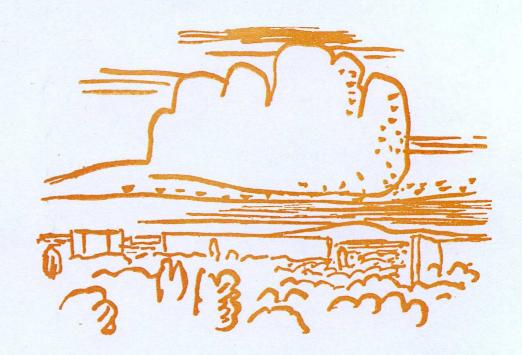
Le Corbusier's ideas about the nature of the dwelling and its relationship to the city sprang from his belief that mankind's highest activity was intellectual creativity, 'meditation'. Using sources rarely tapped by Corbusier scholars, James Dunnett explains this little-known key to Corbusier's thinking and shows how it relates both to his theory of machine production and to the revolutionary innovations of Cubism.



# THE ARCHITECTURE OF SOLID AND ADDRESS OF THE ARCHITECTURE OF THE A

'We are now ready to introduce into the (architectural) 'silence' of our home the work of art that inspires thought or meditation.'
Le Corbusier: *Précisions* 1

The Radiant City was conceived by Le Corbusier not simply, as is sometimes supposed, to provide roadspace for the motor car, to ensure optimal insolation, or to facilitate mass-production in the construction industry. It was to be a setting for a particular ideal of intellectual life, the model for which was, above all, that of Cubism—which for Le Corbusier was essentially a meditative art. In this sense the Radiant City was designed for

'meditation'. Le Corbusier underlined the centrality of this consideration to his theory of urban form, as follows: 'Many years ago . . . I threw into the confused discussion of styles, fashions, snobberies, this argument which was a "knock-out": "the house is a machine for living in". A thousand staves have been produced to beat me with for having dared that utterance. But when I say "living" I am not talking of mere material requirements only. I admit certain important extensions which must crown the edifice of man's daily needs. To be able to think, or meditate, after the day's work is essential. But in order to become a centre of creative thought, the home must take or an entirely new character. And that necessitates fo its realisation a change in the entire layout of the city, a new arrangement of transport, a new and daring concept of space relationships, a new method of construction for human habitation...'2

For Le Corbusier, the ideal of meditation not only extended the meaning of the mechanical analogy, but was intrinsic to his understanding of it, and hence to his understanding of modern architecture as a whole. This 'humanistic' interpretation of the analogy differentiated his ideal from the purely mechanistic enthusiasms of such groups as the Futurists or, later, the Metabolists. The city and home as place of meditation was only the most comprehensive expression of an ideal that permeated his approach to design at every level.

In describing the house as a 'machine for living in' Le Corbusier was classifying it according to a

1, 'To dwellings high above the ground is offered a spectacle of the sky and all its movements and its colours, its forms throughout the seasons. A distant hill appears. From below push the green domes of the tangle of trees. The town is "green".' Drawing and caption by Le Corbusier from 'The Home of Man', London: Architectural Press, 1948. 2, 'Sun, space, verdure: essential joys. Through the four seasons stand the trees, friends of man. Great blocks of dwellings run through the town. What does it matter? They are behind the screen of trees.' From 'The Home of Man'

### THE ARCHITECTURE OF

DAVILLE RADIEUSE

OZONINGO

P

3, the Radiant City, 1935. Zoning from the top downwards: the business centre, flanked by government and research buildings, the travel centre, hotels and embassies, housing on either side of central retail and educational zone, factories, warehouses, heavy industry. 4, ''Recessed' apartment buildings in the Radiant City, parks and schools in the middle.' Le Corbusier's original caption from 'The Radiant City'.

principle of differentiation which was central to his thought and to his sense of form. This principle was embodied in such antitheses as:

The implement, or tool: the work of art

work: leisure needs: luxuries typical: a-typical

biomorphic: geometric
The division opposed the essentially 'servant'
functions of life and the 'free' functions. Highest of
all 'free' functions was intellectual creativity, or
meditation—the creation of the work of art. This,
for Le Corbusier, was the greatest source of human

happiness, and the means for man's expression of his individual being. The 'servant' functions were all those activities necessary merely to keep man alive, with sufficient comfort and well-being to enjoy the 'free' functions.

This division was extended to the field of artefacts by recognising two distinct categories: the 'free' artefact, ie the work of art, and the 'servant' artefact, ie the implement or tool (outil). Though the former needed no ulterior justification, the latter was justified only by its service to the processes of life, and hence to the enjoyment, ultimately, of the former. The artefact which most completely embodied the 'servant' function was the machine; it epitomised the tool in its most highly developed technological state.

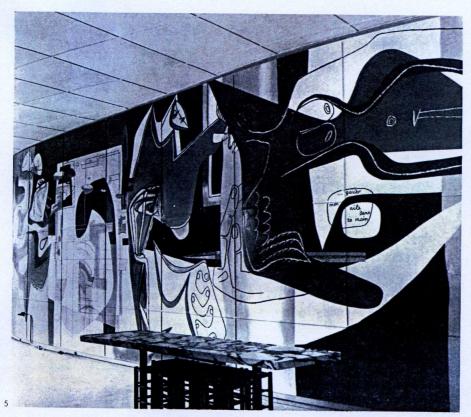
For Le Corbusier this classification was profoundly important, being the key to his justification of the Machine Age itself. It enabled him to regard the machine as a liberator, and to reject the arguments of the Arts and Crafts movement, to whom it appeared as an enslaver. Indeed he saw universal recognition of this division as the necessary consummation of modern architectural thought: 'To tie up the final strand: a breakthrough in our consciousness, a classification, and the natural expression will emerge of a normative perception of our existence which distinguishes clearly between its intensely practical side, of work, and its free, living, ideal side, of the spirit.'<sup>3</sup>

The implications of this division can be illuminated by comparing Le Corbusier's attitudes with those of the Arts and Crafts movement which rejected the machine age, as expressed by William Morris. 'The true secret of happiness', Morris had

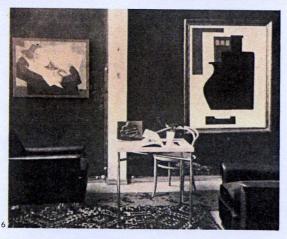
written, 'lies in taking a genuine interest in all the details of daily life, in elevating them by art, instead of handing the performance of them over to unregarded drudges.'<sup>4</sup> The concomitation of this view was that the everyday utensils of life should be elevated by art. This meant for Morris-for reasons still generally accepted in the fine artsthat all artefacts should be made by hand ('in all crafts where the production of beauty was called for, the most direct communication between a man's hand and his brain would be sought.'\s^5 A further concomitant was that through his daily work man should have the opportunity for artistic selfexpression. Here again a revival of hand manufacture would return (to the craftsman at least) this opportunity which the machine was rapidly taking away. Art, for Morris, was ultimately and quite simply 'the expression by man of his pleasure in labour'. Everyone had the capacity to create art at his own level; even the highest art was simply the flowering of the same phenomenon as such art at a mass level. But the machine, and the social system which had given it birth, had almost eradicated such art.

Le Corbusier also believed in hand craft, and practised it in painting and sculpture all his life. But where Morris emphasised the continuity between the Fine Arts and the Decorative Arts, Le Corbusier drew a clear distinction. He rejected both the concept and term Decorative Art. The utilitarian object was distinct from the work of art, and its method of production should be equally distinct.

His attitudes grew from a very different understanding of the nature of work of art. Where Morris had been inspired by medieval art, Le Corbusier's outlook was formed by Cubism. His preoccupation was with the work of art not as an expression of man's pleasure in his work, but as a pure statement of Mind—as the unique self-conscious creation of an exceptional individual. Works of art were '...crystallisations of the spirit, the fruits of our meditation, which express



5, 'The Painting of Silence', Le Corbusier's title for his mural in The Pavillon Suisse. The quotation ('... and shelter my wing in your hand') is from Mallarmé, a poet of whom Juan Gris was also a passionate admirer. 6, a painting by Juan Gris (left) hangs alongside an Ozenfant in the Pavillon de l'Esprit Nouveau (1925).
7, the 'Machine for Living in' as a setting for works of art — Lipchitz, Léger, Ozenfant, Jeanneret. Le Corbusier's Pavillon de l'Esprit Nouveau at the 1925 Exposition des Arts





disinterested\_ideas, and the play of our intellect. .

The work of art rested on man's capacity for playful enjoyment of his existence, and for profound contemplation upon it. Through it man expressed understanding of the world and sought harmony with its order. Art required absolute but disinterested attention, in a spirit open to its elevated aims, an attitude incompatible with functional use. Man needed to be served, so that he could be free to contemplate art with the necessary detachment: 'Making use of these tools, we avoid unpleasant labour, and being free, we think about things, about art for example (for it is very comforting).'8

If the tool were a work of art it would draw attention to itself, which by its very nature it did not warrant: 'The objects of utility in our lives have assumed the functions formerly performed by slaves. They are in fact themselves slaves, valets, servants. Do you want them as your soul-mates?'9 So the tool should not aspire to great power of expression. It need merely display the rightness of an object honestly designed for its purpose—a quality which could well be supplied by machine.

The work of art, though, was a personal, private achievement; it was the fruit of an intense search for understanding by the individual, and it was the most complete expression of his spirit. It was 'the living "double" of a being, whether still present, or departed, or unknown; that moment of profound discourse; those open and eloquent words spoken

in the intimacy of the soul.'10

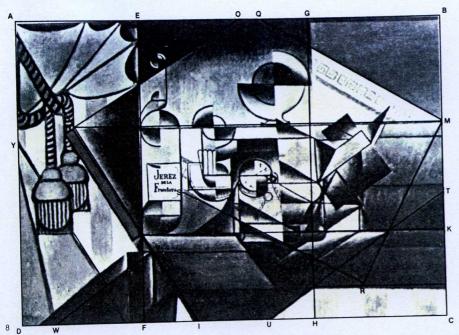
Therefore the work of art, as the unique statement of an individual idea, should be made by hand. Its uniqueness clearly did not suit it to mechanical production, and the expressive power which is its raison d'être depends on the imprint left by its maker's hand. The tool, on the other hand, is by nature a standardised product; its role is to supply the wants of the human frame. For example, it was difficult for man to lap up liquids, so the cup was invented, difficult to cut, so the knife was required. The tool was an extension of the human limbs, a 'human-limb object' (objet membre

'If our spirits vary, our skeletons are alike.'11 The wants of the human frame were universal, they were 'type', and the tools that supplied them could be equally so: 'These objects (extensions of our limbs) are "type", ie standard, since they respond to "type" needs." The tool was a standardised product, admirably suited to manufacture by machine. But this standardisation involved no loss of individuality for the user of a tool. On the contrary, sameness in small things allowed the mind and attention to focus without distraction on the affairs of the spirit, which were the true expression

of individuality.

Likewise, the fear that the machine would impoverish the quality of life, eliminating creativity in work, could be rejected by Le Corbusier with similar arguments. He extended his interpretation of the role of the tool to the role of work in daily life. He assumed that art, true creativity, was inevitably far removed from the work that was a daily necessity of life: 'Life obliges us to work (work that is generally obligatory, and therefore scarcely creative)...'13 'There is a time for work, during which one uses oneself up, and a time also for meditation, during which one regains harmony. One must not confuse matters . . . Everything has its place; work and meditation. $^{\prime 14}$ 

So Le Corbusier did not seek, as William Morris did, to enhance the quality of work by ensuring opportunities for creativity (he claimed that loss of pride in craftsmanship was, in any case, compensated by pride in the perfection of machine-

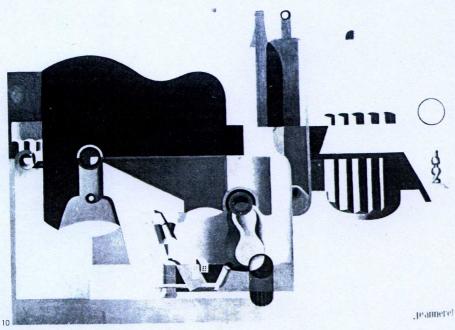


8, Juan Gris, 'The Watch (Sherry Bottle)', 1912, with 'Golden Section' triangles outlined, from 'Mathematics in Early Abstract Art' by Lucy Adelmen and Michael Compton in 'Towards a New Art' (London, 1980). Le Corbusier's interest in the Golden Section as a system of proportion is well known. This painting retains some of the chiascuro characteristic of 'Analytic'

9, Juan Gris, 'The Open Window', 1921. 'Synthetic' Cubism. 10, Charles-Edouard Jeanneret (Le Corbusier), 'Large Still Life', 1922.



THE ARCHITECTURE OF



made products). Rather, working hours should be shortened as far as possible by taking advantage of the greater productivity of the machine (and by abandoning the production of unnecessary goods mainly tools disguised as works of art). Increased leisure would then offer ample opportunities for self-expression through intellectual, physical, or social culture. These activities were no longer to be regarded as peripheral 'leisure' pursuits, but as the 'daily activities of modern man' 15 Equally the distinction between a work of art and a tool should not be blurred in design. 'Art has no business trying to resemble a machine (the error of Constructivism) . . . '16

But Le Corbusier was prepared to admit some gradations. He came to recognise the category of hand-made luxury goods, jewellery, fashion clothing as 'this manufacture which does not cater to a standard demand, but on the contrary appeals

to personal tastes...

These objects represent wants rather than needs. They share some characteristics of a work of art; they were entitled to draw attention to themselves and to reflect an individual sensibility. All artefacts had their place in a 'Hierarchy . . . (this channelling of one's attention only to those things worthy of it) . . . First of all the Sistine Chapel, that is to say those works that are forged with passion. Afterwards, machines for sitting in, for filing, for lighting, "type" machines . .

The role of a 'machine for living in' is outillage that of servant. Its duty was to make man free, free to live, free to think. And the city—'A town is a tool' are the opening words of The City of Tomorrow—had by extension the same role.

#### CULTURE OF CUBISM

The theory so far advanced questions, at least as regards the home, the very concept of architecture as an expressive art—a position at variance with Le Corbusier's practice. The anomaly was inevitably not wholly resolved. In Decorative Art Today he assigns architecture a category of its own, between 'a tool, that which gives service...
and 'a work of art...that moment of profound
discourse...' 'Architecture is an invention of the
spirit which gives material form to the sum
consciousness of its age.'

The machine was certainly chief exemplar of the contemporary spirit for Le Corbusier, providing a positive model for his architecture in many different senses, not all of which can be explored here. In formal terms, for example, it suggested the free composition of primary forms in space, to which his

'free plan' is analogous; and he often paradoxically saw the machine as analogous with the work of art itself. Like the object of beauty in Alberti's definition, nothing could be added to it or taken away without loss to the whole: 'The significance of the machine is that it rejects all parasitic organs, it tolerates only active elements.'20 In this sense he could describe his own

paintings as machines a émouvoir.21

Different meanings of the mechanical analogy, mutually contradictory though they might seem, had a common root in the inspiration of Cubist Art. The hierarchy of 'servant' and 'free', wherein the machine epitomised the servant, reflected the highly abstract and intellectual conception of the Cubist work of art. And the 'rationality' of Cubism suggested the spirit of the machine, and its spatial indeterminacy the intricacy of mechanical forms.

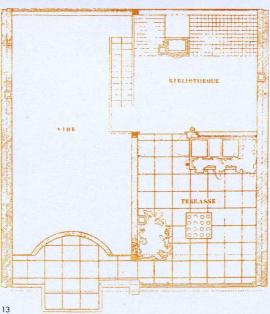
Cubism was described by its early apologists, such as Maurice Raynal, as marking a return to a 'conceptual' mode of representation from a 'perceptual'. The Perceptual mode, beginning with the Renaissance, had reached its apogee with

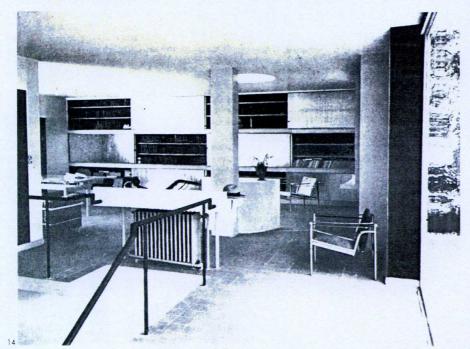




11, the Carthusian monastry of Ema in Tuscany (photograph by Stanislaus von Moos). Of all the monastic orders, the Carthusians attached the most importance to solitary contemplation. 12, 13, view and plan of the bibliotèque in the Maison Cook, 1926, isolated at the top of the house, with the roof terrace alongside. 14, the bibliotèque in the Villa Church at Vill d'Avray, 1928. Le Corbusier advocated the use of built-in furniture, such as these bookcases, wherever possible to reduce clutter, and it is from a discussion of the furnishing of a library such as this that the opening

quotation of this article derives.





Impressionism, when all the qualities of a single moment of perception were reproduced with the greatest sensitivity and accuracy. But the Cubists rejected as a basis for representation the particularity and transience of perception, in favour of the universality and stability of the image, or conception. They no longer wished to paint an illusion of one particular view of the world, at a single moment, with its multitude of incidental details, its transient pattern of light and shade, and its arbitrary viewpoint. They wished to paint the Absolute; to recreate the world with only the elements essential to their understanding of it, with the essential elements of form. They no longer wished to paint the illusion of a particular space, by the use of perspective, but to create an Absolute space.

Thus in Cubist painting, as in the work of Primitives, the universal 'idea' of the subject, and stable generalised geometrical forms had predominance over the perceived image. But the Cubists enjoyed a quite different command over their subject—its development being seen as analogous with the development of science. The art of representation was thought to have attained, in Cubism, the capacity to make a general statement akin to the general laws of the behaviour of matter enunciated by science. The period of the Perceptual tradition in Western art, culminating with Cézanne, had constituted a period of observation and analysis towards the formulation of a general theory. Just as a science, which has successfully established a general theory, can by deductions apply it to particular instances, the Cubist theory of representation, being founded in observation, could, it was thought, be applied deductively to the particular. The Cubist could create an image from the general theory that was purely personal, and in that sense, particular—on the basis of geometrical forms that were truly pure.

Juan Gris, whose work, perhaps even more than that of the other Cubists, provided Le Corbusier with a model of intellectual achievement, wrote in L'Esprit Nouveau: 'I work with the elements of the intellect, with the imagination. I try to make concrete that which is abstract. I proceed from the general to the particular, by which I mean that I start with an abstraction in order to arrive at a true fact. Mine is an art of synthesis, of deduction . . .

'I want to arrive at a new specification; starting from a general type I want to make something particular and individual...

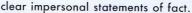
'Cézanne turns a bottle into a cylinder, but I begin with a cylinder and create an individual of a special type: I make a bottle—a particular bottle out of a cylinder.'<sup>22</sup>

To the extent that the Cubist approach to representation could be called deductive rather than inductive, it recreates the world in the light of preconceived formal ideas. It is inspired not by direct or violent contact with life, but by introspective reference to the concepts of the mind. In this sense, it was meditative. Subject matter was chosen for its stillness, it neutrality, its suitability as a vehicle for formal ideas; a still life or a single impassive figure was portrayed, like a specimen, without anecdote or emotion, but with the detachment of science. It was in this sense that Gleizes and Metzinger provocatively linked Cubism with the Realism of Courbet.

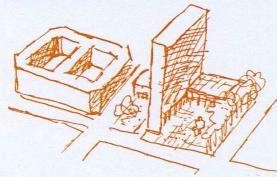
Le Corbusier's initial response to Cubism had been ambivalent. In Aprés le Cubisme, of 1918, written jointly with Amédée Ozenfant, he attacked Cubism as being insufficiently responsive to the new era. Its painterliness, its lack of spatial definition, its ambiguity of form (l'impressionisme des formes) were suggestive of romantic and decorative individualism. The era of science was the era of



16, 'Traditional land use in Rio (left). The new solution that has been found (right),' Original caption by Le Corbusier from 'Oeuvre Complèt', Vol

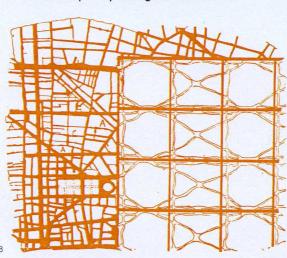


Nevertheless, Cubism represented a considerable advance. The conceptual mode of representation reintroduced to painting the possibility of a general statement, which was the true object of art, as it was also of science: 'Science and High Art have the common objective of generalisation, which is the highest ideal of the spirit.'<sup>23</sup> The narrow limitation of subject matter had allowed attention to focus again on form, and some first steps had been taken in reintroducing geometry to form, thus recognising the language of the contemporary world. It was precisely these, the 'meditative elements of Cubism which Le Corbusier and Ozenfant sought to develop in Purism, whilst rejecting what seemed anachronistic. They restricted subject matter still further to the most basic 'typeobjects', as being the most neutral, and reduced



formal expression to a vocabulary of flat coloured geometrical forms.

By the time he published La Peinture Moderne in 1925, Le Corbusier's public attitude had changed. He openly hailed Cubism as the harbinger of the manifestation of the old. By this time Cubism's position in the avant-garde had become insecure. Picasso had turned intermittently to a romatic Neo-Classicism. The first Surrealist manifesto had been published in 1924. Cubism, moving from its 'Analytic' to its 'Synthetic' phase, had become still lifes, but his work showed the most intense thought. The 'flat coloured architecture'—to use his own terms—of Gris' paintings has a solidity, a freedom from fantasy, and a power of expression that had much in common with the aims of Purism. and though he made no systematic use of mathematical methods, his paintings respond to some extent to geometrical analysis. He was an exact contemporary and good friend of



15, 'Radiant spring, winter storms'. From 'The Home of Man'.

new culture, rather than dismissing it as the ultimate more austere and geometrical—particularly notable in the work of Juan Gris. His subjects were mostly lyricism, seemingly fuelled by the very clarity of his He exhibited initially with the 'Section d'Or' group,

Le Corbusier, who many years later was to write of him: 'He was, as is clear today beyond all doubt, the strongest and the most noble of the Cubist painters.'24 Arguably, Gris' painting exerted the most marked impact on Le Corbusier's imagination, and accords most closely with his conception of a meditative art—a conception he expressed as follows: 'Today, painting has outsped the other arts (I mean of course the vital change brought about by Cubism . . .). It is the first to have attained attunement with the epoch. Modern painting has left on one side wall decoration, tapesty and the ornamental urn and has sequestered itself in a frame-flourishing, full of matter, far removed from a distracting realism; it lends itself to meditation. Art is no longer anecdotal, it is a source of meditation: after the day's work it is good to meditate. The need for such meditation was of crucial

relevance to the design of the modern home: 'On the one hand the mass of people look for a decent dwelling, and this question is of burning importance. On the other hand the man of initiative, of action, of thought, the LEADER, demands a shelter for his meditations in a quiet and sure spot; a problem which is indispensable to the health of specialised people.

'Painters and sculptors, champions of the art of today, you who have to bear so much mockery and who suffer so much indifference, let us purge our houses, give your help that we may reconstruct our towns. Your works will then be able to take their place in the framework of the period and you will everywhere be admitted and understood.'25

The reference in this passage to the particular needs of 'specialised people' (élites) reflects Le Corbusier's conviction, inspired by his rarefied conception of the work of art, that significant cultural activity would tend to be concentrated within an intellectual class—a far cry from Morris' popularising Medievalist conceptions. This conviction was to affect not so much his design of the individual dwelling, which varied little for different sections of the population, as his planning ideas. Both his early project for the City of Three Million, contemporary with the passage quoted, and his later Linear City project, were focused on a core where cultural life would develop. This, however, is not the case with the Radiant City, and in practice Le Corbusier sought to create conditions for all where 'meditation' was possible.

#### THE RADIANT CITY

If the term 'meditation' was therefore a synonym for the culture of Cubism, it should not be understood to carry the connotation of sombre or mystical introspection. It signified solitary, but rational and confident cerebration, colourful and lyrical, but also balanced and precise, like a 'Synthetic' Cubist painting. For the 'house-machine' to become a setting for meditation as thus defined, it had to provide peace, both aural and visual; it had to ensure privacy and solitude, but also order and light. It had to allow leisure, and finally, it should provide the inspiration of the beauty of nature. Most importantly, and problematically, it had to fulfil these requirements within the context of the dense city.

The contemplative ideal did not imply advocacy of a dispersed pattern of living. He accepted that the industrial revolution, on which rested the hopes of the mass leisure needed to permit 'meditation', was inseparable from urbanisation. The machine needed teams of workers, and was itself the product of many different skills. It was the symbol of achievement through collective effort. And the development of the arts, like that of science and technology, was the achievement not of isolated

17, 'This parallelepiped of streets and light wells, and this unique product, the corridor-street. The corridor-street, the

same in towns throughout the world, is the one plastic manifestation of town

planning.' From 'The Home of Man'

18, 'Here, as a contrast, is the road

configuration around Les Halles set against the road network of the Radiant City.' From 'The Radiant City'.

74 10

## THE ARCHITECTURE OF

In this article James Dunnett draws heavily on Le Corbusier's book The Decorative Art of Today, which he is translating for publication by the Architectural Press to coincide with Le Corbusier's centenary in 1987.

#### References

The author of all works quoted is Le Corbusier, unless otherwise attributed. Translations are taken from the published English editions where these exist; otherwise they are by James

1 Précisions sur un Etat Present de l'Architecture et l'Urbanisme (Paris: Crés & Cie, 1930), p116.

2 The Four Routes (London: Dennis Dobson, 1947), p161. Original French edition: Sur les Quatres Routes (Paris,

3 L'Art Décoratif d'Aujourd'hui (Paris: Crés & Cie, 1925), p101.

4 William Morris, 'The Aims of Art' (1887), from G. D. H. Cole, editor, Selected Writings of William Morris (London: Nonesuch Press, 1934), p600. 5 Ibid, p600.

6 Quoted in Nikolaus Pevsner, Pioneers of Modern Design (London: Penguin Books, 1966), p23.

7 Une Maison—Un Palais (Paris: Crés & Cie, 1928), p4.

8 L'Art Décoratif. . ., op. cit, p76.

9 Ibid, p1.

10 Ibid, p115.

11 Ibid, p76.

12 Ibid, p76. 13 Ibid, p74.

14 Ibid, p87.

15 The Radiant City (London: Faber and Faber, 1967), p152. Original French edition La Ville Radieuse (Paris

16 L'Art Décoratif. . . , op cit, p115. 17 Manière de Penser l'Urbanisme (Paris: Editions Architecture d'Aujourd'hui, 1946), p76.

18 L'Art Décoratif. . ., op cit, p77. 19 Ibid, p120.

20 Croisade, ou le crépuscule des Académies (Paris: Crés & Cie, 1932), p15.

21 'La Peinture', XXe Siecle, No1, March 1938, p31.

22 Daniel-Henry Kahnweiler, Juan Gris, his Life and Work (New York: Abrams, 1968), p193. Original French publication in L'Esprit Nouveau, No 5, 1921.

23 Le Corbusier and Amédée Ozenfant, Aprés le Cubisme (Paris: Editions des Commentaires, 1918), p39.

24 The Modulor (London: Faber & Faber, 1961), p218. Original French publication, *Le Modulor* (Paris, 1949).

25 Towards a New Architecture (London: Architectural Press, 1946), p23. Original French publication, Vers Une Architecture (Paris, 1923).

26 Letter dated 17 March 1930, published in Précisions. . . , op cit,

27 The Radiant City, op cit, p67. 28 L'Art Décoratif. . . , op cit, p185. 29 Letter of 17 March 1930, op cit,

30 The City of Tomorrow (London: Architectural Press, 1947), p177. Original French edition *Urbanisme* (Paris, 1925). individuals but, in a literal sense, of culture-of refinement brought about by collaboration and competition. Le Corbusier wrote to Moisei Ginsburg, who had advocated a programme of deurbanisation: 'Man feels the need to gather together-always, in all countries and in all climates. Gathering together brings men security in defence and the pleasure of company. But, when the climate becomes harsher, it stimulates industrial activity, production whereby men live (clothe themselves, win their comforts). And intellectual production is born of the labour of men working together. Intelligence develops, becomes sharper, broadens its scope, acquires refinement and variety, amongst peoples when gathered together.'26

Cubism was of course the archetypal example of a great cultural achievement born from the stimulus of the city—a city which had drawn to itself much of the genius of Europe. Completely the product of urban culture, it was 'bourgeois' in a literal as well, perhaps, as a social sense. Private and domestic in scale and subject matter, it was meditative, but it was also very much the product of that sharpening of the intellect which is the fruit

of the meeting and interaction of minds.

So the Radiant City's programme was: 'To a healthy body, to a mind kept in a continual state of activity and optimism by daily physical exercise, the city if the right measures are taken, can also provide healthy mental activity. This would take two forms: first, meditation in a new kind of dwelling, a vessel of silence and lofty solitude, grouping of creative impulses towards the public good."<sup>27</sup> secondly, civic activity achieved by the harmonious

Because meditation was first dependent on leisure, home life had to be made less onerous; apartments should be equipped with communal domestic services like those of hotels or liners. This was an attempt, ultimately realised to a limited extent in the Unités d'Habitation, to harness the benefits of collective effort, of 'mechanisation,' to the management of the home. But it also had a more spiritual model; it was first inspired, said Le Corbusier, by a visit in 1907 to the Carthusian monastery of Ema in Tuscany. Here the clear architectural expression of each monk's individual cell, the private seat of his meditation, and its relationship to the wider community of which he was a part, seemed an appropriate image for society as a whole. The community supported each monk in his spiritual endeavour. This was the kernel of Le Corbusier's social ideal.

If the home was designed to serve culture by saving labour, it was also to be equipped with features specifically designed to accommodate meditation. In the Unités every apartment was to be centred round a large, light, double-height living room, immediately suggestive of an artist's studio and the intellectual endeavour which that implied. The sheer uncluttered walls, the orthogonal geometry, the austere design of fittings, would all create an atmosphere of refined calm. The walls would be painted predominantly white: 'There may be some people who think against a background of black. But the work of our epoch seems to demand of us that we think against a background of white.'28 For the sake of quiet and privacy, each apartment was to be isolated acoustically from its neighbours by means of the most sophisticated constructional methods. It was a technical problem in which Le Corbusier took the closest interest all his life.

Many of Le Corbusier's larger apartment and villa plans contain a room specifically designed for solitary cerebration-remote from the rest of the dwelling, high up, and frequently (as in the Maison

Cook and the projected Maison de M. X, Brussels, 1929) equipped with a small terrace or balcony of its own, from which to gaze out to the horizon (AR March 1985). There is, even more frequently, a roof garden, one of the 'Five Points of the New Architecture', and a life-long preoccupation of Le Corbusier's. Its peace and solitude offered ideal conditions for communion with nature and the sky. Not only was nature an endless source of beauty, it was an inspiration to thought. He wrote to Ginsburg: 'Intimacy with nature (radiant spring, winter storms) is a stimulus to meditation, to introspection. 129

The desire to surround every home, indeed every building, with nature—'sun, space, greenery'—was possibly the most consistent and striking aspect of Le Corbusier's work. The Radiant City might be described as the only city where every inhabitant could be alone with nature. Continual contact with nature was made possible by a fundamental reorganisation of the relationship between buildings and land surface. What he termed the 'vertical garden city', attempted to combine the technology of the skyscraper with the landscape of a garden suburb. The development of the steel or concrete structural frame, and the perfection of the lift and other mechanical services, made it possible for the volume of a building, instead of being disposed as a band around the periphery of a site, now to be concentrated in a single taller volume across the middle of the site. This resulted at once in a radical change in the spatial nature of the city. Internal courtyards or lightwells and corridor streets (ruesfissures) disappeared. Streets became spatially very much wider since buildings no longer lined them closely, but were set back behind forecourts. More light and air could now penetrate both streets and buildings. The forecourts could support greenery. The outlook was no longer into dark and narrow clefts but into broad, tree-filled spaces. Buildings were further from the road, so there was (theoretically) less noise from traffic, and further from one another, so there was more privacy.

By freeing buildings from the street, the road could be specially designed to meet the needs of the motor vehicle: pedestrian segregation, limited access, and grade separation where required. The new arrangement also allowed a higher net density. The city, being more compact and having better internal circulation, would be more efficient as a 'tool' to bring about the human contact for production and the development of culture.

Le Corbusier also realised that in order to exploit to the full the potential of this new principle, it was necessary to increase radically the typical spacing of city streets—from an average of perhaps 40 m to 400 m. With this new size of plot, the planted forecourts became parks. Roads ran far from the buildings, isolated amidst the greenery. Buildings, raised three storeys high on pilotis, removed from the turmoil of the street, gazed out across a sea of green to the stillness of far horizons. Le Corbusier explained: 'Here is the CITY with its crowds living in peace and pure air, where noise is smothered under the foliage of green trees... Here bathed in light, stands the modern city. '30

Le Corbusier had thus devised conditions where every home would indeed be, in his expressive phrase, 'a vessel of silence and lofty solitude'. It would be silent, separated from the external noise of the city by distance, and from the noises of neighbours by elaborate techniques of insulation. It would be solitary in that its outlook would not be into a busy street, but into the stillness and emptiness of distance. It would be lofty-its outlook was one of Olympian detachment. And it would be open to the inspiration of the beauty of nature. In

such a home was meditation possible.