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Man as Measure

Human figure in modern architectural drawings

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Human figures are conventionally used in architectural drawings to visually express the scale of design space. Someone might generally affirm that their presence is a symptom of a particular sensibility toward human scale and needs, but during centuries human figures have played a number of roles not only according to the kinds of representation but to the different ideas about man. They have been accosted to architectural orders and overlaid to churches plan and facades by Renaissance architects to demonstrate the proportional relationship between human and architectural body. They have been inserted (sometimes reduced as a floating eye) to represent perspectival foreshortening and specific points of view. They have been used to visually measure archeological reconstructions as well as to maliciously oversize urban squares or metropolitan churches by Piranesi or Boullée. They have been ordered and multiplied to mark an important route through the building. Finally, their latent designing and communicative potential has been understood by XX century architects. Some of them tried to combine Ergonomics, diagrams and numeric proportions to achieve a general spatial defining system and used human figures to project themselves into the designing space. Others were inspired by painting, popular press and early comics to put in scene little stories describing urban scenes or modern man's activities. Since Le Corbusier's sketches this fictive role of figures has been increasing thanks to cinema's influence and photomontage practice, but few architects have expressed it better than James Stirling and his talented draftsman Leon Krier. While Stirling's famous isometric drawings are abstract schemes to express ideas more than spaces, his perspectives are invested by the task of telling stories through characters, actors and Stirling himself, of course.

Human figure; design drawing; Le Corbusier; James Stirling

I. HUMAN BODY AND ARCHITECTURAL BODY

We have to do a general premise. Human presence in a drawing can be explicit or implicit. Every perspective with a 160 cm high point of view implicitly conveys human presence inside the drawing: it recalls our daily experience and turns us into observers, watching the picture from outside. On the contrary orthographic representations or bird's eye views seem to conceptually exclude this occurrence. Therefore human body must be deliberately represented into the image to play its role.

But what role does the human figure play in architectural drawings? What does its absence do? Of course, the

representation of architecture is a too wide field of study to be described in a single paper. We limit our enquiry to the basic field of the design process, in its three key moments: the design sketch, the measured drafting and the presentation drawing (not to talk of working details drawings).



Figure 1. Francesco di Giorgio Martini. Torino, Cod.Salluzziano 148, fol.3. Fortified building plan with human figure, 1482 ca. (detail).

Human body and representation of space is an archetypical binomial. Human body's representations have always been used to describe quantity and quality of environment. Depicting human bodies getting smaller and smaller in the foreground has been a common strategy to suggest depth before perspective's rediscovery in Florence.

The architectural drawing – as we know it – begins in late XIV century and it has always been linked with the image and the study of human body. Italian artists were architects and engineers as well as painters and sculptors. For a very long time architecture has been thoroughly intertwined with images

of the human body as it was the focus of artists' enquiries, formerly as an expression of a divine order and lately as a wonderful mechanical device. It is often hard to say in many drawings where artists stop thinking of buildings and start thinking of human body. Even terminology demonstrates the osmotic relationship between anatomical and architectural speculations: *head*, *body*, *arm*, *wing* (and later *circulation*, *backbone*, *skeleton*, etc.) are terms borrowed by architects from the anatomical field to commonly identify parts and functions of the building.



Figure 2. J.F.Blondel, Cours d'architecture, 1771-77. Tuscan Entablature.

Antiquities and classical sources, such as Vitruvio's book, confirm the centuries-old bound between human body and architectural body: architectural orders constitute the most evident example as a result of stylization of caryatides. In the former treatises human body is often overlapped to architectural orders, as well as human heads are inserted in capitals. Francesco di Giorgio emphasizes that properly designed buildings must demonstrate the divine order enshrined in the human body (Fig.1). But he does more. When he drafts a human figure on a church façade, he demonstrates not only an implicit relationship between divine body and human building but establishes a possible set of proportions, gives birth to a long tradition of anthropomorphic architecture and attributes a human character to the building. This presence of human figures on architectural drawing shows both ontological and figurative values and can be classified in five different shades: *proportional system*, *analogical system*, *anthropomorphisms*, *optical correctives* or/and *instruction to use*.

Man has always been *measure* in artistic practice but Villard de Honnecourt's geometrized and idealized figures demonstrate how in XIV century yet the proportional canon preceded the perception and representation. On the contrary, Piero della Francesca, Leonardo and Dürer's anatomical studies suggest and confirm the possibility of extracting a universal *proportional system* from effective body's proportions in order to size every single part of a building and, at the same time, to relate it mathematically to human body.

At the same time, human body – as the whole Nature – reveals itself as an endless source of inspiration. *Analogies* between human body and architectural distributive and structural schemes advise another possible field of experimentation. This is true even for a single parts of body, such as head, eye, hand, organs, etc. "At one level, it is urged that the layout of the building matches the body part for part. Vasari, for example, in his recommendations for the design of an ideal palace, compares the *façade* with the face, the central door with the mouth, the symmetrically placed windows with eyes, the courtyard with the body, staircases with the legs and arms"¹.

Anatomical and physiognomic studies suggest to artists the possibility to attribute a specific *character* to a building through careful variations in proportion and form. This idea goes over the habitual identification of architectural orders with a gender, according to which the Doric order would be a male figure adapt to fortresses' doors and palaces while the Ionic order would be a female body useful to sign a church. A single part of human body can be used to size architectural frames and the character of a building can be influenced and modified by altering the size of the moldings to the appropriate human profile, as in a famous J.F. Blondel's drawing (Fig.2). But when Bernini draws an embracing figure to connote his oval *Tetrastilo Vaticano*, he wants to underline a further symbolic meaning activated by an anthropomorphic suggestion (Fig.3).

Sometimes human figure on architectural drawings can serve to study and to demonstrate the necessity of *optical correction* of parts of the building according to human effective points of view, often along a particular celebrative route. In these cases, an open eye may be overlapped to a plan or a section in place of the entire body.

Elsewhere human figure plays the role of the *instruction to use* to visually demonstrate the possible uses of space such as the human motion along the main route, the opening of a drawer or the activation of mechanical devices. Also in this role human body may be reduced to a single hand pointing to a direction or pulling some lever, but complete figures, that are expressive of occupation, use or human actions, can help to elucidate the effects that buildings have on people, as well as the important roles that people play in shaping their environments. But in this case it loses its function of allowing the observer to optically measure the space.

Last but not least, the *image of man* has a natural attitude to be used as an optical reference to measure the space, as well as to alter its perception. It is not alone in this function because trees, furnishings and vehicles may collaborate to space optical measurement. This attitude seems inversely proportional to its graphic definition and detail, as the more the figure is detailed, the more it suggests an additional fictive role in the drawing and may engage reader's body.



Figure 3. G.L.Bernini, Sketch for St.Peter's square, 1650 ca.

II. LE CORBUSIER'S COMICS CIRCUS

What about modern architects' drawings? It might be sufficient to evoke Gaudi's architecture to realize the deep and stratified connection with human body that XX century architects inherit from their masters. Somewhere human body keeps on inspiring buildings form, as suggested by famous photographs of the Hotel Astor's Beaux Arts Ball (1931) with architects wearing costumes representing their own buildings. But the architectural drawing changes deeply in XX century, together with the ideational and productive processes of architecture, that exclude ornament and human direct representations from buildings. Cubism masters, such as Picasso and Klee, cast a new light on the meaning of the word abstraction. While Mondrian extracts his grid from the branches of a large grey tree, Theo Van Doesburg starts from the drawing of a face or a dancing figure to obtain a neoplastic division of the plane, ready to become a colorful window glass as well as the plan of an experimental house (Fig.4).

Le Corbusier's drawings witness his attention to the ontological role of human body in architecture. We could cite a lot of examples, from Chandigarh's open hand as well as the hidden face in Villa Savoye's plan, as supposed by Luca Ribichini's recent book². Le Corbusier's huge graphic production offers a number of original figures engaged in daily activities. In the Artist's House perspectives (1922) we can see a painter working on a blank canvas in his atelier, while his torpedo car is waiting parked under the staircase, on the pilotis level. In the Wenner Geneve Project (1929), the loggia hosts a punching-ball where a boxer is training, observed by an elegant lady that is hanging a carpet on the handrail of the upper passage (Fig.5). "The lodging is there to receive and welcome the human animal, and the worker is sufficiently cultivated to know how to make a healthy use of [his] hours of liberty."³ Elsewhere we can see more usual scenes: children playing on a carpet, men working in the offices of Rentenanstalt (1933) or sitting around a table as in the houses for the Réorganisation agraire (1934); but the finality of the figures of his Comics Circus is clear: they must elucidate les modes d'emploi of Le Corbusier's innovative spaces.



Figure 4. T. van Doesburg, Studies for Rhythm of a Russian Dance, 1918.

Such figures seem to be strongly influenced by some books read during his childhood, in particular by Rudolph Toepffer's illustrated books, such as *Voyages en Zig-Zag*. Stanislaus von Moos has already remarked Jeanneret's early enthusiastic consideration of Toepffer's comics and the possible influence on his peripatetic conception of architecture⁴. Le Corbusier seems to adopt deliberately the language of the new popular media to attribute an innovative narrative role to his figures. This is thus the key to demonstrate the wide functional range of his spaces and to visually engage his middle-class potential clients in order to let them connote those industry-like and unattractive spaces.

Neither we can forget the importance of furnishings and objects. In Le Corbusier's theatrical sketches each detail becomes fundamental to tell a story able to grasp the curiosity of the reader and to help him to identify in those actors; nor we can underestimate figures and details' role to apparently oversize the space of his interiors. Le Corbusier is used to play with reader's perception and a number of his drawings are maliciously deformed to suggest rooms wider than they are. Smaller-than-real furnishings, objects and figures collaborate to get a Piranesi-like effect as well as to produce pseudo-panoramic views to see with the same modalities of a walk along the *promenade architecturale*⁵.



Figure 5. Le Corbusier, Wenner Geneve Project sketch, 1929; Modulor schemes, 1946-55.

Bodily presence, shadows and interaction with furnishing and objects witness a precise relationship of figures with the time. They are *here and now*, main actors of their own destiny, moving in an architectural frame optically manipulated to envy a precise idea of space. If compared to black shadows drafted by Mies van de Rohe in many of his American perspectives, they show the same consistence of the architecture they live. Instead Mies' phantoms appear like zombies standing still outside. They seem to belong to a different world and their only function is to oppose their ectoplasm transparency to the building's geometric purity and permanence⁶.

Modulor man has quite a different role and consequence in Le Corbusier's work. "The Modulor is a measuring tool based on the human body and mathematics. The height of a man with an upraised arm may be divided into segments at the points determining his position in space, his feet, his solar plexus, his head, his fingertips. These three intervals produce a series of the Golden Section"⁷. From its fully publishing and explaining in early Fifties, human figures on Le Corbusier's drawings have been acquiring the additional meaning of revelator of spaces proportioned on human body's sizes. After industrial and mechanical centrality of early Le Corbusier's

production, Modulor can be judged as an attempt to focus the architectural process back on the man, on his size, on his perceptive peculiarities in motion. Perhaps in Twenties Le Corbusier's replacement of the tall window with his *fenêtre-en-longueur* had asserted the end of human body's projection on the building façade, as claimed by Perret; but after decades of missing caryatides, ornamental oblivion and abstract elevations, in Fifties human figure makes its way back in the building, impressed on the concrete surfaces of the *Unitè d'Habitation*. But what kind of man is it?

After a long geometric experimentation, Le Corbusier settles the Modulor-man on a six foot tall (1.828 m) body, useful to answer to a number of designing problems. But it is a modern architect's common attitude to consider an average man during his designing. Modern architects' "conceptions of the body have their roots in the post-Galilean view, which conceives of the physical body as a machine and as a subject of mechanical laws. The body, in this view, is little more than an object with fixed measurable parts; it is neutered and neutral, that is, without sex, gender, race, or physical difference. It is residual and subordinate to the mind"⁸. Fordism and Functionalists in Thirties complete such a transformation to optimize human productivity inside the Industrial System as well as the *Frictionless House*⁹. As an economical resource, man is inserted in manuals as a graphic standard and reduced to a bunch of numbers, like size, strength, speed and resistance, to play a new role in the *diagram*. Generally white and male¹⁰ bodies are reduced to an outlined shape, even to an amoeboid form, or directly excluded from architectural drawings to exalt the ideal form of space and the industrial-like productive process of architecture. Rob Imrie argues that architectural standards' use divests the human body of its fleshiness in order to become an object that serves to highlight the qualities of architectural space¹¹

III. HUMAN FIGURE IN THE DESIGNING PROCESS

Between XIX and XX century modern architects established operative practices that attribute specific e differing roles to man in the three design graphic moments.

In the design sketches, human figure is absent during the plan definition of the parts. In those first moments architect's point of view is far away, to control all the building's articulations. Human figure is habitually introduced when an architect needs iconic verifies of exterior and interior spaces. Architect uses it to get aware of the actual size of space, but also to virtually explore and discover further uses and articulations of a room.

This is the *exploring role* of the human figure. It is remarkable in many Alvaro Siza's sketches, that seem to perfectly express the speed of a mind guided by imagination. The quickly drafted figure, visible in so many sketches, plays the role of architect's alter-ago: it works as an *avatar* through which the architect can mentally explore the design space, passing from the role of director to the role of actor. Its rough drafted definition exalts its tactile value and we mentally begin to run with it, just as Siza did while drawing it.



Figure 6. Alvaro Siza, Getty Museum Villa Malibù, Los Angeles, 1993; Museo del Parque del Oeste, Madrid, 1992.Design sketches.

In the drafting phase, an architect tries to translate his freehanded sketches into orthogonal measured drawings in a specific scale of reduction. Human figure has the role to help architects to define form and materials of those surfaces and objects which man is going to interact with.

This is the *ergonomics role* of human figure. If we compare drawings from different draftsmen, we frequently find body differences, for practicing architects consistently use the size of their own bodies as a reference for understanding the human body. Carlo Scarpa's *corpus* of drawings offers a lot of examples, as already described by Frascari¹² and Anderson¹³. Quite the same could be said for hundreds of Louis Kahn's sketches and orthogonal drawings, where a number of customized figures are committed to test a room, the light passing through a window or just a table and a chair, as we can see in a drawing for renovation of Radbill Oil Company in Philadelphia (1944-47; Fig.7).



Figure 7. Stonorov and Kahn, Radbill Oil Company, Philadelphia, 1944-47. Plan, section, elevation and details of boardroom table and chair.

The presentation of a project – the third phase of the design process – is usually afforded to models and perspectival views so as to encounter audience's expectations; but other representations may be used, where the presence of human figures plays a fundamental role.

This is the *explicative role* of human figure. Sometimes it is essential to illustrate the spatial properties of design space.

In many Claude Parent's pencil drawings of his articulated sculptural structures, human figures are rough but vital to visualize potentialities of what he calls *la function oblique* (Fig.8). Only figures succeed in suggesting slopes' physical and tactile attraction: they help us to feel that our body can never be indifferent walking or standing on those planes. It is called to an active role in keeping a position and, at the same time, is stimulated to assume unusual attitudes that may bring to a new way to socialize and to look upon the world.



Figure 8. Claude Parent, French Pavillion at Venice Biennale, 1969. Sketch.

Even if human figure may not be essential in architectural drawings, it generally produces beneficial effects on perception of design. Designed spaces can look more satisfying and meaningful for the reader if human body's interactions are anticipated and exhibited in the drawings. This is evident in the traditional practice of pictorial and photorealistic renderings that usually illustrate public projects. At the same time customized figural representations achieve a greater degree of relevance between the representation of the human body and the specific built environment. Gio Ponti's drawings for Villa Planchart in Caracas (1953-60) constitute an exceptional application of this principle to an architectural plan: they can even be assumed as a manifesto for the freedom of the graphic expression of spatial and sensitive values (Fig.9). Long shaped arrows indicate the main routes in the house while a number of centers are signed by human figures drafted as lying on the floor. They are opening doors, walking, eating or looking at internal and external points. The perception of such a drawing oscillates ambiguously between the horizontal and the vertical, between a plan and a vision of a sort of landscape with a number of persons living in.

In XX century many architects are inspired by artists as well as graphic designers, during the ineffable game of communicating vessels among arts. We could suggest a relationship between Giacometti's wired men and human figures drafted by Yona Friedman or, recently, by Kazujo Sejima. Another interesting tendency can be found in Alison and Peter Smithson's drawings. While their sketches show simplified humanoid figures, their perspectives are enriched through photomontage and collage practices (Fig.10). Van Doesburg and Van Eesteren's architectural rendering in 1924 already showed human figures cut from a newspaper and pasted on a painted perspective, but this kind of practice was limited to few artists hanging around the Bauhaus, such as El Lissitzky and Mies Van de Rohe.



Figure 9. Gio Ponti, Villa Planchart in Caracas (1953-60). Detail of plan.

In 1953 Alison and Peter Smithson seem full aware of the narrative potential of such a communicative technique. In a perspectival rendering of the so-called *Street in the air*, in the Golden Lane project, they overlap newspaper-cut-out figures on a delicate linear drawing. But those aren't generic figures: we can recognize Marylin Monroe and Joe di Maggio *pasted* in the foreground of the suspended street. This choice can be assumed as a symptom of a new way of using human figures in the architectural drawing. By recognizable figures, architects want to deliberately associate further meanings to their representation of design space. We don't know exactly which is the meaning but we ask ourselves for it, we look for it in other parts of the drawing for we perceive it as an evidence of a hidden plot.

Figure 10. P. Smithson, Golden Lane, 1953, Berlino-Haupstadt, 1958.



IV. STIRLING'S STRANGE SCENES

In the post-war years several architects seem to realize human figures' fictive potential for communication. Cut-andpasted figures are fundamental to Superstudio's surreal collages of anthropic landscapes. The corridors of Rossi and Grassi's Monument to the Fallen in the War (1965) are instead inhabited by black-filled figures appearing and disappearing from the view like shadows, reminding our condition of survivors (Fig.11). The curious figures that Richard Meier puts on the ramp of the perspectival section of his famous High Museum of Modern Art in Atlanta witness a very different story. They are dressed with elegant XIX century's robes, as if they were out for the Sunday walk on Main Street (Fig.11): along with the trees, copied-and-pasted from some Karl Friedrich Schinkel's engraving, their mission is to cast the modernistic building in the past and to demonstrate its public vocation to be walked as a street (Fig.11).



Figure 11. Rossi and Grassi, Monument to the Fallen in the War, Brescia, 1965. Perspectival section; Richard Meier, Atlanta High Museum of Art, 1980-83. Perspectival section (detail).

But if we are looking for an architect that was truly aware of the narrative potential of human figures, we must turn to James Stirling. His attention to people in the drawings emerges already in his graduating project for a Civic Center

(1953). The complex sections and elevations of the doublecourted building are full of little figures engaged in several actions. As in a humorous Mordillo's illustration, his figures are studying, dancing, watching movies, walking, sleeping: they play with the space and remark not only the official function of each room but a more general idea of freedom and enjoyment¹⁴ (an attitude lately common to other British architects as Rogers and Foster). Moreover Stirling uses little grey human figures and dashed lines in his study sections to control a number of building's aspects, such as relationships among different floors and between inside and outside, visual targets and fields and zenithal lights effects (Fig.12).



Figure 12. Stirling, Wilford and ass, Tate Gallery (Clore Gallery) in London, 1987. Study section of the hall.

Stirling is probably best known for his silent and lifeless axonometric worms-eye views, but we must always consider this kind of ideal drawings as a counterpoint of his perspectives conceived as a view into the design space. If the former drawings have the aim to synthetize the idea and to let reader's eye/mind move to collect building's geometrical and proportional data, the latter ones depict a moment of a daily life inside the building, like if watching through an open window. But it is never a generic human activity to be registered in those perspectives: we often come across special, something something that recalls us а cinematographic atmosphere.

Stirling was very fond of cinema. When he was young he used to watch two or more movies a week and somehow this passion has passed directly in his drawings, conceived as small, black-and-white movie scenes. We can admire his director's attitude in a drawing for the Lingotto's project in Turin (1988). The building is viewed through a train's window, while a glass of wine and a lit cigarette on the small table evoke human presence (Fig.12). In the Thyssen-Bornemisza Museum in Lugano (1987), the Scottish architect let De Chirico's silent figures *haunt* the closed rooms, while renaissance artists and their young apprentices wander around the lake, in Arcadia-like gardens full of sculptures and ruins.



Figure 13. Stirling, Wilford and ass, Lingotto Project in Turin, 1988 (Bird's eye view and Train view); Thyssen-Bornemisza Museum in Lugano, 1987. Perspectival section.

Sometimes Stirling reveals us all his delusion for a missed work by drafting his design for the Columbia University Chemistry Department as falling in pieces, in the tradition of John Soane's Bank of England drawing in ruin. Elsewhere Stirling assumes Piranesi's style to dress his project for the National Gallery's New Wing (1988) with an antiquity suite, in the background of a desert and semi-ruined square. A small bust in the left corner is the only human presence, near the plate with the Italian *dedica* engraved on.

As in Le Corbusier's views, Stirling's figures are drawn with the same black line and level of detail used for the architectural frame. They seem to belong to those spaces, but they invite the reader to a more personal connotation. In many of his perspectives we can sense that something is happening, that there's a plot linking together figures, objects and spaces. It is no more a strategy to educate people to a new way of seeing and living, as in Le Corbusier's sketches. It seems rather an optical strategy to psychologically engage the reader and to envy the message that such a building exists, is already inhabited and it's funny to explore. Moreover, Stirling is one of the few architects to be the main actor of his own drawings, thanks to his talented and ironic collaborator Leon Krier. In a famous perspective of the Olivetti Headquarters in Milton Keynes (1971), Krier draws himself as a statue and puts his Scottish master in the middle of the restaurant, sitting on his beloved Thomas Hope's chair, ambiguously hanging on the black line framing the view. Some years later Stirling appears in the perspectives of the Cornell Performing Art Center College at Ithaca (1983-88), walking with the drawings rolled up under his arm through the door. Mostly he he looks huge and smiling in the black-and-white picture cut-and-paste on the linear bird's eve view, standing proud like Verne's Phileas Fogg inside an hot-air balloon's basket flying over the Lingotto.

From Eighties on, Stirling's textures, shades and shadows have being often remarked by meticulous fields of pen dots, while human figures, formerly detailed in their robes and behaviors, start to be reduced to full darkened silhouettes, as in Nineties' last urban projects. In Scottish architect's last works something seems to have lightly changed. In the same years personal computers' advent had been changing the idea and the practice of the architectural drawing.

V. CONTEMPORARY COLLAGES

When I was a young student at Faculty of Architecture in Rome, I used to spend part of my summer weeks working as draftsman at the Studio Valle's. I remember the colorful competition perspectives made by Maurizio Cascarani on large lucid paper sheets, full of smiling persons drafted from his personal archive of fashion magazines. I still remember Valle's office drawers full of dry transfer sheets with people, cars and trees: they had been customized from Valle's sketches to reduce working times and to impress a recognizable signature on the final drawings. In those years the industrialization of architectural drafting had already allowed the passage from the manual copying to plastic templates' use, from photocopy and cut-and-paste procedures to Sixties' *Letraset* and *Rotring* dry transfers (Fig.14). Today the so-called informatics revolution has totally changed the practice of architectural production as well as of drawing. The present practice bases on on-line libraries of predrafted CAD or photographic figures, ready to be pasted both on elevation and perspectival views. At the same time modeling and animation software offer the possibility to collocate solid objects, trees and human figures in the tridimensional space of a digital model and to *render* them together with the architectural structures (not to talk of animation).

To place a man in a drawing is still a deliberate act showing a will to set a relationship between the design space and the physical and ethical human measure, but the diffusion of these new techniques is deeply changing a centuries-long relationship between architect and human body in design process. Contemporary architects' figures seem to "have lost any ontological dimension; they are simply a form of communication oriented to the common man and to the technician, or a formal representation to other architects of the possible problems of scale and dimension."¹⁵



Figure 14. The Human Figure Template; Letraset Illustration dry transfert.

We can quote significant exceptions, of course: Madelon Vriesendorp's humanized skyscrapers painted on a bed in *Delirous New York*; Hejduk's circus of architectural machines; Siza's sketches and anthropomorphic elevations; Gehry's *Ginger and Fred* in Prague or even Sean Edward Whelan's human bodies made of hundreds of small buildings, as an

architectural version of Arcimboldo's paintings. But we do perceive a general trend to neglect human body as a basic source of inspiration to architects.

If human figure seems to keep its original role in design sketches - meanwhile risen to an artistic concern - it is almost disappeared in the drafting phase that today is totally executed by Computer Aided Drafting software. The blank neutral CAD environment is congenitally refractory to references and human body takes no longer a visual part in the dimensional setting of human space. It might seem too arbitrary to establish a relationship between its absence and the minimalist and subtractive trend of interiors, but there are many evidences of a low consideration of human body (and feelings) by contemporary designers for they seem basically guided by optic purposes. Together with man's disappearing from this kind of drawings, handles disappeared from doors and furnishings as well as any human sign disappeared from magazine pictures. Moreover blob-architects' free-oriented curved surfaces often seem not to consider body size. Walking in Rem Koolhaas's Casa da Musica in Oporto (2005) makes you feel an intruder, like an insect creeping in oblique interstices or, in the best case, like a movie-hero approaching to villains on all fours in the metal air-ducts. This result is probably due to narrative and poetic reasons but those spaces produce weird feelings and a common wish to get out as soon as possible.



Figure 15. Adolfo Natalini, Church design, 2004.

Vice versa it is getting easier and easier to fill presentation drawings with crowds of figures pasted thanks to postproduction software as Adobe Photoshop. This may have disagreeable outcomes when figures' size doesn't accord with perspectival depth illusion, but it is stimulating the development of new ways to express architectural values to a wider target as well as by a sophisticated narrative use of human figures in architectural drawings.

Somebody can use this opportunity to pursue traditional goal as Adolfo Natalini of Superstudio in his church project at Venice Biennale in 2004. He uses Photoshop montage tools to overlap a free-hand sketch of human figure handing a model to a bird's eye digital rendering as an explicit homage to

Italian pictorial tradition (Fig.15). Mansilla+Tuñón's competition renderings offer interesting examples of adifferent use. The Spanish architects usually present geometric perspectival renderings, with a careful use of shadows and textures. The final images are often closer to a manual paper collage than a photo-realistic rendering. They coherently host few human figures cut-and-pasted from black-and-white pictures, with the basic mission to enhance the depth effect. But among them, like in the Smithson's precedent, we can recognize someone well known. We can see not only the German artist Joseph Bueys walking toward us but, above all, Le Corbusier - lui-meme - standing and watching around (Fig.16). If Mario Botta uses to complete his sections with small Modulor-men to express the proportional and philosophical source of his spaces, Mansilla+Tuñón virtually call their putative mentor to play a cameo in their scenes. Le Corbusier's picture represents an affectionate way to establish a continuity between their work and his architecture: a way to declare their cultural roots and to give the reader a key to understand their designing process.



Figure 16. Mansilla+Tuñón, Royal Collection Museum en Madrid, 2003. Competition rendering.

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