

# Drawing to Conclusions: Sketching the Modulated Subject of Le Corbusier

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Throughout the meandering donkey (perhaps-ass) steps of his architectural path, Le Corbusier often stated the importance he placed on the relationship between the building envelope and its accommodation of function. A dialectic between the functional apparatus - liberated from traditional conformity by the free plan - and the skin of the building, which suspends such functions within its surface. It was a relationship, which for Le Corbusier, was apparent in its inherent simplicity: "one day we noticed that the house, like the motor car, could be a simple external covering or membrane, containing multiple organs in free arrangement."<sup>1</sup> The envelope of the building - the poetic surface of the free facade - is aligned to the condition of a simple external surface, which merely articulates its internal functions. The envelope produces a referential skin which limits the extent of the functional process, defining its field of influence. The functional skin becomes a structural element, a public covering, necessary to define a pathology of the interior, forming a closed surface which manufactures its internal condition(ing).

For Le Corbusier the emergent reality of the (technological) machine was a natural step in the unwavering course of humanity's path toward a new future. The free plan was only indicative therefore of a necessary redistribution of the machine's functional components: architectural "research was directed towards a free distribution of the organs as an allowance of the biological exactitude,"<sup>2</sup> an optimisation of the conditions of production. As Le Corbusier evolved the free plan, the individual components became more plastic and liberated, although they exist only in relation to each other, the organs were never autonomous of the organism which housed them, and were only liberated relative to their deployment within the sequence of production.

So while the quantity, size, and ratio of these organs may alter, they were always comfortably accommodated within the external programmatic skin. The individual living cell may geometrically proliferate, and it is actively encouraged to do so, in relation to the composite body, as such a

proliferation is purely natural and included. The skin of Le Corbusier's modernist discourse anticipates, and actively incorporates such proliferation, by expanding the size of the discursive envelope from the object of the house to the object of the city. It is an agency that is an augmentation of size - big, bigger, absurdly huge - which never questions the validity of such an inclusive envelopment:

*such a method could be applied to town planning, not only to dense multi functional ensembles, but to the complete city as an entity. It is at the architectural level that town planning begins. For each of the functions of the town a suitable organ or tool must be created - the organs are conceived as complementary to one another and are established on the same scale, corresponding to one and the same "order of size." An organ does not function in isolation but only within the context of an organism. There can be no architecture without town planning.<sup>3</sup>*

As Manfredo Tafuri has written,<sup>4</sup> for Le Corbusier, the essential role of the architect was that of the organiser; the designer of the programme that houses these functional components in sequential spatial relation to one another. To maximise the level of programming, ensuring the optimal operation of the functional mechanism - the human subject, as a functional component - must be cited within the skin of the productive field. It is an abstract accommodation within the ideological city, rather than a literal accommodation within the built architectural form. With such a strategy the individual human subject is reduced to the position of the X: occupying the position of an infinitely interchangeable index (the X is the intersection of discrete geometries of production) in the cartesian field of production. Therefore the validity of the Corbusier programme resided on the inclusion of the human subject internal to the conditions of the productive assemblage:

*Le Corbusier never built for princes, or for supermen; he built for men, whose measure he tried to take as exactly and universally as possible. For if man was not for him the measure of the world, man was never-the-less the measure of all architecture. Never did Le Corbusier think of*

*architecture in terms of anything beyond man, anything purely political, social, or religious.*<sup>5</sup>

We are required to believe that the scale of the Corbusian architectural project is concerned only with the man, not as the abstract functional organ, but as a physical figure - adulent of their relation to an understanding architecture: "in the final reckoning the scale is determined neither by the scale nor the political ideal, but everywhere and always by man, and man at his humblest."<sup>6</sup> - or rather man at his most politically reducible, generic and accommodating. The figuring of a universal defined figure, *le modulator*, is for Le Corbusier the enactment of a (not-so committed) committed political ideology. The strategy behind the modulator is not the expression of a (naive) ideology - man as the universal term - but a complex vilification of the Corbusian project which attempts to house the human subject as an abstract condition of production. The universal measure of the modulator is an attempt to eradicate the heterogeneous nature of society by accommodating the subject within the homogenous surface of the field of production. As Tafuri insinuates,<sup>7</sup> the Corbusian organisation of the city - the spatial organisation of the subject within an architectural skin - operates not at the banal level of the physical subject, but at the abstract level of a pure ideological topography. The subject is accommodated, not as a literal physical entity, but as an abstract term, realised by a metaphorical inhabitation of the space of an ideological architecture.

The work which perhaps most concretely elucidates Le Corbusier's expanding of the domiciling architectural envelope - from the building to the city - and the subject's subsequent homogenisation within the generic system of the modulator, is the post-war mass-housing project: the "Unité d' Habitation" in Marseilles. To quote the Corbusian monograph of 1965;

*The Unité d' Habitation which is the principle work which exemplifies the use of the Modulator and bears witness to the harmony inherent in this range of dimensions.*

*The Unité d' Habitation is constructed on 15 measures of the Modulator. This immense building, 140 metres long and 70 metres high, appears familiar and intimate. From top to bottom, both inside and out, it is to the human scale.*<sup>8</sup>

For Le Corbusier the modulator was an essential generator of the relationship between the subject and the architectural product:

*The modular is a measuring tool based on the human body and on mathematics. A man with arm upraised provides, at the determining points of his occupation of space - these intervals which give rise to the Fibonacci, or golden, series.*<sup>9</sup>

The combinations obtained by the use of the Modular have proved themselves to be infinite. The splendid result was the rational gift of numbers - the impeccable and magnificent play of mathematics. In Corbusian discourse, the Modulator is figured as harmonically derived from mathematics and its inherent relationship to an empirical subject body. Le Corbusier paraded the modulator as a natural expression of mathematics as the divine structure within which we - as the subject - position ourselves relative to the universe:

*Mathematics is the majestic structure conceived by man to grant him comprehension of the universe. It has walls before which one may pace up and down without result: sometimes there is a door: one opens it - enters - one is in the realm of the gods, the room holds the key to the great systems. These doors are the doors of miracles. Having gone through one, man is no longer the operative force, but rather it is his contact with the universe. In front of him unfolds and spreads out the fabulous fabric of numbers without an end. He is in the country of numbers. He may be a modest man and yet have entered just the same. Let him remain, entranced by so much dazzling, all pervading light.*<sup>10</sup>

The liturgy of the modulator is undermined in Corbusian discourse by the political requirement for a generic subject, utilised as a validating design tool. As such a structure of empirical qualification, *le modulator*, is an ordering of the subject and its space of affection, an imposition of a homogenous framework which is capable of implicitly ordering its heterogeneous contents;

*society lacks a common measure of ordering the dimension of that which contains and that which is contained. To offer such a measure in the purpose of our enterprise. That is its raison d'être to bring order.*<sup>11</sup>

The figure of *le modulator* is the Corbusian drawing of a diagram of (desired) production, the establishment of a generic ordering that is an absolution of subjective differentiation. The construction of *le modulator*, a drawing of the line from one predetermined geometric point (A) to another (B) to another (C) ... etc, is the striating of the subject within a generic framework. The modulator is a mechanism for the ordering of the abstract subject, operating as the tool for the production of an

idealised subject - as an assured functional component - rather than an ergonomic system derived from the universal subject. The agency of the modulator in the design of the Unité is the production of an interior subject, to be accommodated within a space already formulated by the modulator, rather than the production of an inhabitable space by the subject. Corbusier's adherence to the conformation of the modulator - and its dubious authentication of the Unité as its product - is an attempt to domicile the individual subject, through a reduction to the universal, within this concluding realm of Corbusian urbanism.

Le Corbusier traces in relief on the concrete surfaces of the Unité the many figures of the modulator, a line drawing of the symbiotic relationship between the functional organs and the productive organism which houses them. With the drawing of this surface detail, Le Corbusier attempts to formulate the new domestication of a heterogeneous (post-war/new) society within the discursive envelope of the Unité; as the passive viewing subject we are implicated within the abstract programme of Corbusier's Unité, by its attempt to house us within its universal space. However, the drawing of the diagram of the modular on the surface of the Unité by Le Corbusier, is actually a tattooed inscription of the condition(ing) of the subject.

As the anthropologist Alfred Gell has written of the mechanism of the tattoo; "As a technical means of modifying the body, tattooing made possible the realisation of a particular type of subjection which, in turn, allowed for the elaboration and perpetuation of social and political relationships of a certain kind."<sup>12</sup> The agency of the tattoo is a complex operation: it is not a simple manifestation of the linearity between the internal/functional/subjective condition, and its expression on the exterior/membrane/objective semiological field of the skin. Rather the production of the tattooed diagram on the skin is an allowance of the terms of the line itself. It operates on the surface of the Unité as the manifestation of societal difference, decoding the functional subject from the semiological field of production. As Gell writes further:

*tattoos are the emblematic bindings which attempt to physically restrain the organs beneath, through the tattoo's construction of a multiple skin: the tattooing tool goes through the skin, the ink is absorbed into the body, subsequently being inaccessible from the outside, but still visible, behind what seems like a transparent layer. Tattooing produces a paradoxical double skin ... a protective layer.*<sup>13</sup>

The layers of the skin multiple themselves through the assembling of this layer, forming a disjuncture in the (supposedly) smooth lineal progression from the internal organisation of functional organs to the surface of the enveloping skin. Corbusier's drawing(s) of the modulator is a tattooing of the Unité's skin that attempts to assemble this protective layer, thereby maintaining the critical integrity (containment) of the surface of his discourse of the modulator. However the tattoo opens the line between the body of the interior, and the exterior of the body, constructing an abstract architectural diagram which oscillates between the states of interior/exterior, subject/object. It is a play between the engenderment of the body without organs and the docile domiciling organism. The critical action of the tattoo is the drawing of a deterritorialising line from an implicit interior definition (of the subject as productive organ), mechanised through the (discursive) surface of the (programmatic) skin by the constructed figure of the modulator. It is a linear inscription of drawing which illustrates (sic) the impossibility of the building skin accommodating the heterogeneity of the abstract subject.

The drawing of the modulator, a desired tracing of the humble (functional) subject on the envelope of the Unité by Le Corbusier, is a liberating of the dialectical containment of the subject. It forms a laceration in the surface of the skin which engenders the abstract movement of the subject - a shift from the semiologically implicit site of the field of production - ultimately disavowing the authority of Le Corbusier's use of the modulator as anything other than a superficial surface detail. The diagram of the modulator assembles a critical resistance by the subject to adhere to the dimensions of a drawing which idealises the relation between the subject and the mathematically constructed space of production. Furthermore it is the drawing of a line which opens the many figures of Le Corbusier, engaging a forensic of the implicit structure of such pre-drawn conclusions.

#### NOTES

- 1 Le Corbusier quoted, Stanislaus von Moos, *Le Corbusier - elements of a synthesis*, (Cambridge, Massachusetts: MIT Press, 1979), p. 86.
- 2 Le Corbusier quoted, Svon Moos, *Le Corbusier - elements of a synthesis*, p. 82.
- 3 Le Corbusier quoted, von Moos, *Le Corbusier - elements of a synthesis*, p. 149.

- 4 Manfredo Tafuri, *Architecture and Utopia: design and capitalist development* (Cambridge, Massachusetts: MIT Press, 1976) p. 128f.
- 5 Maurice Besset *To Live with the light* (London: Architectural Press, 1987), p.189.
- 6 Besset *To Live with the light* p.189.
- 7 Tafuri, *Architecture and Utopia* p. 132.
- 8 *Le Corbusier: the Complete Architectural Works 1946-1952* ed. W. Boesiger (London: Thames and Hudson, 1966), v. 5, p. 179.
- 9 *Le Corbusier, Le Modulor: A Harmonious Measure to the Human Scale Universally applicable to Architecture and Mechanics* (London: Faber, 1952), p. 55.
- 10 *Le Corbusier, Le Modulor* p. 71.
- 11 *Le Corbusier, Le Modulor* p. 21.
- 12 Alfred Gell, *Wrapping in Images: Tattooing in Polynesia* (Oxford: Clarendon Press, 1993), p. 3.
- 13 Alfred Gell, *Wrapping in Images* p. 38.