

Directive Disorder: Pursuing Architectural Attention

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For every individual, there passes, unknowingly, an endless succession of subconscious stimuli, a provocation of thought, memory, and feeling by the physical experience of sights, sounds, and surroundings. Contained within that moment is the individual's choice of value, of prioritizing one thought above another, of judgment, to compare and contrast the objects within one's company, of interest, where one may or may not deem thought worthy of conscious awareness, and of memory, by which an individual will relive the moment, even once it has passed. Ultimately, there exist variable degrees of this attention, and inevitably, the demanded effort to channel independent thought amongst a shared reality. The human mind is profoundly shaped by what it imposes on itself. An individual's understanding of its focus, and, by default, its lack of focus, therefore becomes vitally important in the architectural realm. Plagued by the standardization of a population's expectations to see and be seen, to hear and be heard, to notice and to know how to respond to any given circumstance, the selective attention of the human species is an innate solution. In the moment-by-moment management of a population's widely and abundantly shared experiences, the ability to tune in and to tune out has become absolutely necessary for the progressive functioning of society. Architecture, however, seeks out the harmonies of everyday life, the ideal blend of worldly chaos and mental order, the internal and external stimuli that can, when brought together in the right way and at the right time, form a new and unparalleled understanding of a space and of an experience. For a population that thrives on routine, that grows accustomed to habit, and that comforts itself on the assumption that they both know and notice just about everything, architecture introduces the theory of difference, the disruption of a visual stereotype, and the interruption of a preconceived idea.

ATTENTION

Consciousness

"It is the experience of the world that puts us in a position to think about it. Without experience, we would not know what the world is like."¹

From the vast landscapes of the natural environment to the anthropological manipulations of an occupiable surface, it is within the human framework the capacity to perceive one's surroundings, and to do so regularly through the decision to tend to, neglect, or engage with the surrounding stimuli. These stimuli would include any form of physical or audible sights, shapes, objects, colors, people, places, and things. With the interaction of these stimuli, the foundations of an experience will form, and the individual's experience will be entirely unique as a product of the varying degree at which it was perceived. There is essentially a range of wakefulness, from those behaviors deemed exceptionally attentive, such as studying and writing, to the least attentive subconscious tendencies of breathing, walking, and blinking. As part of the constantly evolving cycle, it is likely that future generations will continue to refine the conscious mind, developing knowledge more appropriate and more efficient to engage with differential context.

As Robert Solso defines the term, consciousness is a "state of attentional wakefulness in which one is

immediately aware of his subjective sensations."² The intuitive belief is that humans understand the way they think, behave, and react. Generally, they assume to know and notice just about everything and to capture in their attention the presentation of distinctive or unusual subjects; the proportion of true sensory intake to assumed informational processing, however, is really quite imbalanced. The individual experiences far less of their visual world than they think they do.

Despite the freedom to focus and despite the individual's unique deviation of values, intelligence, and experience, the human mind behaves quite predictably. As Christopher Chabris and Daniel Simons illustrate in *The Invisible Gorilla*, 'inattention blindness' occurs when people direct all of their attention to one particular area of their visual world and tend not to notice unexpected objects, even when those objects appear directly before their eyes. Inattention blindness is not specifically a problem; rather, it is a consequence of the way attention works: "It is the cost of the human being's exceptional ability to focus the mind," to avoid distraction and use limited resources more effectively.³ Because it is impossible to be attentive to every piece of one's surroundings, and impractical to be attentive all the time, Jonah Lehrer suggests the exercise of flexible attention.⁴ If one can train their mind to focus its attention on one thing, then one can also train their mind to release that focus, to acquire additional information, to change perspectives, and

to find other solutions. As Lehrer noted, "when our minds are at ease, we are more likely to direct energy inward, toward the stream of remote associations emanating from the right hemisphere. When our minds are focused, we are expelling energy outward on the task at hand."⁵ The ideal, therefore, is to find a balanced architectural condition, one in which the mind is activated by its surroundings, and at the same time, calmed enough to process the incoming data.

Tunnel Vision

The world today is in exponential motion. Technology continues to spawn more and more information to learn, apply, progress, and store. With less time, more people, and more demands, attention resorts to matters of ultimate efficiency. As attention is directed consciously toward one sensory focus, whether that be riding a bike, carrying on a conversation, or making it to work on time, fewer mental resources are left available to perceive any secondary matter effectively, even if that matter is correlative. The comforts of tunnel vision lie within universal reach. As Chabris and Simons surmised, "people scurry by in comical hops and starts...cell phones at their ears...a grim dance macabre to indifference, inertia, and the dingy, gray rush of modernity."⁶ This inability of the human brain to allocate cognitive resources equally among the simultaneous demands of different tasks and goals is not defined by the limitations of human motor control, but rather, as Chabris and Simons believe, by the limitations of attentional resources and awareness.⁷

Effectively, the human mind is a network of accumulated expectation, preconception, and prototype, those allocated to it by society and those reinforced by its own forever-developing comprehension. According to Solso, "convincing evidence has been collected indicating that schemata influence perception and recall of visual

events. We see the world through a veil that presents it to us, not as it is, but as we expect it to be."⁸

If an individual's expectations are entirely fashioned from their personal associations with the occurrences of the past, then their perceptions of taste, touch, sound, smell and sight in the future will inevitably build on that experience. Informational intake will become limited to factors of framework and correspondent interest unless the disruptions of difference affect the individual emotionally, sensitively, or memorably. Because this personal schema determines the ensuing experiences, no two individuals will ever live remotely similar lives.

Much as one cannot recognize a place that has never been traveled to, the human mind cannot perceive that which has not been perceived through a prior relationship. Similarly, the human mind's tendency to disfavor gaps in knowledge may result in falsified associations and illusory recognition. An individual is, in actuality, more likely to see what they expect to see than what they actually see, unless they actually expect to see something unfamiliar.

To apply the concepts of a graphic imagery collage (Figure 1), the eye begins with the collective whole. Knowledge then informs the mind of what each thing is—a bridge, a park, a tower, a wall—until experience associates identity with place, triggers feeling beyond simple visual stimuli, and organizes pattern, connection, and line across the page. According to Solso,

Expectations are based on our prior experiences of the world, and perceptions build on that experience. Our experience and expectations help us to make sense of what we see, and without them, the visual world would just be an unstructured array of light, a "blooming, buzzing confusion," in the classic words of William James.⁹

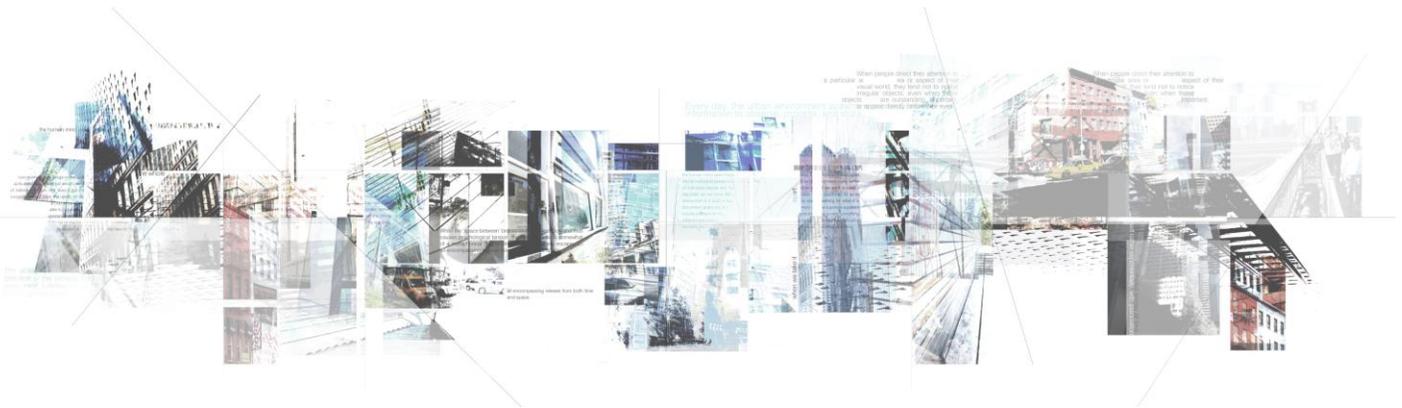


Figure 1. Graphic collage

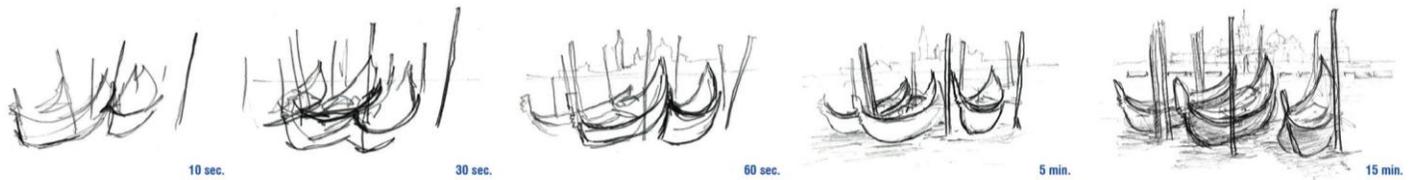


Figure 2. Timed sketch sequence showing process of informational intake

FROM LOOKING TO SEEING

The Gestalt

Moment to moment, the cycle of seeing, processing, and storing takes place beyond one's wakeful consciousness. The cycle has always and will always exist through the exhausting effort to filter function from the ever-expanding chaos of a complex society. Much as the computational brain will endlessly seek reasoning and interpretation of sensory stimuli, the necessities for comfort and closure will instigate an understanding of every situation through which one is placed. The gestalt, also known as the Law of Simplicity, states that every stimulus is perceived in its simplest form, therefore making the whole greater than the sum of its parts (Figure 1). When one views an object, for example, the object will be a 'tree,' a 'coffee mug,' or a 'house,' before it is an assemblage of branches, leaves, roots, stems, and twigs, or a handle and a piece of glass, and a roof, windows, doors, and walls. Similarly, the gestalt results in the search for pattern, and often, the completion of visual pattern when no pattern persists.

The Four Steps to Seeing

According to Robert Solso in *Psychology of Art and the Evolution of the Conscious Brain*, there are four steps that the brain must process from looking to consciously seeing.

The first step involves 'Nativistic Perception,' or as John Campbell of *Reference and Consciousness* would title it, 'relational viewing,' the inborn way of seeing something exactly for what it is. Architectural forms, colors, shapes, sizes, and interactions that occur in one's visual field are considered shared stimuli that should instigate a superficial response among a population of people. The expectation that a building's inhabitants will visibly observe a piece of constructed work is an acceptable one, though the degree and quality to which it will then be interpreted, associated, and recalled shall remain a dependent variable.

Recognizing that the visual attraction of a piece of work is often a deciding factor of interest as well as a tactful technique to draw people in, architects and theorists such as Beatrice Colomina advocate the priority of "market image." The market image isolates the exterior appeal of an architectural form as the primary focus of design concentration.

As Figure 2 depicts, the brain collects information by the application of conscious attention. Timed observation by increments of 10, 30, and 60 seconds to 5 minutes then 15 minutes reveals how perception begins with basic shapes, prominent edges, and a very generalized form, then gradually acquires detail and a more distinctive understanding of what lies within view. In the argument of the market image, then, the architecture has a limited window to advertise its form and spark intrigue.

Following the initial visual intake, continues Solso, comes the psychological reaction, the sensory provocation of associations, memories, and emotions as they may relate to other senses. Defined as 'Synesthesia,' or by Campbell as 'representational viewing,' this stage may trigger feelings of coolness while in a blue room or those of heat while in an orange room. Sitting in an empty room, surrounded by plain walls, gazing up through a skylight, feeling the heat on one's face...it is the activation of all these senses at once that trigger an emotional response, an architectural reaction.

Beyond the processing of sensory stimuli there develops the association of an architectural experience to those experiences that came before. The Berlin Museum by architect Daniel Libeskind, for example, was designed to not only commemorate the victims of the Holocaust's horrors, but to also ignite contemporary and relatable emotions of pain, sorrow, and discomfort while in the designed space. Directive Perception, as Solso defines it, occurs due to the brain's natural need to make sense of what it sees. This stage of processing information involves the formulation of questions—Do I know what I'm looking at? Have I seen it before? Would others feel the same?—the falsifying of associations, the filling in of gaps to patterns that do not exist, and the drawing up of hypotheses when such memory, or lack thereof, disrupts one's equilibrium with the gestalt.

Upon the conclusion of this information processing, one may question why it is that they feel in such a way, what does it mean, and is it worth remembering. Because every individual perceives the world based on their personal frameworks and analogous expectations of what to see, feel, and remember, and because these expectations do not always align with reality, psychological tension commonly results, as do intuitive resolutions. In the case of visual dissonance, the viewer may reduce the importance of one of the dissonant elements, and, consequently, retract his

directed attention. He may reinterpret or misinterpret one or more of the elements by filling in the gaps or by finding a pattern where that pattern does not exist. Lastly, he may seek resolution of psychological tension by entirely changing one of the dissonant elements, as can be demonstrated with the prototype, the population standard.

THE STANDARD

Forming Judgment

Forming a judgment based on exterior expression illustrates two realities: one, the individual is consciously aware of his current sensory intake; and two, the brain is not only processing the visual information that it is being provided, but it is also generating a comparison to its previous experiences. The human population at large lives in a comparative cycle. To see, hear, taste, touch, smell and remember is to accumulate degrees of quantity and quality for one's experiential database instinctively. From this database, future comparisons, associations, and attitudes can be pulled. Even more, there arises the ability to be critical, to tap into the repressed pleasures of a personal opinion, an idea, an emotion, or a standard entirely unique to oneself.

Every object is, in essence, a product of its relationship to something else. The brain attributes characteristics to an object based on its experience of those same characteristics in the past. As one grows older, the brain learns, however, that a banana can be yellow and a chair can be yellow, but that the chair is not necessarily then a banana. A ten-story building may be large in comparison to a house, yet the same building may be small in relation to a skyscraper. Furthermore, a light space may simply be the lightest among darks, or it may be a room filled entirely with light. Methods of contrast are present through every degree of shape, sound, height, taste, proximity, and time, and it is the responsibility bestowed upon that individual who possesses the capable mind to apply them.

Guided by Expectation

The architect and the client share a human fault, and that is, that even despite a desire for something new, the mind is influenced overwhelmingly by the precedence of immediate context. Why must one desire difference when comforted by conformity? What if change is for the worse? Most notably, if the population's standard is constant conventionality, how will one perceive change when it rarely ever occurs?

Reality exposes the inconsistencies of supposed consistencies. For a world that survives on variability, the all too common perception is an illusion of uniformity. Though humankind possesses the exceptional ability to imagine, to create, and to change an opinion, stereotypes

persist, and they do so not as isolated occurrences, but rather intuitively as preconceived notions. Solso believes that "lurking in the brain of all normal humans is a collective image or prototype of people, objects, things, ideas, and the like... We see things that fit well within our preconceived notion of how things should appear, not necessarily as they actually do appear."¹⁰

Even beyond practicality, stereotypes maintain a power in the guidance of imagination. "As we get older, we become too concerned with criticism from our peers," explains Lehrer. "Rather than love something for the sake of loving it, we love it more than something else, or we are bored by something because we've done it for too long without change, and we've learned to love something else more. We need to remind ourselves of why we do the things we do."¹¹

THE INFLUENCE OF SPACE

The world is seen three dimensionally by a two dimensional eye. Coupled with its geometry and with the relative cues of perspective vision, the eye is granted awareness of height, width, and depth. This also means the body becomes an object of occupation, a part of voided space. Space gives the brain a manner of identifying something by means of proximity and relation. To observe an object is to give it static placement, or comparatively, to associate movement with its speed and position. Upon noticing an object in one place, position, or occurrence for the first time, one will instinctively expect it to be there in the future. Most often, without conscious thought, the mind is able to tell the body where to move, how quickly to do it, and how to do it effectively within any volume of space, new or not. Conscious attention to the space need only provide enough information to define it as a target for the visual system; the subconscious action can then be taken, knowing at least what is desired, where it is desired, and how to obtain it.

Figure 3 illustrates two specific architectural concepts: 1) a space of experiential occupation, and 2) a common element reconfigured. Contortionism exposes the outrageous possibilities of the human body to contort, bend, fold, displace, and balance. Based largely on the proportions of the human body by weight, and by the arrangement of the body parts in relation to the ground and to one another, the figure can change. Applying these conditions of distortion to structure, the envelope becomes the play of balance between vertical support and overhead enclosure. Much as the contortionist takes the human body and manipulates it, the systems and joints of the enclosure link, latch, hover, wrap, and extend against one another to both reinterpret the customary idea of structure and to define an architectural space worthy of occupation.

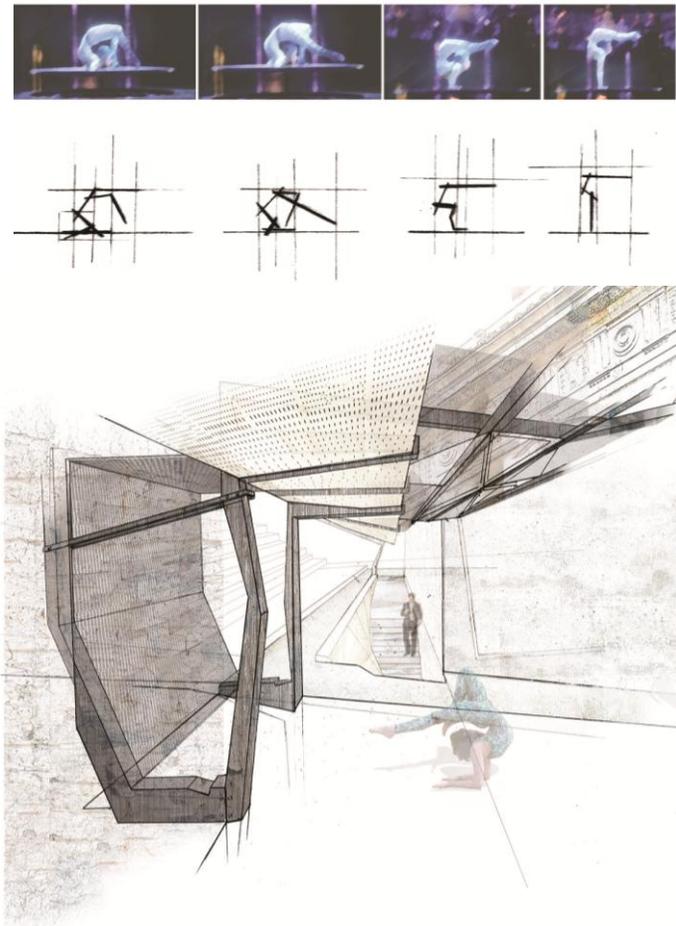


Figure 3: Designed Structural Enclosure

SENSORY ADAPTATION

If architecture, as Beatriz Colomina proposes in *Privacy and Publicity*, is a “device to see the world, a mechanism of viewing,”¹² then a consistently changing world would demand a consistently changing architecture. Society, however, has made apparent its aversion to change, and, through its reliance on standards of expectation, its hesitancy to implement contrast. Instead, the window through which one could once see the world has morphed into a stagnant context occupied by a transient population. “In the big city, people now have to adapt to the speed, the continuous movement, the sense that nothing every stops,” observes Colomina. “With this restless movement that effaces boundaries comes a new mode of perception that has become the trademark of modernity. Perception is now tied to transience.”¹³

The emergent pandemonium of modern society has made ‘inattentional blindness’ more prominent. Nevertheless, it is the efficiency of this focused tunnel vision that fosters momentum in life, enabling and encouraging an individual to follow the same routine day after day. Expectation, after all, is human habit, and it is what reliably keeps the mind at ease. A stagnancy of expectation, however, may produce dissolution in the

notion of time, allowing the body to become too comfortable with congruity and balance. As the senses adapt to loss in the detection of a stimulus, most measurement will fade away, moments will seem to pass by more and more rapidly, and all independent intake of the existing milieu will resort to the bare minimal. The ground upon which one walks, the sounds of the clocks, and the people that pass by become negligible.

In 2007, for example, Washington Post Staff Writer Gene Weingarten set out to discover if famed violinist Joshua Bell could stop busy metro commuters in their tracks. Despite his recognizable character and talent, and despite his placement within a crowded transit plaza, he could not. As Weingarten expressed, “If we can’t take the time out of our lives to stay a moment and listen to one of the best musicians on Earth play some of the best music ever written; if the surge of modern life so overpowers us that we are deaf and blind to something like that—then what else are we missing?”¹⁴

To disrupt the comforts of pattern, the world needs more spaces that reside on the edge of chaos, environments that are neither fully predictable nor fully anarchic, but those that disassemble the expected into a reconfiguration of function, pattern, or process.

DIRECTIVE DISORDER

Travel

Travel forces upon the routine individual the dangers of virgin terrain, the removal of familiarity and time. When the mind is prepared for the intake of something new, the subjects available for attention are more likely to be noticed. Travel, however, though fulfilling such expectation, is not as much about the anticipation of something new and something noticeable as it is about the exclusion of the everyday. To travel is to experience difference, to be disoriented and confused, to be reminded constantly of all that is unknown. Travel is the model for architectural emulation when it is perceived as a threshold for distinct opportunity. Architecture is a medium for difference. It does not always have to fit in, and often, it should not.

Order and Disorder

According to Perez-Gomez, the creation of order in a mutable and finite world is, after all, the ultimate purpose of man’s thought and actions.¹⁵ “Our attention to objects is rarely arbitrary,” supports Solso, “but is driven by a searching eye looking for details that, [when] combined with other details and integrated into our larger world knowledge, form the basis of a more comprehensive consciousness.”¹⁶

Despite the inherent ability of the human species to attend to their environment, it is the evolution of human

functionality that engendered the anticipatory response, a substitution of the unknown with the understood, of an inquiry for an assumption, and the disguise of order in a world operating on disorder.

The prototypical resources for thought tell an individual to ignore the distinctiveness of detail in favor of the greater whole, to form conclusions without adequate support, and to make inconsistent assumptions about associative and precedent experiences. Coupled with the selectivity process at every given moment of obtaining, processing, and storing vast quantities of variable data, the subconscious mind's intention to avoid distraction ironically results in the brain's respite from both conscious attention and its productive engagement with most contextual surroundings, whether familiar or not.

This is quite an architectural paradox- to look at more and yet see less, to exist within a context overflowing with information and teeming with distractions, contrasts, and variation and yet settle into the comforts of routine and the illusion that all that one should notice is, in fact, noticed. How does architecture respond to this paradox? As a product of culture and species evolution, design should participate in the formation of a more comprehensive experiential consciousness.

Architecture

Architecture gives the mind something to work with, a counterbalance to the contemporary ideals of the ordinary, a disruption of the status quo. Beyond the manipulation of space, the process of architectural thought and design is

inherently founded on creativity. To design is to imagine and perceive a world that does not yet exist, though one that still relies on the accumulated experience of the past. To design by the ideals of difference is to provide the population an environment from which every individual of every unique framework can pull information of significance. This significance may, in fact, be related simply to change, a change from the usual to the unexpected.

Architecture needs to be experienced out of the commonplace, a component system of small problems that demand pleasurable resolution. If the production of an inhabitable design can instigate thought, speculation, wonderment, confusion, and intrigue, then it can effectively mix the conscious mind with the subconscious mind to produce an ideal state of performance. In the words of Jonah Lehrer, "it's a controlled kind of craziness."¹⁷

In the perplexity of an informational surplus and amongst the confusions of a society struggling to attend to all the priorities of an independently driven value system, architecture operates as the link between body and space, between figure and population, and between the richness and pleasure of an original experience and the filtered repetition of one's internalized schemata.

"We need structure or everything falls apart. But we also need spaces that surprise us," concludes Lehrer. It is, after all, the exchanges we don't expect, with the people and places we encounter, that will change the way we think about everything.¹⁸

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