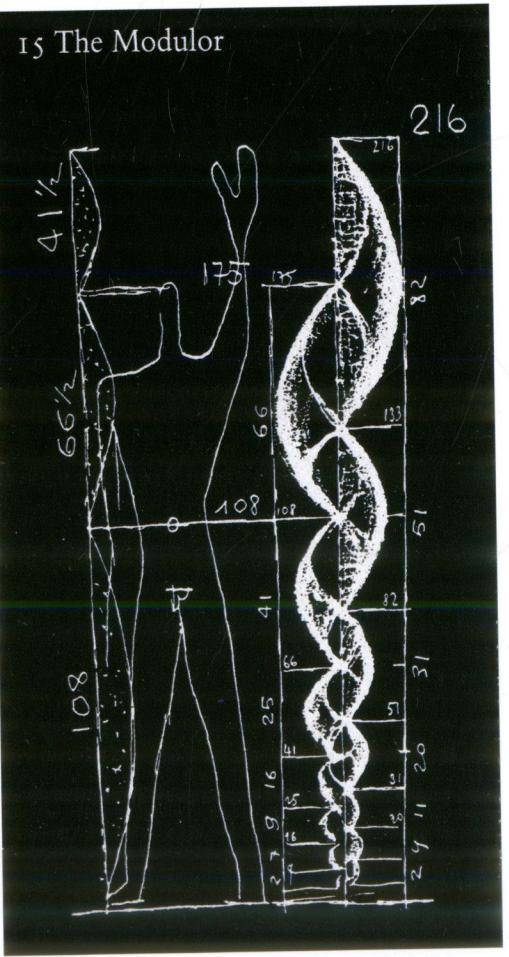
The overlay of the Modulor Man on the site plan registers the position and also the relationship of pieces to parts of the body – the head meets, is at the head. An overlay of the Academical Village Complex's buildings and public spaces.

posed with the alluvial landscape registers the sinuous form of agricultural precondition of the site. Layered systems of circulation within urban sectors.

The figure in an architectural space, metered with a dynamic/fluid frictional dynamics framed by static public institutions.



Source: Le Corbusier. The Modulor. *Three Human Establishments*. See Endnotes.



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SITE AND CITY / HUMAN ESTABLISHMENTS

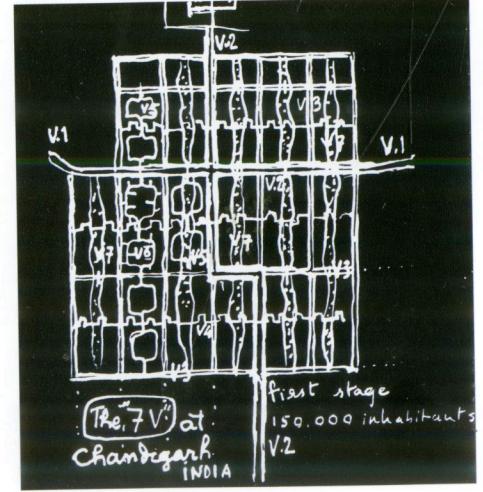
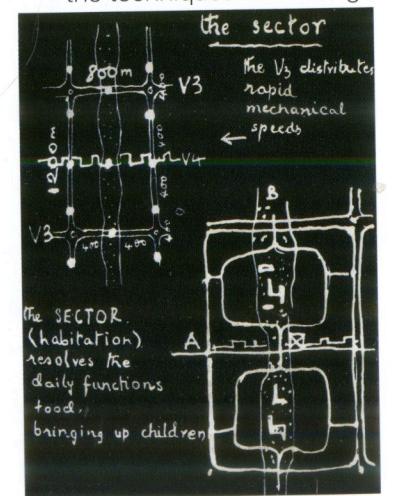
Sited in an alluvial floodplain at the foothills of the Himalayas, streams etch Chandigarh's territory, making legible the relationship between source (the Himalayas) and resource (the streams that feed this agricultural plain). The Capitol Complex is sited at the city's northernmost point and the land slopes away from the complex to the southwest. The Chandigarh city plan is a grid of 400x800m sectors of varying densities, bounded by two rivers to the East and West and the Capitol Complex to the North. Farmland and smaller villages surround the city.

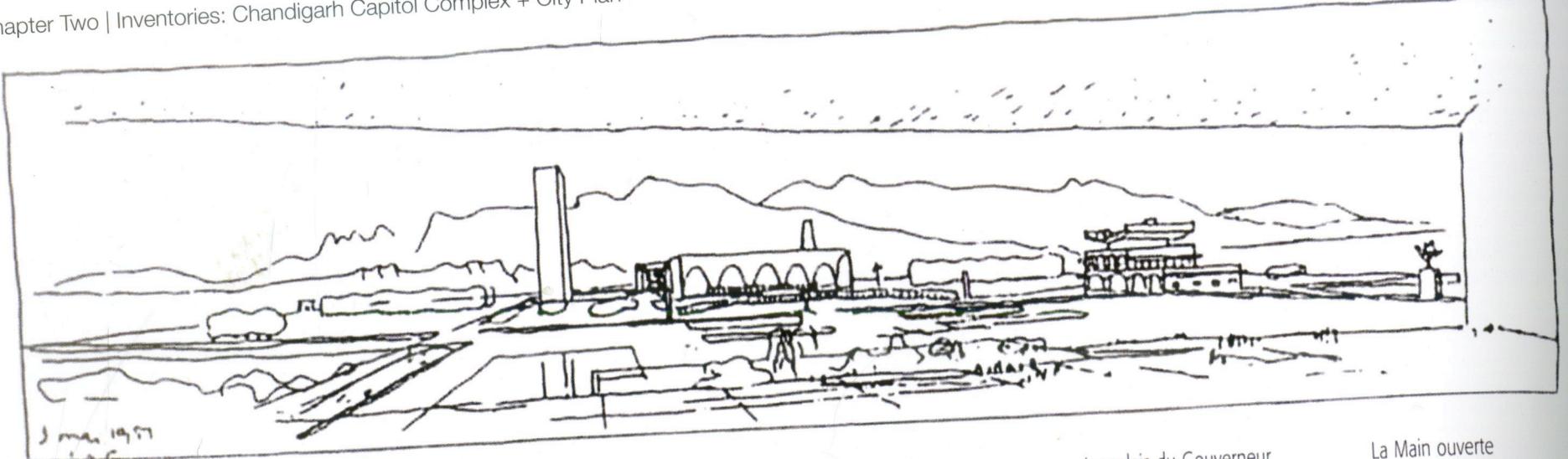
In *Three Human Establishments*, written in 1942 and applied at Chandigarh, Le Corbusier identified the radiant village, or the unit of agricultural production as the first human establishment, in service of the peasant and the cooperative; the linear industrial city, or the place where habitation, work, and self-cultivation occurs as the second; and the radio-concentric city of exchange, the most urban unit, founded upon what Le Corbusier terms man's relationship to nature.⁹ One might think of the three human establishments as the utopian urban manifestation of First, Second, and Third Nature in landscape, the gradation from wild to civilized landscape.¹⁰

The plan of Chandigarh was an opportunity for Le Corbusier to test principles of modern urban design, codified in his writings in *Three Human Establishments*. Each 400x800m sector -- a double square -- was designed as an autonomous community within the city, with its own economic, dwelling, and recreation zones, described anthropomorphically as "organs and functions" in a new "biology of building", connected by layers of vehicular and pedestrian circulation that Le Corbusier described as "irrigation of territory by transport."¹¹ This references the precondition of the site: the network of etched streams irrigates as an agricultural resource; the overlay of systems of movement irrigates the city. The urban form is a network of autonomous sectors, interwoven by strata of transit/transport connections.

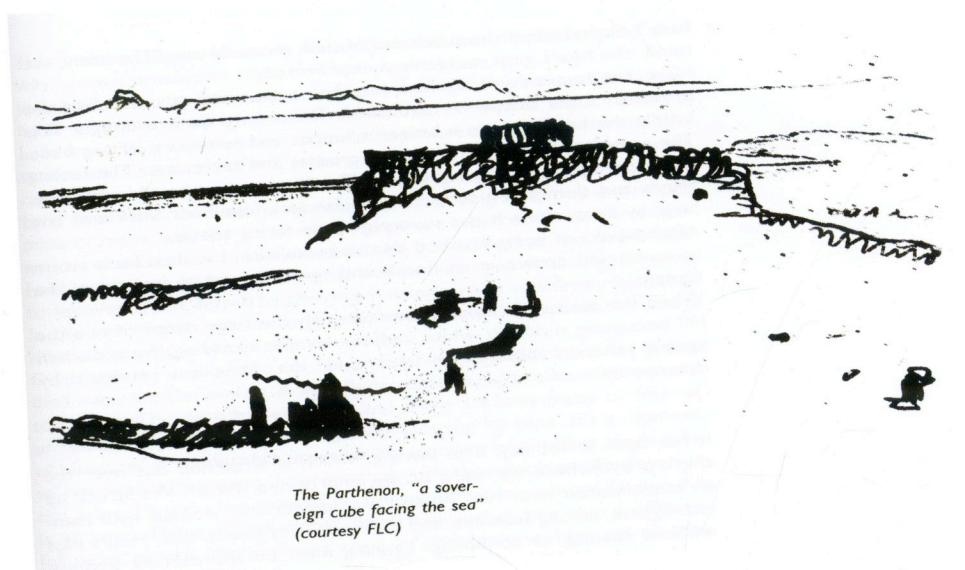
Le Corbusier saw the pedestrian as the most important mode of circulation in the city. As the human body is the fundamental unit of measure in Le Corbusier's Modulor system, so does the pedestrian become the fundamental unit of measure of movement in the city. Le Corbusier described the primacy of the pedestrian in his vision as such:

Things which we believe Utopian, are now present: the royalty of the pedestrian. This silence of the street, this serenity of the walker, this possibility of looking, of raising the eyes towards upper stories endowed with fine proportions. This unity of stones, and this unity of windows, the scale of which is the result of a tournament between human needs and the techniques of building.¹²

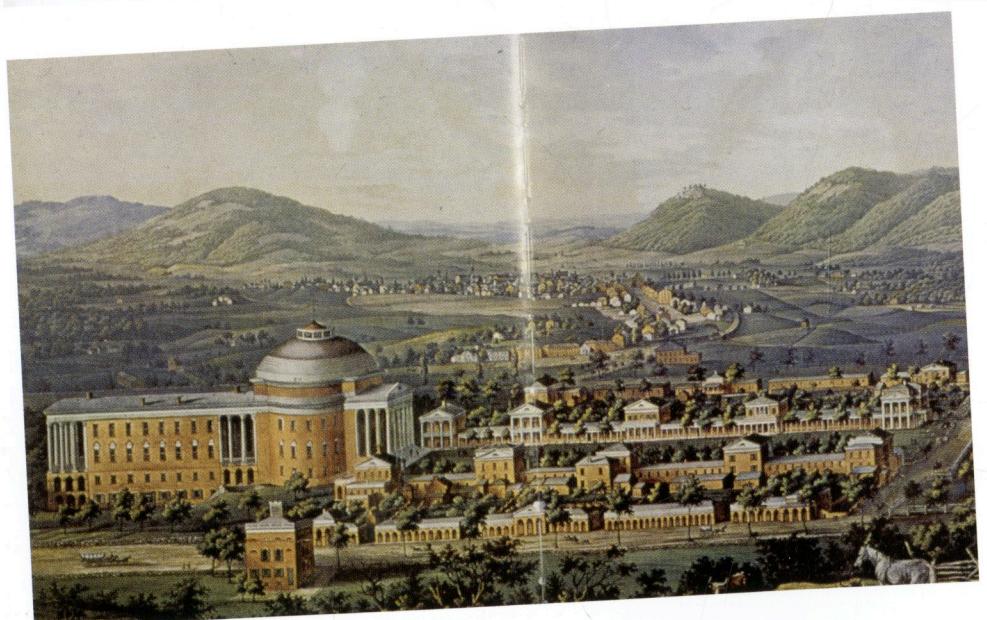




Source: Collectif. Chandigarh, la ville indienne de Le Corbusier. Le Capitole, une œuvre inachevée... (Coédition Musée. Somogy éditions d'art, 2002).



The Parthenon, "a sovereign cube facing the sea" (courtesy FLC)



Source: View of the University of Virginia from Lewis Mountain by E Sache, 1856

ENCOUNTERING THE CAPITOL COMPLEX: SURVEYOR,

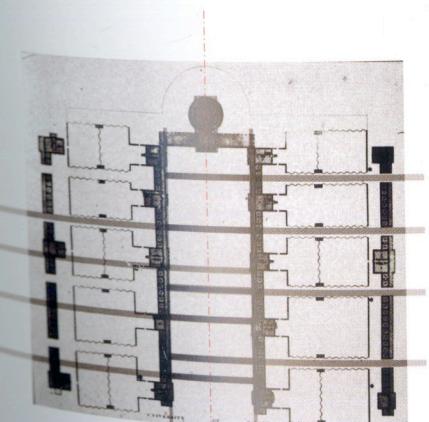
In the scope and form of his post-war work, Le Corbusier sought permanence in the face of upheaval. He looked to cultural traditions to inform his intentions. On Le Corbusier's first trip to Punjab, he met with the vernacular and cultural traditions of the region; these observations were registered throughout the Capitol Complex in its proportions, materials, and occupation.

Le Corbusier also referenced the physical geography that shaped operations through the juxtaposition of artifice and nature emerging in the ordering of the land. The rational Surveyor observes this juxtaposition registered against figural, as dialogue rather than imposition: the stream corridors registers their sinuous form and recalls the precondition of the site; layered systems of circulation connect independent urban sectors.

The Capitol Complex is located at the terminus of a main street leading into the city. Mounded landforms obscure the view from the city into the distance. The processional axis terminates off-center, in a composition of shifting centers, where edges are at once immediate and distant, defined by layered horizons of structures and mounds, and the Shiva Lingam of the Himalayas and its foothills. The peripatetic Nomad encounters the shakkei - a landscape painting technique - that encompasses an orienting device and as a bounding horizon, creating tension between immediate and distant elements and situating the complex in its precondition.

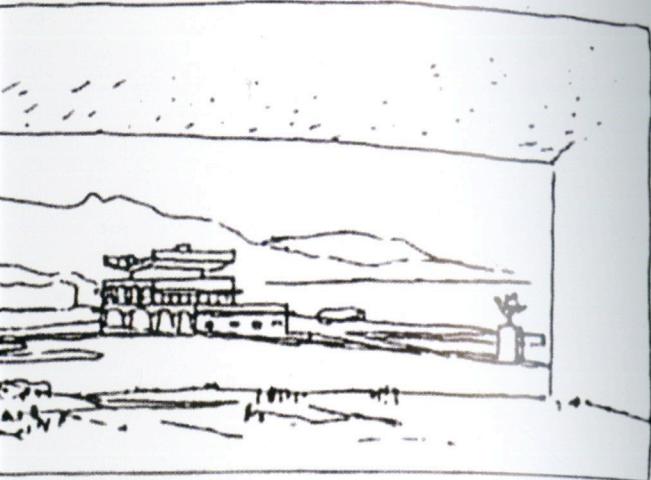
In composition, the Capitol Complex references Jantar Mantar, an observatory built in 18th century that consists of collection of instruments within composition to measure time, track orbits, and measure the earth. The landscape of Chandigarh is a collection of elements that reflect the earth. These Mounds and Valleys obscure and reveal views, reflecting pools mirror the sky and reference traditional cycles of emergence, while attics and basements enclose spaces. The complex understands the themes of ground, water, sky, and horizon as cosmological, referencing Hindu and Christian philosophy.

Le Corbusier recorded his formative travel experiences in Japan in his travel journal and first publication. As we look pedagogically at the characters who inhabit and narrate it – Suvarna, the Village and the characters who inhabit and narrate it – Suvarna, the Lunatic – Le Corbusier drew lessons from the Acropolis. Looking to precedent situates Chandigarh and its promise of Indian design within a temporal continuum.



Axial relationships compared across precedents, from left-right: The La

ENCOUNTERING THE CAPITOL COMPLEX: SURVEYOR, NOMAD, LUNATIC



Le palais du Gouverneur

La Main ouverte

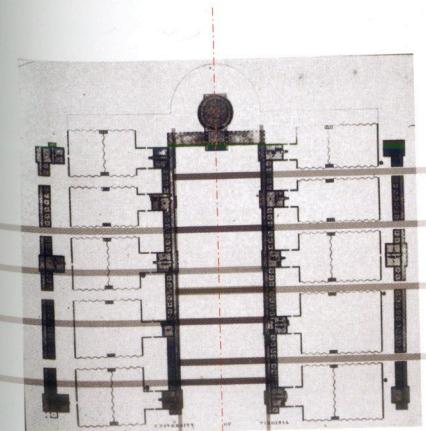
at the temple, the sky, and the surface of paving stones
ries of plundering. And no other external sign of life was
t, far off in the distance, Pentelicus, creditor of these stones,
marble wound, and Hymettus, colored the most opulent

of the horizon, particularly at noon when it imposes its
hing about it, provides for each one of us a measure of the
ible perception of the absolute.”

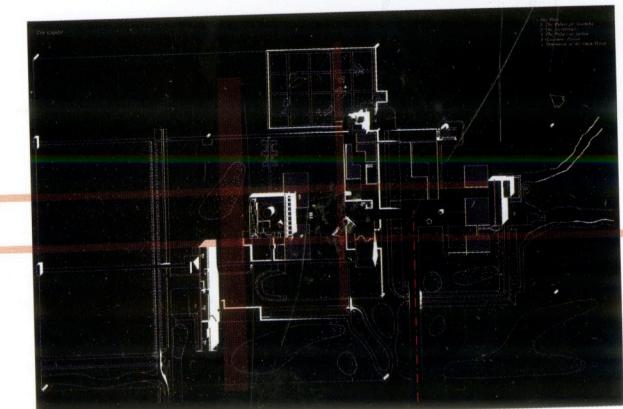
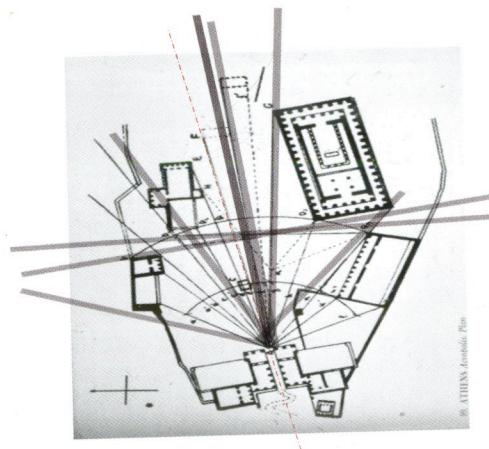
The Capitol Complex is located at the terminus of a main street, Jan Marg, above the city. Mounded landforms obscure the view from the city into the complex; the processional axis terminates off-center, in a composition of slipping axes and shifting centers, where edges are at once immediate and distant, defined by layered horizons of structures and mounds, and the Shivalik range of the Himalayas and its foothills. The peripatetic Nomad encounters borrowed scenery, or *shakkei* - a landscape painting technique - that encompasses the Himalayas as an orienting device and as a bounding horizon, creating tensions and ambiguities between immediate and distant elements and situating the Complex in its precondition.

In composition, the Capitol Complex references Jantar Mantar, an astronomical observatory built in 18th century that consists of collection of elements placed within composition to measure time, track orbits, and measure celestial altitudes.¹³ The landscape of Chandigarh is a collection of elements that cut and mound the earth. These Mounds and Valleys obscure and reveal views and axes, reflecting pools mirror the sky and reference traditional cycles of rebirth and emergence, while attics and basements enclose spaces. The dialectical Lunatic understands the themes of ground, water, sky, and horizon as not only cosmic but cosmological, referencing Hindu and Christian philosophy.

Le Corbusier recorded his formative travel experiences in *Journey to the East*, his travel journal and first publication. As we look pedagogically to the Academical Village and to the characters who inhabit and narrate it – Surveyor, Nomad, and Lunatic – Le Corbusier drew lessons from the Acropolis. Looking to this ancient precedent situates Chandigarh and its promise of Indian democracy in the same temporal continuum.



Axial relationships compared across precedents, from left-right: The Lawn, the Acropolis, the Capitol Complex.



In 1911 at the Parthenon, he observed:

Having climbed steps that were too high, not cut to human scale, I entered the temple on the axis...turning back all at once from this spot once reserved for the gods and the priest, I took in at a glance the entire blazing sea and the already obscure mountains of the Peloponnesus...The steep slope of the hill and the higher elevation of the temple above the stone slabs of the Propylaea conceal from view all traces of modern life, and all of a sudden, two thousand years are obliterated, a harsh poetry seizes you...sparkling and elusive above the sea, a spectral past, an ineluctable presence.¹⁴

This description of his first encounter with the Acropolis suggests a more profound understanding of ‘ground’, one that Robin Dripps describes in ‘Groundwork’ 50 years later:

Metaphorically, ground refers to the various patterns of physical, intellectual, poetic, and political structure that intersect, overlap, and weave together to become the context for human thought and action.¹⁵

The thread of shaping and constructing the ground weaves through Le Corbusier’s conceptions of both the city through the three-dimensional grid of transit and plan of sectors, and the Capitol Complex, where the ground obscures, structures, and scales the buildings of the complex. On approach, the mounding of the earth sets apart the Capitol Complex as another autonomous sector with its own systems and shifting axes, and landform obscures the Secretariat and the Assembly Building. Consider this arrival sequence in dialogue with the Lawn or the Acropolis – the processional axis terminates not in a singular capitol, but toward the east and the horizon. Rather than giving hierarchy to a single building or civic function, the buildings are perceived on the oblique, indicating their relationship within the monumental composition and to the larger whole. Le Corbusier framed this relationship at the Acropolis: “I think the flatness of the horizon, particularly at noon when it imposes its uniformity on everything about it, provides for each one of us a measure of the most humanly possible perception of the absolute.”

There is a relationship among the Capitol Complex’s porous edges, the shifting axes of the Lawn, and the layered views of the Acropolis. In one of Le Corbusier’s earliest sketches of the Capitol Complex, the horizon is referenced and broken at various points in the composition, alternately overtaking and receding. To draw in the horizon, Le Corbusier utilizes shifting axes and centers. These shifting axes and centers can be examined both in plan and in precedent. At the Lawn, the north-south axis is intended to be continuous, opening to the mountains beyond



Le Corbusier intended that a single ray of light hit a column of Ashoka, the first emperor, on the speaker's rostrum on the opening day of Parliament. Through this vertical axis mundi, the sky begins to penetrate the constructed ground of the building through a mythical ray of light.

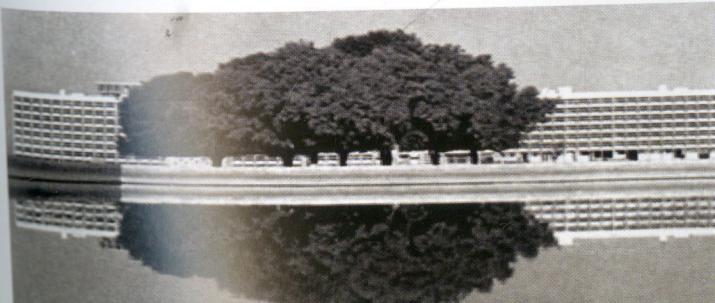
Iconography explores the connection of sky, horizon, ground, figure, and water connected by the axis mundi. The Enamel Door, the ceremonial entrance to the Assembly Building, symbolizes the transition from dark to light in its rotation and pivots about an abstraction of the tree of knowledge.

to enclose the site; columns and by walls truncate east-west axes, on the first terrace that runs all the way through; at the Acropolis, a brought into the composition, and the composition related to the la shifting axes and layered views.

CENTER, EDGE, AND STRATA: ELEMENTS CONSTRUCTING

According to the Indian constitution, the fundamental elements of the Assembly, the Secretariat, the High Court, the Governor's Palace of the Shadows, the Monument for the Victims of the Partition of the Open Hand. These elements of democracy, evolved from ideas engagement from both Nehru and Le Corbusier, construct identity relationships, and references.¹⁶ Reflecting pools connect particular Assembly Building, the High Court, the Open Hand – to the sky. C spectrum of scales, from engulfing space to body-scaled *brise-soleil* of the Capitol Complex are all scripted by Modulor and manifest re strategies -- proportional systems, chiaroscuro, figure-ground -- c negotiation among figure, ground, and sky, measured against the The Assembly Building, the main meeting hall of Parliament, exem themes of center, edge, and strata that explain the overall site stra Capitol Complex. In plan, Le Corbusier organized the Assembly Building's gridded system and a forest of columns, read against the floating volume of the Forum (the main meeting room of Parliament). Re cardinal points from the NE/SW orientation of the rest of the build is celebrated as the symbolic gathering place that is at once poet Sections of the Assembly Building reveal the depth of its construct the stratification of the horizon.

Entering the Assembly, there is a duality between inhabiting the ground and denying the ground. Buildings are of the earth, permanent, const concrete; vertically stratified circulation engages the depth of the the Chandigarh city plan and its 7V circulation system. The reflected in the reflecting pool denies the ground, instead drawing the sky to Dripps's "Groundwork" provides a reading for this strata:



Source: Le Corbusier. Global Architecture 30: Le Corbusier - Chandigarh. Yoshizaka, Takamasa., Futagawa, GA A.D.A. Edita Tokyo, 1974

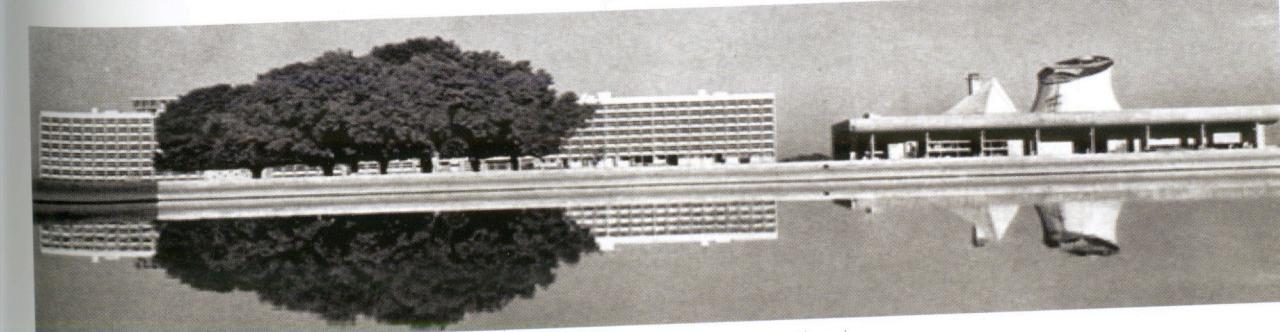
The reflection of forms by the reflecting pool denies the ground, instead drawing the sky to the ground. Vertically stratified circulation engages the depth of the ground, recalling the Ch its 7V circulation system that separates and prioritizes pedestrian movements.

to enclose the site; columns and by walls truncate east-west axes, except for one on the first terrace that runs all the way through; at the Acropolis, all elements are brought into the composition, and the composition related to the landscape, by shifting axes and layered views.

CENTER, EDGE, AND STRATA: ELEMENTS CONSTRUCTING DEMOCRACY

According to the Indian constitution, the fundamental elements of democracy are the Assembly, the Secretariat, the High Court, the Governor's Palace, the Tower of the Shadows, the Monument for the Victims of the Partition of the State, and the Open Hand. These elements of democracy, evolved from ideas of democratic engagement from both Nehru and Le Corbusier, construct identity in their forms, relationships, and references.¹⁶ Reflecting pools connect particular elements – the Assembly Building, the High Court, the Open Hand – to the sky. Operating at a spectrum of scales, from engulfing space to body-scaled *brise-soleil*, the spaces of the Capitol Complex are all scripted by Modulor and manifest representational strategies -- proportional systems, chiaroscuro, figure-ground -- deployed in the negotiation among figure, ground, and sky, measured against the horizon. The Assembly Building, the main meeting hall of Parliament, exemplifies broad themes of center, edge, and strata that explain the overall site strategy of the Capitol Complex. In plan, Le Corbusier organized the Assembly Building as a gridded system and a forest of columns, read against the floating, subtracted volume of the Forum (the main meeting room of Parliament). Re-oriented to the cardinal points from the NE/SW orientation of the rest of the building, the Forum is celebrated as the symbolic gathering place that is at once poetic and rational. Sections of the Assembly Building reveal the depth of its constructed ground and the stratification of the horizon.

Entering the Assembly, there is a duality between inhabiting the ground and denying the ground. Buildings are of the earth, permanent, constructed in concrete; vertically stratified circulation engages the depth of the ground, recalling the Chandigarh city plan and its 7V circulation system. The reflection of forms by the reflecting pool denies the ground, instead drawing the sky to the earth. Again, Dripps's "Groundwork" provides a reading for this strata:



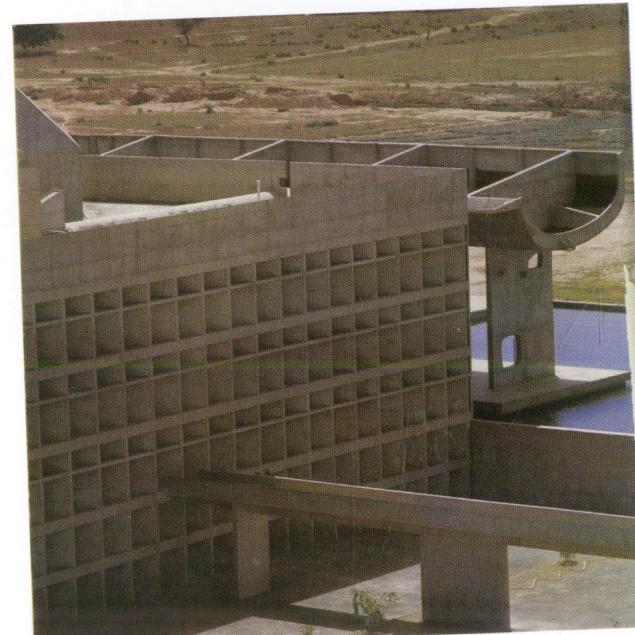
Source: Le Corbusier. Global Architecture 30: Le Corbusier - Chandigarh. Yoshizaka, Takamasa., Futagawa, Yukio., ed. GA A.D.A. Edita Tokyo, 1974

The reflection of forms by the reflecting pool denies the ground, instead drawing the sky to the earth. Vertically stratified circulation engages the depth of the ground, recalling the Chandigarh city plan and its 7V circulation system that separates and prioritizes pedestrian movements.

[Providing] protection and a sense of permanence...the wall is part of the ground. It grows from the making of terraces and thus reveals the underlying topographical structure of its earthen context and grounds local place in a larger world. [The ground] forms one pole in a spatial construct linking earth to sky that he considers one of the fundamental relationships guiding human thought and action. The attic, with its clearly articulated structure exposed to view, its removal from the particularity of the ground, which gives it its greater sense of perspective on things, and its mnemonic capacity coming from the contents typically stored within, is considered the rational part of the house.¹⁷

At the Assembly, Modulor weaves together several operations: the constant registering of monumental versus human scale; the juxtaposition of static ordering and dynamic sculptural elements; the geometrical abstraction of figures; chiaroscuro, the poetic carving of volumes of light from a space of shadow, and painting as a method of study; and iconography. Le Corbusier studied the spatial operations of the Capitol Complex through daily painting to investigate space and qualities such as movement and perception; he devoted afternoons to architecture. In his method, you can see a continuum from the hand wielding a paintbrush to the way space is delineated and stratified at the scale of the city by Modulor's multi-scalar application. Paintings of the Modulor man situated at the threshold between earth and water, mythical scale versus distant horizon, establish him as belonging to both realms.¹⁸ This duality persists in reading the Assembly Hall and the Complex more broadly.

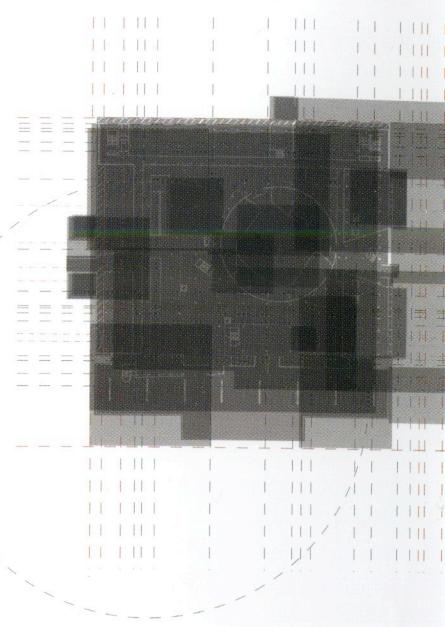
The painting technique of chiaroscuro, where light is created by carving white/light from a dark canvas is a connective thread between Le Corbusier's paintings and his attention to the sacred and monumental qualities of space at the Capitol Complex. This is manifest at the Assembly in the subtractive quality of volumes of light carved from the building – scholars have noted the symbolism of the oculus as related to the Pantheon, and also to Hindu temples and the idea of the regenerative power of light that punctures the darkness of a masonry-walled space. Le Corbusier intended that a single ray of light hit a column of Ashoka, the first emperor, on the speaker's rostrum on the opening day of Parliament. Through this axis mundi, vertical connection from sky to ground, the sky begins to penetrate the constructed ground of the building through a mythical ray of light. This connection draws several precedents of study in the class – the Pantheon, the Rotunda, and now this democratic sacred space.



Source: Le Corbusier. Global Architecture 30: Le Corbusier - Chandigarh. Yoshizaka, Takamasa., Futagawa, Yukio., ed. GA A.D.A. Edita Tokyo, 1974

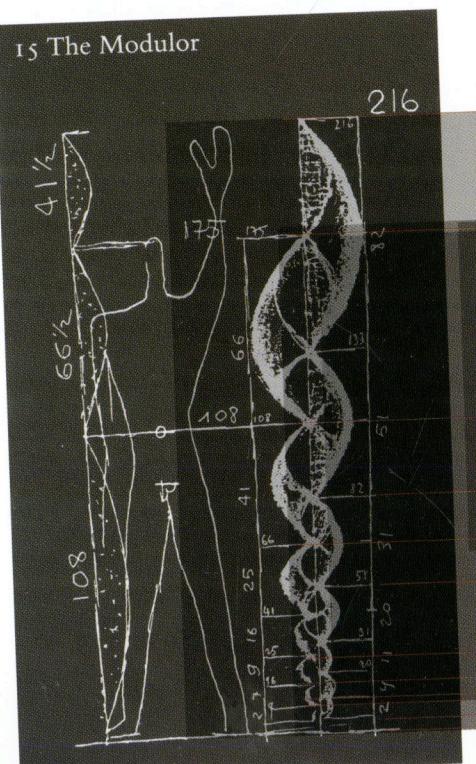


Source: Le Corbusier, *La poème du l'angle droit*, Tériade Publishing, Paris, 1955.

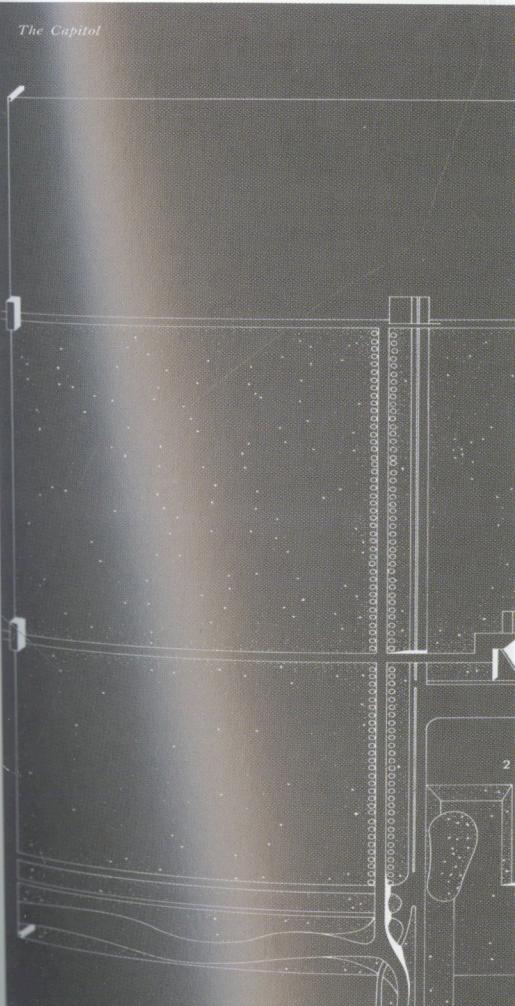


This analysis connects Le Corbusier's method for study, daily paintings, to strategies at the scale of building and site. First, the analysis discerns the painting's ordering strategy and identifies scales of golden section - further derive geometries. Finally, the analysis is applied at site scale.

This painting, as with many of Le Corbusier's paintings, applies to plan and sectional relationships and directionalities and expresses the dialogue between the figural and datum.



Source: Le Corbusier, "The Modulor." *Three Human Establishments*. See Endnotes.



METHODOLOGICAL ANALYSIS: TRANSLATING METHOD AND INTENTION

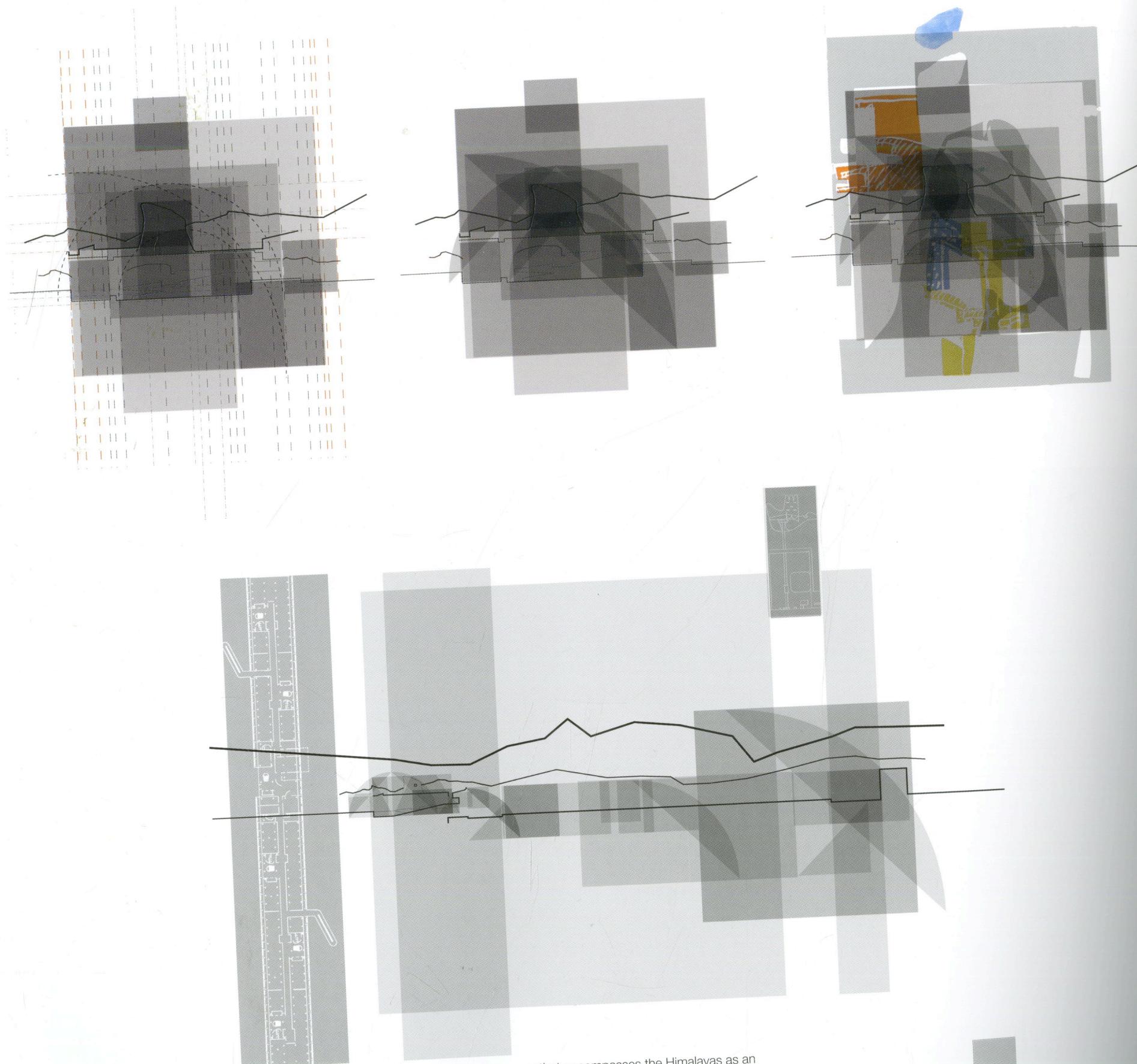
This analysis superimposes the Assembly Building and a key painting to analyze the deployment of Modulor and Golden Section in terms of this superimposition of scales. This painting, from *Le poème de l'angle droit*—a composition of verses, paintings, musings published by Le Corbusier in 1955—expresses many of Le Corbusier's interests at the Capitol Complex. The volume of white is carved from the heavy, dark ground of a figural element; an orthogonal grid pulls the ground into the carved volume of white as a structuring grid; fragments break through frames and weave in and out of the structuring grid. The dominant figure morphs from the ground to shape both interior and exterior space in the painting.

Applying the Modulor ordering system to the site reveals proportions of the composition that deal with how one moves through and perceives space. The layering of methods and scales manifest in the painting are also manifest in the buildings of the Capitol Complex as scalar densities facilitate the registration of human scale against monumental/infinite scale through the layering of bench, balcony, window; water and horizon. The individual is read within and against the monumental at the site scale. At the building scale the metering of the facade is read against a forest of columns in the hypostyle hall. At the scale of the room individual microphones and seats are registered against the tapestries. In the Forum of the Assembly there is a constant overlay of systems of inhabitation and civic purpose.

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The peripatetic Nomad encounters borrowed scenery that encompasses the Himalayas as an orienting device and as a bounding horizon, creating tensions and ambiguities between immediate and distant elements and situating the Complex in its precondition.

ICONOGRAPHY, IDENTITY, + PERMANENCE

Le Corbusier grounds the Capitol Complex in iconography referencing not only the cultural traditions of the region, but methodology and translation. The Enamel Door is the ceremony to the Assembly Building, symbolizing the transition from day to night. There is transference and echoing of forms between the Assembly and the ceremonial door: the abstraction of the tree and in the sun on the door, the geometrical abstraction of the abstracted geometries of the tree of knowledge; the verticality and define the entry, reaching to the ground, and the pivot ceiling on which the door rotates.¹⁹ In a dialogue between civilization, cosmic cycles and geologic time, iconography with democratic progress.

Vernacular influences manifest through materials, typologies further this dialogue, registering human agency against modernity. In Chandigarh, the roughness and imprecision of materials – between rough planks, highly labor-intensive construction and the tactility of the hand, for weathering and patina that are signs of permanence. The appreciation of vernacular tradition and also be seen at the Lawn, in the formation and use of brickwork, local practices and reinforcing the Lawn as of the earth. The Complex's Secretariat, a thickened zone that mediates between shadow and light, is a threshold inhabitable by one person or the façade's monumental scale through its meter, and modulating hot climate over the course of the day and seasons. The central Lawn create a similar threshold between inside and outside, individual and collective. The combination of modern and a sense of permanence in the face of political turmoil.

FIGURED GROUND, AGAIN

Sited in its social and political context, Chandigarh is a subversive city that places the condition of Man before the trajectory of progress. It is a directive for the Modern to erase the ancient and refuting the past in favor of modernization and tradition by grounding the Capitol Complex in the landscape of Chandigarh, physically, materially, and culturally. The concept of Chandigarh is suggestive of ruins and timelessness.²⁰ Through the figure : ground, Le Corbusier situates the Capitol Complex in a space of time, place, ritual, and complex horizons.

ICONOGRAPHY, IDENTITY, + PERMANENCE

Le Corbusier grounds the Capitol Complex in iconography and human scale, referencing not only the cultural traditions of the region, but also his painting methodology and translation. The Enamel Door is the ceremonial entrance to the Assembly Building, symbolizing the transition from dark to light in its rotation. There is transference and echoing of forms between the approach to the Assembly and the ceremonial door: the abstraction of the sun in the Forum and in the sun on the door, the geometrical abstraction of the pyramid and the abstracted geometries of the tree of knowledge; the vertical columns that meter and define the entry, reaching to the ground, and the pivot that connects floor and ceiling on which the door rotates.¹⁹ In a dialogue between modern and ancient civilization, cosmic cycles and geologic time, iconography connects ancient ritual with democratic progress.

Vernacular influences manifest through materials, typologies, and climate further this dialogue, registering human agency against monumental scale. At Chandigarh, the roughness and imprecision of materials – concrete packed between rough planks, highly labor-intensive construction – leaves space for the tactility of the hand, for weathering and patina that are an expression of permanence. The appreciation of vernacular tradition and material craft can also be seen at the Lawn, in the formation and use of brick, incorporating local practices and reinforcing the Lawn as of the earth. The *brise-soleil* of the Complex's Secretariat, a thickened zone that mediates between fluctuating shadow and light, is a threshold inhabitable by one person that breaks down the façade's monumental scale through its meter, and moderates Chandigarh's hot climate over the course of the day and seasons. The colonnades of the Lawn create a similar threshold between inside and outside, shadow and light, individual and collective. The combination of modern and ancient references seeks permanence in the face of political turmoil.

FIGURED GROUND, AGAIN

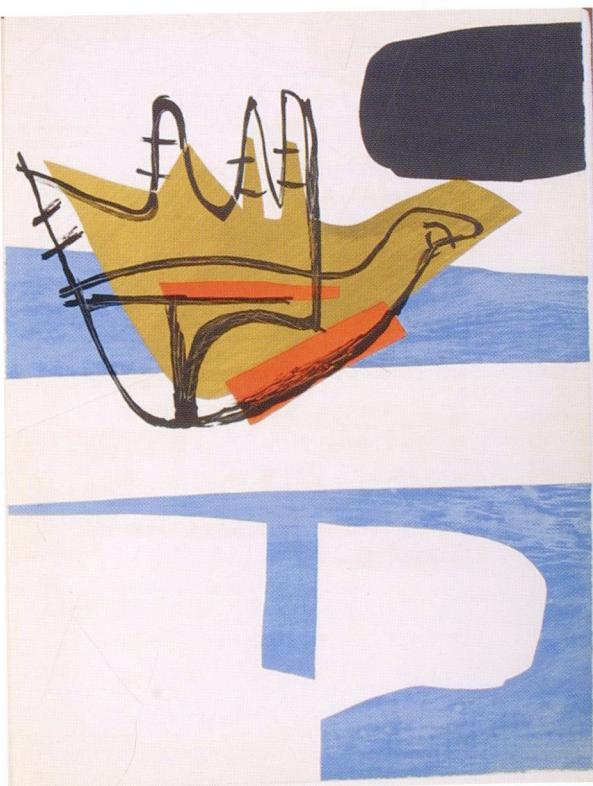
Sited in its social and political context, Chandigarh is a subversive landscape that places the condition of Man before the trajectory of politics, defying the directive for the Modern to erase the ancient and refuting the separation of modernization and tradition by grounding the Capitol Complex, and the city of Chandigarh, physically, materially, and culturally. The constructed, figured ground of Chandigarh is suggestive of ruins and timelessness.²⁰ Through this conception of figure : ground, Le Corbusier situates the Capitol Complex within a continuum of time, place, ritual, and complex horizons.

POSTSCRIPT: THE OPEN HAND

"It was not a political emblem, a politician's creation, but an architect's creation, a symbol of peace and reconciliation, open to receive the wealth that the world has created, to distribute to the peoples of the world. It ought to be the symbol of our age. The Open Hand will affirm that the second era of machinist civilization has begun; the era of harmony."²¹



Source: Collectif. Chandigarh, la ville indienne de Le Corbusier. Le Capitole, une oeuvre inachevée... (Coédition Musée). Somogy éditions d'art, 2002.



Source: Le Corbusier. *La poème du l'angle droit*. Tériade Publishing, Paris, 1955.



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Endnotes

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- 2 Prakash, pp 9.
- 3 Curtis, William J R. *Modern Architecture Since 1900*. 3rd Ed. Phaidon Press, 1996. pp 377.
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- 5 Frampton, Kenneth. *Celebrating Chandigarh*. Ed. Jaspreet Takhar. Illustrated edition. Chandigarh Perspectives in association with Mapin Publishing. 2007. pp. 37.
- 6 Frampton, pp. 36.
- 7 Cresti, Carlo. "Le Corbusier." *Twentieth-Century Masters*. Hamlyn: 1970. pp 34.
- 8 Le Corbusier. *Les Trois établissements humains*. Éditions Denoël, Collection ASCORAL, Paris, 1945. pp 167.
- 9 Le Corbusier. *Les Trois établissements humains*. pp 98-165.
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- 11 Le Corbusier. *Les Trois établissements humains*. pp 51.
- 12 Le Corbusier. *Les Trois établissements humains*. pp 165.
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- 16 Prakash, pp. 19.
- 17 Dripps, pp. 66-67.
- 18 Zimmer, Heinrich. *Myths and Symbols in Indian Art + Civilization*. Princeton: Princeton University Press, 1974.
- 19 Prakash, pp. 94.
- 20 Frampton, pp. 36.
- 21 Curtis, pp 429.

Further Reading:

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