from much more intentioned manners than those of Gaudi, we recognize in his elaboration the feasibility of a programme, the pursuit of an order necessary to the understanding of such mixed references.

There subsists in fact a precise aim to dissect the historic-artistic fact. The many different political reasons to be found either in the determinant role of certain familiar potentiates (López, Güell) or in the contemporary political party and institutional strategies (Prat de la Riba, the Lliga, the Mancomunidad) the profusion of interactions with the literary culture of the time (Yxart, Verdaguer, Maragall), the active symbologies in the climate of the past, the Spanish doctrine in construction.

This strength and which inevitably end mixed references.

Attraverso una ricognizione critica sul ruolo corpuscolare, è qualcosa di concreto e misurabile e quantificabile, come ben si sa che Le Corbusier, anni dopo, rinnovò in una libreria della vecchia Patigi alcuni degli appunti che egli usava con astuzia. Fu così che riuscì anch’egli a controllare la luce con esatta precisione.

È che la luce è qualcosa di più che un sentimento, nonostante sia capace di suscitare emozioni negli uomini e di farli fremere nel loro istinto. La luce è, quindi, quantificabile e qualificabile, che sia che usino le tavole del Bernini o di Le Corbusier, la bussola, le mappe solari o il fotometro, plastici in scala o precisi programmi di informatica già sul mercato. La luce può essere controllata, domata, dominata. Il tutto è amore e ammirazione, è per l’uomo che si crea l’architettura.

La prova del fuoco (Sui diversi tipi di luce) Esistono molti tipi di luce. Vediamo alcuni; a seconda della direzione la luce può essere orizzontale, verticale, diagonale; in base alla qualità, possiamo distinguere diversi tipi di luce. Voi diamone alcuni; a seconda della direzione, la luce può essere orizzontale, verticale, diagonale; in base alla qualità, possiamo distinguere diversi tipi di luce. Voi diamone alcuni; a seconda della direzione, la luce può essere

"materiale" nella costruzione.

**Intorno alla luce**

Attraverso una ricognizione critica sul ruolo ricoperto dalla luce nell’architettura del passato, l’architetto spagnolo afferma la centralità di questo "materiale" nella costruzione.

**Around light**

Through a critical survey of the role performed by light in the architecture of the past, the Spanish architect affirms the centrality of this "material" in construction.

Alberto Campo Baeza

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La luce è materia e materiale (Sulla natura materiale della luce) Quando, infine, un architetto scopre che la luce è il cardine dell’architetturare, solo allora inizia a capire qualcosa, a essere un vero architetto. La luce non è un'entità vaga, diffusa, che si dà per certa perché è sempre presente. Il sole non sorge invece per tutti e tutti i giorni. Al contrario la luce, con o senza teoria concr *e* sa, è qualcosa di concreto, preciso, concreto, preciso, continuo, certo. È materia osservabile e quantificabile, come ben sanno i fisici ma sembrano ignorarli gli architetti. La luce, così come la gravità, è una realtà inevitabile. Fortunatamente inevitabile, poiché, in definitiva, l’architettura si è sviluppata nel corso della storia grazie a questi due elementi primigeni: luce e gravità. Gli architetti dovrebbero sempre portare con sé una bussola (per la direzione e l’incocinazione della luce) e un fotometro (per misurare la quantità), così come si ricorda no dal metro, della livella e del piombino. Se la lotta per vincere, per battere l’incantesimo, è qualcosa di concreto e misurabile e quantificabile, come ben si sa che Le Corbusier, anni dopo, rinnovò in una libreria della vecchia Patigi alcuni degli appunti che egli usava con astuzia. Fu così che riuscì anch’egli a controllare la luce con esatta precisione.

Effettivamente, chiudendo l’anello del Pantheon e le aperture della cappella della Tourrette avremmo posto fine al’architettura, e con essa alla storia.

La luce è materia e materiale
nulla architectura est
tects seem to ignore. Light as well as gravity is something unavoidable. Fortunately unavoidable by architects since architecture definitively moves through history thanks to those two primitive realities, light and gravity. Architects must always take a compass and photometer (quality and quantity of light) with them, just as they carry a metre, level and plumb line. If the light to overcome and convince gravity continues as a dialogue with it, giving rise to the best of architecture; the search for light and the dialogue with it is what makes common dialogue reach the most sublime heights. One then discovers the necessary coincidence that light is the only one which can truly overcome gravity. Thus, when the architect treps the sun, the light breaks the spell and light. An indispensable material would be missing.

If I were asked for three recipes to destroy architecture I would suggest covering over the central opening in the Pantheon dome, or to close the coloured openings which illuminate the La Tourette chapel. It, to keep rain and cold from entering the Pantheon in Rome the nearly nine meter diameter central opening that crowns it were to be covered over, a lot of things might or might not happen: its skilful construction would not change; nor would its perfect composition; nor would its universal function cease to exist; nor its context; Ancient Rome would know it (at least on the first night). The only thing is that the most wonderful trap that human beings have ever laid out for sun light even there. The more than concentrated space would have darkened and the monks would see with surprise how that luminous Gregorian chant would refuse to leave their throats. The monastery and architecture with it would have penetrated dark night. Covering the central opening in the Pantheon dome and patching up the cracks on the La Tourette chapel would mean we had put an end to architecture and history with it.

Light table

[On accurate control of light] Lorenzo Bernini, a light magician among all those there are, made his own tables to measure light accurately which were very similar to those now used to calculate structures: meticulous and precise. That master knew that light may be measured and classified, as all matter that is evaluated, and may be scientifically controlled.

It was a pity that on his return from that tiring and unfruitful trip to Paris to try to make the Louvre, his young and absent-minded son Paolo should have lost them. On the 20th of October 1665, Bernini was quite relieved to leave the City of Light which had treated him so badly, and to his terror, he realised he did not have his tables, which were more valuable to him than the Law itself. Searching gave no results. Chantelou, the punctual and punctilious chronicler of that French trip left everything related to that unfortunate accident out of his detailed narrative.

It is known that, many years later, Le Corbusier was able to obtain some of the key pages of that valuable manuscript in a second hand bookshop in Paris, and that he knew how to use it cleverly. Thus he was also able to control light with such precise precision. However, light is more than a feeling, although it is capable of moving men’s feelings and making us tremble in our innermost being.

The fire test

[On different types of light] There are many kinds of light and we shall speak about some of them now.

In olden days, when people needed to take light from above, they could not do it because if they made openings in the roof, water and wind and cold and snow would come in. It was not a case of dying to obtain that light. Only the gods in the Pantheon dared to do it. In their honour, Hadrian built a lofty architecture raised. Premonition of the achievement of vertical light. Thus, throughout the length of Architecture’s History light has always been horizontal, taken horizontally, piercing the vertical plane, the wall, as it is logical in that sun’s rays fell diagonally upon us, a great part of the history of architecture may be read as an attempt to transform horizontal or diagonal light into light that might appear vertical. This is what was achieved in the Gothic, which may not be understood as just the desire to obtain the greatest quantities of light but, fundamentally, how to obtain the most vertical light in this diagonal.


Above, Alberto Campo Baeza, interior of the Bank in Grazia in a photograph of the model: an example of diagonal light. Next page, below title, logo of the Institute of the Dure of Geneva; facing column, photographs and some of the symbols used to identify the material in a product and its responsibility. On page 80, New York, from Terrazzo, 6, 1991.
In this way during the baroque period they tried to twist light with ingenious mechanisms to convert horizontally taken light into a light that would appear, and could upon reflection sometimes be vertical light. With one more step more verticality than that obtained by the gothic. The magnificent transparent baroque by Narciso Tomé in the beautiful Toledo cathedral is a masterful lesson of what I have expounded.

With many lights at the same time (On the combination of different types of light within one single space) Just as Edison would later invent electric light Gian Lorenzo Bernini, greatest master of light invented something so simple and full of genius such as "Luce alla Bernini". Using various sources of visible light he first created a homogenous environment with diffused light, generally from the north, with which he illuminated and gave light to a space. Then, after centring it geometrically, breaking in at a concrete point, hiding the source from the eyes of the spectator, producing a cannon of solid light — Luce gettata — establishing it as the star of that space.

The contrast, counterpoint between both types of light, furiously tensing that space, produced a first rate architectonic effect. Solid light in visible movement dancing over an invisible diffused light in calm stillness. The appropriate combination of different types of light has, knowing them, infinite possibilities in architecture.

Finale (On how light it the theme) Finally, is light not the substance of architecture? Is the history of architecture not the search for understanding, and dominion over light? Is not the romanesse a dialogue between the shade of the wolls and the solid light which penetrates like a knife in its interior? Is not the Gothic, light's elation inflaming those unbelievable spaces into rising flames? Is not the baroque an alchemy of light where the wise mixture of diffused lights brakes through light, sure, capable of producing in its spaces indescribable vibrations? Finally, is not the modern movement, after throwing down the walls, such a flood of light we are still trying to control? Is our time not a time when we have all means available to finally dominate light? Depth reflection about light and its infinite ways must be the central point in the architecture of the future. If Paxton's intuitions and the successes of Soane were a prelude to the discoveries of Le Corbusier and of the investigations of Tadao Ando, there is still a long and rich road to follow. Light is the theme. When in my work I am able to make men feel the rhythm marked by nature, harmonizing spaces with light, mitigating them with the passing of the sun, then I believe it is worthwhile.