Magalhães + Providência Dreamed Gestures: A Case of Architectural Design Communication through Drawing.

Abstract

Here, we aim to discuss that which generally refers to the contribution of drawing in the understanding of the design project, and particularly in relation to its communication in architecture. From a heuristic perspective, it is accepted that drawing recreates 'ways of seeing' which facilitate the project. Through its functions in supporting and stimulating the idea, throughout the project, drawing contributes to the idea's development in accordance with the stratified process of design.

We present a case study of project communication by considering drawings by the architect Rui Pacheco (1929 -) which were created in response to a commission from renowned Portuguese architects in the second half of the twentieth century, in order to provide a three-dimensional prediction and to commercially communicate architectural projects among promoters.

Anticipating three-dimensional modelling with digital technology, Rui Pacheco constructed images through a complex methodological process which departed from the two-dimensional representation of the project, in favour of a three-dimensional model which would serve as a blueprint for the new two-dimensional images – such as with European painting in the seventeenth century.

In this case, the representation exceeds the functional consideration of the project, in that the modes involved in the drawing participated in the idealization of the *heterotopic* representation, steering the perception constructed by the public, users or by the designers themselves.

Through this research, we aim to contribute to critical debate and to the multidisciplinary nature of drawing, design and architecture, intersecting the practice of drawing with the project, so as to encourage an understanding of the interdisciplinary potential in generating new ideas and solutions which the project seeks to address.

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1. Introduction

We aim to present that which is generally referred to as the contribution of drawing in understanding design and particularly the communication of the architectural design. The analysis of the images that we display here will be considered according to this principle.

Even without claiming its formal classification or semantic valuation, we will see these drawings as the centre of a possible visibility in which Drawing is close to the discipline of Design[1].

As a subject (formal object) drawing is considered as the construction of imagery, i.e. resulting in an action materialized either bi-dimensionally or three-dimensionally and visually inscribed. Therefore, the graphic shapes characterized by formal content enable, manage and resolve the representation of the idea. From the perspective of design it is a clarifying iconography (concept / knowledge) through the action (symptomatic / symbolic) of drawing.

Thus, drawings are capable of symbolically representing the project, mediated by the technique chosen by the author; drawn images interpret the architecture as an ideological entity, which associates the desire with the symbol.

Various dimensions may be observed in the drawings of Rui Pacheco, which begin by responding to the necessity of attributing visibility to the architectural project, featuring a cinematographic narrative which anticipate the *heterotopic* experience of architecture, graphically shaping the perception of the target audience, the user, the entrepreneur or the project manager.

The work of this architect/draftsman is of particular interest in relation to drawing due to its link with architectural activity, at the turn of the millennium. If, on one hand, the unusual peripheral manifesta-

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1   Contrary to the English language, the words *'desenho'* (drawing) and *'design'* do not have distinct translations in the Portuguese language. In the Portuguese language *'desenho'* (drawing) is a much broader and comprehensive concept than in English. Whereas in English *'drawing'* is mostly the approximate relationship between graphic representation and reality, in Portuguese *'desenho'* also includes reflection, knowledge, idealized projection, etc.

'Desenho' (drawing) resulting from de action of the verb *'desenhar'* (to draw) means, simultaneously, intent and image. It is the translation of the Italian *'disegno'* which word had its origin in the Renaissance, in Italian language born in Tuscany, and not in Latin (disseminated through the Accademia delle Arti del Disegno, in Florence, in fifteenth century). *'Disegno',* means the wide projection (planning) of the whole, as conceptual project. Hence, approaching the word *'design'* in English.

Fig. 1- Pacheco, Hotel Parque de Lassalete, graphite and black indian ink on tracing paper, 380x602mm

Fig. 2- Pacheco, Cedofeita Shopping Center, 1976, graphite and black indian ink on tracing paper, 405x437mm

Fig. 3 - Pacheco, 1991, graphite, black indian ink, color pencil and paint on tracing paper, 305mmx1055mm

tion can justify its contribution to global knowledge, conversely we can also find evidence of an unexpected originality, which arises from the mythologized existential experience of the author himself, using drawing to revive an archaic culture, with props that resist the new, brings us back to the past.

2.   *Methodological evidence of the Images*

Returning to Hans Belting's concept regarding *image-medium-body*[2], the images exist through desire, idealized through a medium of technique controlled by the body's intention. "The images (...) do not exist by themselves, but happen / succeed / occur, take place, whether treated as images in motion (in which case it is obvious) or whether they are instead static images". (Belting, in Pinotti, 2009: 75).

As H. Belting states, the difficulty in distinguishing '*how*' from the '*thing*' constitutes the true essence of the image. The '*how*' is the way (the medium) by which the image is known by the body (designer, drafts-

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2 the study of images proposed by Hans Belting departs from the presumption that the concept of the image can not be adequately understood without the reference to two concepts which, with the image, comprised a fundamental triad: medium and body. The medium is what makes the image visible and by which it can be reported. The image does not exist without a supporting medium. According to Belting, this results in a distinction between mental images (from memory or imagination) and material images (a picture or a photograph). Although the first are in reality linked to a medium which is our body, due to what we perceive, remember, imagine, produce and report all kind of images. "(...) the images live in their medium just as we live in our bodies". Hence, body signifies the body which reacts when the body perceives. Hans Belting in Pinotti, Teorie dell'immagine, Milano, Raffaello Cortina Editore, 2009, p. 73-75.

man or observer) and which, in its way, becomes the '*thing*', according to a culture. In the present case, the '*thing*' becomes the drawings of the architect Rui Pacheco.

However, the medium enhances the visibility of the images should not be confused with the technology in which the medium is found. For example, a technological image can be an immaterial image (without a body), but when the technological medium gives body to the image, the image becomes a material image (shape). The medium is therefore something that materializes the making, proceeding from the action of the body. Therefore, a drawing is 'more' than an image (when it does not yet have a body). A drawing is a material object that results from the operability of making related with a medium, whether technological or not.

The drawings of the architect Rui Pacheco introduce architectural space and in doing so also represent it. This duality, of the perceptive and the imaginative, is embodied in the drawings of this author. Their presence and permanence in a stated context ensures the figuration of their history through memory.

With regard to the issue of consideration and reading, and recognising that the state of visibility is contaminated by speech, we also know that images are therefore 'tainted' by the explicitness that we seek. The ways in which the sign appears differs according to the clarifications of the images, but also according to the degree of knowledge/experience that we have about them and the reasoning that we are able hold about the images. The syntactic framework of signs and their iconographic references provide formal approaches and contents which according to their fruition. The interpretation of these drawings results from the ordering of signs and the articulation of legibility - namely, the signifi-

cance stated and instructed by the intent of the program. However, this interpretation also acquires signification through the formal situation in which the image is shown. In the first case, the participation of the elements is structural, ruled by contents, in the second case, the presence is the signs provide the shape. The first case tend to be associated with the functionality of the design (architectural communication), the second scenario is usually linked to the artistic need by which drawings are embodied. Hence, the function of the first corresponds to rational rhetoric (rational understanding linked to contents), whereas the second is closer to visibility according to narrative empathy (visual understanding linked to signs). Signs are never 'pure' visual elements, but rather combinations which bring significance and are hence precarious in terms of stability as they require a receptor which turn them in to visible (arte)fact

2.1   *Creative paradigm*

Overall, we seek to understand and considering the author's creative paradigm through their drawings as part of the architectural design. In these drawings project representation refers to a mimesis which is not simply imitation, but rather a particular form of poiesis. Poiesis in this case is an action of doing (a way of making), following the preservation of continuity with communication with the culture to which it belongs.

Hence, we aim to identify these symbolic drawings, situations and the paradigmatic structures of authorship which are unified in the significance of the work. In our analysis of the architect, Rui Pachero's drawings, the expression of his instrumental practice as a process is more important than knowledge of the technical rules.

This means that the external inputs, experienced by the individual subject, are incorporated into the design contributing to its development and implementation. In this case, drawing is an activity very close to the concept of praxis. Praxis is understood as somewhere between ideas and nature, a vehicle which unifies these oppositions. Therefore, isolating the function in practical nature of form is a way of reducing the experience of the drawing. The meaning of drawing goes beyond the definition of its program.

The traditional meaning of creativity based on praxis as poetic knowledge (tecnné poietike) was, in contemporary times, replaced by instrumental rationality of theoretical knowledge (tecnné theoretikè). From our point of view, the degeneration of practical activity in favour of instrumental technique was achieved by an assertion of power, creating profound cultural adulteration. Thus, we anticipate that the analysis and interpretation of these drawings is a means of acquiring knowledge from a preferably manual and heuristic practice, in other words, the revelation of an original thought, a brand identity. As stated by Vesely, "identity is not a property of things or structures; it is constituted in the continuity of references to the ultimate sameness of the most regular movement in reality as a whole." (Vesely, 2004: 79). In fact, the author Rui Pacheco accomplishes something new in the execution of his drawings, concerning technique and the discussion of the form. In this way, the identity of this author happened through the process of transforming the world through critical ambiguity (memory) witch origins the 'herein' of drawing's creation.3

Thus, the cultural expression perceived and made explicit by the author

Fig. 4 - Pacheco, Praia da Agudela Building, graphite pencil on thin tracing paper, 358x863mm

becomes empathic experience. The body of the author is present in the empathic mediation of drawing which is developed through the materiality of the instrument, through sensory and cognitive manipulation.

2.2   Models

To interpret a drawing is certainly a difficult task, as it is always linked to a subjectivity although neither is it arbitrary. The hermeneutic activity of drawing, whilst interpreted according to the meaning of graphic language, is directly linked to the message, consistent with the rules of a particular epoch, but particularly in reading what makes these images. To aim interpreting the drawing, it is first and foremost necessary to realize the possibility of its exception, to endeavour to find the gesture that indicates the "detour", to achieve the new – the graphic sign which marks the foresight of a fact, the feature which invokes figuration. All this is 'to see what has been seen' by the author, but also 'to see what has not been seen', as the possibility of seeing is different for each person and hence all who see a drawing will see something different.

The drawings are graphics feature – marks – roughly inscribed on paper. They depend directly on the author's observation in relation to the ability to see and understand, promotes what Cicalò called "archives of knowledge." (Cicalò, 2010: 40). These results from the quantified qualification of seeing, associated with the instrumental capability of research and experimentation of the drawing. Therefore, the scope of drawing is given in the drawing itself, and in the case of the architect Rui Pacheco is almost unlimited. There is a mental and physical capacity, because drawing needs the action of the body in order to be fulfilled.

A drawing requires the energetic availability of the body: alternating rhythms (slow and / or fast), as the expression of the mind and body are revealed in the drawing, the range of which will ultimately be communicated. In this case, the ability to communicate the architectural design drawings, will become perhaps more 'immediate' than artistic drawings, because in the second case, the perception of the object is usually easier to 'identify'. The design cycle, in its connection with drawing, takes 'shortcuts', by means of a more 'concrete' design representation which is clarified by the program. This does not mean that, in avoiding strictly programmatic forces, the author does not find motives for design.

These drawings, understood as architectural design communication, still raise the question of effectiveness as a skill

(mastery and use). The availability of these drawings depends, of course, of being-skilled, not according to rules defined by the corpus of the Drawing, but rather by its capacity to represent the ambiguity establishing with the project. In fact, the effectiveness of the communication of these drawings reveals itself more in hypothetical "cheating" than in the skill of realistic resolution.

Fig. 5 - Pacheco, Cairo Building, Egypt, graphite and black indian ink on tracing paper, 635x750mm

Hence, these images (drawings) are design material par excellence, not only in terms of the validation and evaluation of the project, but also due to the fact that they evoke, organize and imagine the architectural design project, which can be an active milestone of subjectivity, acting and integrating those which 'attend'.

Fig. 6 - Pacheco, Cairo Building, Egypt, graphite and black indian ink on tracing paper, 848x583mm

3.   Case Study: drawings by Rui Pacheco (1929 -)

Drawings by the architect Rui Pacheco (1929-), dating from 1959 to 1990, were principally motivated by financial and economic requirements, as a consequence of being newly married and needing economic independence. He moved to the city of Lisbon (St. Amaro de Oeiras) in search of new job opportunities, hoping to better exploit his talents as a gifted draftsman after having graduated in architecture (from School of Fine Arts in Oporto, 1970) at 41 years of age. As examples of his architectural designed and built projects from scratch are rare, his work essentially comprises the extension and enhancement of existing buildings (such as the Church of Joane, Famalicão; the expansion of the Church of Maximinos, Braga; several residences, etc.) and hundreds of drawings visualize and scenically communicate architectures proposed by other authors.

Fig. 7 - Pacheco, Pacheco's student project, graphite pencil on thin tracing paper, 750x930mm

His architectural drawings soon drew the attention of large organizations, project offices, speculators and developers. His first challenges in urban design and architecture, with aerial views integrated into natural landscape (CUF marine, for example) took place in Lisbon, but it was with the architects of Oporto, where he returned in 1961, that most of his work was completed, designing for architects such as Fernando Távora, João Andersen, Joaquim Sampaio, Carlos Loureiro, José Pedras, Carlos Garcia, Rica Gonçalves, Luís Praça and João Castelo Branco, and Rogério Cavaca, amongst others: these are the illustrative images on which we will focus.

Fig. 8 (top)- Pacheco, Foz Building, graphite, black indian ink, color pencil and crayon on tracing paper, 410x555mm

3.1   Dreamed gestures

In a personal interview, Rui Pacheco knows the many hours he spends as a keen cinema-goer as the principal factor which influences his graphical work. He explains that he enjoys viewing a world recreated and staged by set designers, lighting technicians, producers and photographers, then compiled and given sound by the director, creating – on the large scale which is cinema – a world of landscapes which will always be subject to the deformation of conical perspectives and the dramatic density of the scenes.

In fact, what Rui Pacheco seems to want from his architectural designs – apart from the including perspective in buildings (still only imagined) integrating them into urban or rural landscapes, as he reveals plans which augur municipal and public approval whilst fulfilling their functions – is the recreation of emotionally charged scenes, repeating the typical citizens (the worker in a rush, the couple in love, the middle-aged dilettante and others), as they unfold themselves, between the density of gloomy (intensified) skies, and foregrounds that are framed with flowers, on which the argument of visible action is focused.

In acknowledging suggested alterations, or even in changing some of the architectural projects entrusted to him, Rui Pacheco, always draws another project, a place of immersive *heterotopia*, carefully and technically mended, whereby each viewer is invited to partake in experiencing an epiphany.

Through shading and scratching with 0.13mm thick nib, volume is restored to the forms of architecture, emphasizing the convergence of vanishing points, saturating the image with a detailed description that appears to result as if completely by accident. The exertion, physical and of the retina, which contributed to today's clinical blindness, seems to be the result of a stubborn form of repressing natural chance

with artificial drawing, although, paradoxically, the nature represented considerable space in Pacheco's drawings, particularly through marked by the drama of the skies and the lush flora.

The technique displayed by this author, from assembling models of buildings on cardboard, photographing them from carefully selected viewpoints, served as the basis for the detailed design process with the ink pen. At this stage of drawing with the pen, it was possible to correct the vertical perspective. Using transparency and taking advantage of the strength of paper with a high gram weighting, the author developed the use of black line and watercolours to show depths, objects and skies. The resulting technique involved using plastic paint white as the medium, scraped with graphite or a blade. The surprising results of this pictorial work were later photographed for the typographic reproduction and its integration in promotional material.

Iconographic details of the constructed images, allow the return of the author to a space-time of ancestral rurality, simultaneously integrated in the urban environment, a discredited modernism, with models of archaic cars, characters with theatrical poses and gestures, environments saturated with unusual props, constructing an artificial and ornate whole, displaced from the time during which the images were produced. The anachronism of time and fashion justify an autobiographical centrality that imposes itself as a work of poetry, a heterotopic motor for the production of these images. In fact, the author supplied the answer in response to the demand for the construction of an intimate object, whose artistic production is disconnected from a mere preview of architectural approaches, close to an empathic welcoming space to be shared with the observer.

The technical feature applied in these drawings, apparently masked by the terms of the commission, seems to respond to the author's inherent need for living nature, ecologically corresponding to the exercise of its environmental adaptation to the world. If the technical feature shadows the distance, in this case, conversely, it encourages the proximity of empathic experience on the territory.

Hence, it is perhaps possible to compare and find similarities between Pacheco's drawings with those from earlier epochs, such as drawings by Frank Lloyd Wright in the 1940s and Richard Neutra in the 1950s, although there are also distinguishing features.

The idea of architectural ecology invoked by Pacheco's drawings always considers nature as an indispensable factor for human balance, present in various plans of the landscape – or as the heterotopic setting

Fig. 9 - Pacheco, graphite, black indian ink and red pencil on tracing paper 250x597mm

required to balance his own soul – is consistent with the idea presented by R. Neutra in his book, Survival Through Design (1954), in justifying biorealism: "It has become imperative that when projecting our physical environment, we consciously consider the question of survival in the broadest sense of the term. Any project that confers or imposes excessive strain on the natural human must be eliminated or modified in accordance with the requirements of our nervous system and, more gradually, from all our physiological activity." (Neutra, in Pereira, 2011: 212). The implicit position in these discourses considers architecture (and design) as therapeutic agents for a supposedly dysfunctional artificial system (against nature), regulating or normalizing it, and consequently, drawing recognizes as a supra-functionalist function of holistic order.

3.2　　The dream of achieving reality

The drawings created by the architect Rui Pacheco personify an ideal of space and time, close to that which Michel Foucault defined as *heterotopia*. We are not facing a utopia that idealizes and 'softens' a certain space and time, giving them idealized and proclaimed characteristics at the edge of a concrete territory, but rather in a *heterotopic* dimension where the correspondence between idealization and territorial realization seek a place of existence.

Drawings according to a commission whose function is project-disclosure are interpreted as ground of projection, idealized in their contexts and realized in the drawing place.

According to that which M. Foucault defined as heterotopia, these drawings constitute the possibility of representing a 'counter-space'. "Children are well aware of these localized utopias. The distant angle of the garden, the attic, or better again, the Indians tent in the center of the attic, and finally, on Thursday, after lunch, the parents' big bed. "(Foucault, 2004:13). Rui Pacheco's drawings are also real places, implemented in the drawing through the physical action of the scratching material on the paper, created beyond the likelihood of the built world in reality; they will, therefore, be "mythic and real contestations of the space in which we live." (Foucault, 2004:14).

In this case, the representations made by Pacheco comprise the most pure and constant *heterotopias*, alternatives that overcome the fiction of representation and the constraints of the commissions from which they originated.

The author does not attempt to give the body a utopian idealization of reality but instead seeks to encounter another reality that in another place, inscribes the body in the object-design. In these drawings, the places and the characters seek to ascend to the real. The places are materialized in the representation of various architectures and their characters inhabit us. In association with the drawings, the characters are identified (appearing with warning or inadvertently), and as they are recognized they are consolidated, evoking the universe of comic-books and cinema, thus humanizing places – places 'elsewhere' to which we are carried or are caught. These forbidden places, reserved for the social treatment of individuals in crisis (mental patients, prisoners or, generally, all those to whom deviant behaviour was attributed) are now replaced by the promise of pleasure that images generically advertise. As the ancient places of heterotopia are disappearing (such as the asylums, hospitals, prisons, the barracks, boarding schools, homes for women in the menstrual period or at the time of puberty for boys of primitive societies), the division of 'elsewhere' will be incorporated. Paradises are proposed and socially sanctioned, such as closed condominiums or spas or the cinema and the new interactive environments where images are created for the viewer to submerge in them.

The atmospheres created by Rui Pacheco in his drawings have a 'paused' relation with time. It would not be possible to identify time, because it is present as a purifier of the action. Time 'eternalizes' because it infinitely repeats a perpetuating action, intended to cancel or compensate the reality.

Fig. 10 - Pacheco, Hotel Parque de Lassalete, graphite, black pen and indian ink on tracing paper, 380x605mm
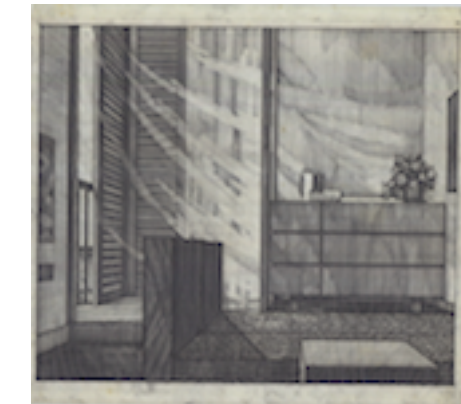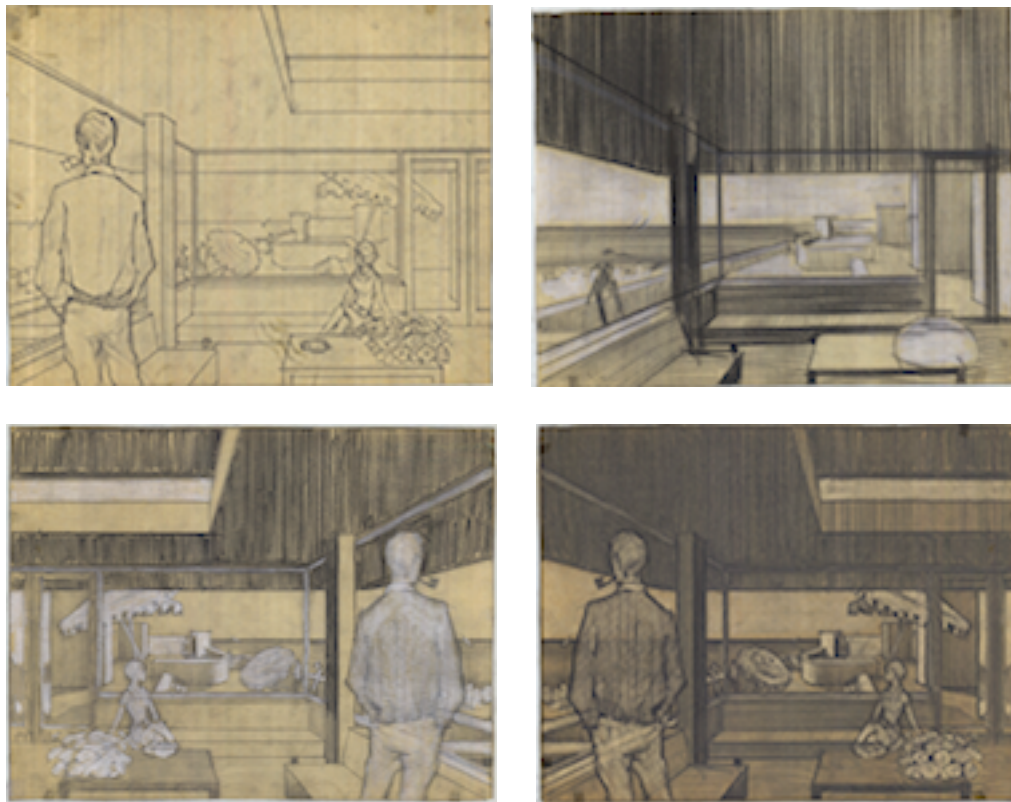

Fig. 11 - Pacheco, Hotel Garrafão, graphite and black indian ink on tracing paper, 498x545mm

4.　　Conclusion

With regard to the idealized asceticism, these drawings hold the power to denounce reality as illusory reality, building a constant idealization of the world. To represent the pacification of an articulated and orderly existence, they appeal alternately to the chaotic and unruly world assigns meaning to them.

We look at these designs with the fascination that causes us to see the disordered existence through images that make us dream of the possibility of a place of relief. The reality of the dream departs from utopia when it seeks to be a substitute for reality. Due to their heterotopic condition these drawings question, unsettle reality, compensate for it, neutralize or purify it. These drawings establish the discontinuity between the visible and matter.

That which appears more relevant with regard to the architect, Rui Pacheco's perspective drawings, is not original technology, invented by himself to carry out architectural graphics, nor the heterotopic environments with the social exceptions in their parts, but rather the poetic emergence of his own experience that contaminates the perception of his production – old environments with characters whose narrative escapes the domain of normal trading standards, indifferent to their target market.

Figures 12-1; 12-2; 12-3; 12-4 - Pacheco, Hotel Garrafão, graphite and black indian ink on tracing paper, 408x532mm

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