Constructing the User

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ABSTRACT
A distinction is drawn between designing settings that are part of the performative framing of immediate behavior and, the often more difficult task, constructing an architecture of possibilities.

Analogies are drawn to the work of stage magicians and software interface designers that suggests some attributes of both of the above aspects of architecture.

The concept of “Utilitas” is explored both as a way of reducing variety so change can be introduced in an orderly manner and as a way of initiating a rich and complex user illusion.

BACKGROUND
This paper is the second in a series written to show how concepts from cybernetics can help to illuminate and possibly resolve some central, linked questions in architecture. The first paper asked where delight (or wonder) and surprise might lie in physical architecture. “Delight” is an attribute taken from Sir Henry Wotton’s Introduction to Vitruvius’ work. Vitruvius was a Roman architect whose texts are the first professional descriptions of architecture to survive from antiquity. One of the conclusions in the first paper is that it is possible for an architect to make architecture that is delightful with no more than a very primitive understanding of the people who might inhabit it.
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Converting the User

Wootton suggested that architecture should have the attributes of firmness and commodity in addition to delight. Firmness approximately translates into structural stability, durability, water-tightness, and thermal performance. Commodity is usually equated with usefulness. This paper is about usefulness in its broadest sense. In order to attribute usefulness to an object, we must begin to define to whom it is useful. An extension of this argument suggests that architects should go to people and find out what they want and need.

A further extension suggests that architects should look at how people behave in the built environment and infer wants and needs from those observations. This approach led, in the 1960s and 1970s, to a form of research into the built environment that sought through survey techniques to establish the spatial requirements of defined organizations on the one hand and the generalized rules about the behavior of people in the built environment on the other. A good example of the former is the “Activity Data Method” developed by Bruce Archer and a good example of the latter is the work of Bill Hillier in developing the concepts that underpin “Space Syntax.”

Both of these approaches start with statements about what people will do (or are likely to do) in given circumstances. These statements mesh together with the descriptions of the built environment to produce outcomes of considerable complexity. The descriptions of individuals are, however, simple and deterministic. Space Syntax rules can, for example, be stated in the form of simple agent behavior, from which complex group behaviors can be shown to emerge. These behaviors are similar to those that occur in other emergent systems.

How useful are these descriptions? Do they give us a sophisticated description of what is going on? Do they help us invent novel ways of making and occupying the built environment? This paper argues that the way that this type of description has evolved and is thought about stands in the way of sophistication and novelty. Sophistication and novelty require invention, which in turn, requires a conceptualization of a future that cannot be predicted from the past.

WHY ARE PEOPLE PREDICTABLE?

The great twentieth-century cybernetician Heinz von Foerster described two metaphorical machines: machines that give outputs of the type y=(fx) are trivial machines, and machines that give unpredictable outputs as a result of hidden internal functional relationships are non-trivial machines. He argues that human beings are essentially non-trivial and that human invention and understanding can only be understood through the metaphor of the non-trivial machine.

The metaphor of the non-trivial machine cannot on its own explain the human:human and human:object systems that are manifested in the built environment. We only need to look at the world to realize that the behaviors of human beings in their environments are often extremely predictable. We know, for example, that in continental Europe, people always drive on the right-hand side of the road and always travel on the right-hand escalator, while in the UK, they drive on the left and take the left-hand escalator, where, however, they stand on the right. These are simple manifestations of social conventions operating in the built environment as trivial machines.

How do these conventions come about? Some startling experiments have demonstrated that the way we see the world is learned, and that it can be un-learned and re-learned with ease. Examples include research into vision where people wearing inverting prisms as spectacles re-learn “up” and “down” within six to ten days sufficiently well to function in an upside-down world. Perhaps human beings can be likened to essentially non-trivial machines that negotiate the world by individually, but more often collectively, trivializing it.

Conventions are ways of dealing with the world, reducing variety, and making it less scary. There is an implication that the ways we construct in this way tend towards stability. Observation suggests that this is not the case; the way that we behave in the built environment is continually changing, both in terms of our behaviors and in terms of the physical context of that environment. How are conventions learned, maintained, and ultimately changed and re-established?

LEARNING

A likely social learning mechanism is mimicry and affirmation. This occurs when an observer in a system of conventions copies a behavior that he or she observes in response to a particular signal, and is rewarded by affirmative behavior from another, more experienced observer in the system that the behavior is, indeed, correct. The first observer in the system has to construct and experiment with a range of potentially correct behaviors before the appropriate response is achieved. When this happens, the observer in the system has performed an appropriate y=(fx) routine.

In this, we are an “advanced” society no different from our ancestors in superficially simpler groupings. We learn to perform the elements of our culture in much the same way as a pupil learns to type on Gordon Pask’s SAKI self-adaptive keyboard instructor or a tribal initiate learns the totemic distinctions described in Levi Strauss’s The Savage Mind. The keyboard that is learned using the SAKI machine is in itself a physically constructed social convention. It is so thoroughly embedded in Western culture that it is hard to imagine how it will ever be abandoned. The reason it is so thoroughly embedded is that it is very widely and consistently used. Levi Strauss describes the fragility of meaning in totemic structures and how they are maintained through stories and rituals. Once achieved, the routine must be repeated as a performance in order to sustain the convention. This is best done with others. We can speculate that, because we are social animals, group repeating of a convention will maintain the convention more powerfully than the equivalent sum of individual repetitions.
MAINTENANCE AND PERFORMANCE

Beeman describes how performance is both mimetic (in that it imitates action) and affective (in that it transforms action). An anthropological view of performance is that it encompasses all institutions of public behavior, including those which control and direct ritual and social interactions. The built environment contains both the settings and the props for the performance of the everyday. Beeman quotes Bauman to describe how performance is always “emergent” but “in the context of the ground rules for the conduct of performance that make up the structured system of conventionalized performance for the community.” This is close to concepts of emergence that are derived from the agent-based representation of social interaction. It is also close to the behaviors that are displayed by the various protagonists in an effective major public hospital. Unfortunately, the same approach can also be taken to a major public hanging in a society where hangings are still part of “the structured system of conventionalized performance for the community.”

INVENTION

Gregory Bateson described the notion of “framing” in his essay, “A Theory of Play and Fantasy.” He described play as a quintessential example of “Framed Behavior,” whose individuals regulate their behavior according to a set of rules that operate only as long as the play frame is in force. Bateson distinguishes this from “ordinary life.” Those involved in the making of the built environment and the activities within it do not have the luxury of believing that ordinary life exists somewhere outside their area of operation. Goffman takes a similar concept of framing and places it in everyday life from a psychological standpoint. More recently, this concept has been used to examine the way that large-scale and immediate social action takes place. For example, Victor Argothy shows how the press framed the presentation of the 9-11 assaults on the World Trade Center, and how that constructed frame structured mass volunteering by members of the public in the wake of the tragedy. The concept of framing has recently been used as a tool in the construction of multi-agent software systems. The concepts of framing can also apply directly to the built environment, as long as it is recognized that the frame contains both a physical construct and a cluster of congruent mental constructs. The latter are expressed in predictable behaviors.

BOTTOM UP OR TOP DOWN?

If human behavior in the built environment is analogous to that of children’s when playing a game, we must ask how the game might be created. There appear to be two conflicting possibilities. It could be argued that social behaviors are the product of the interaction of autonomous agents, a “bottom-up” approach. Cyberneticians in general are attracted to the idea that the process of constructing social convention is best done in this way. We can hypothesize a number of reasons for this. One is the liberal political position that underpins the work of Norbert Wiener, Ross Ashby, and Heinz Von Foerster. A second is the undoubted potential inherent in tapping the capabilities and invention of a large number of human beings rather than a few. A third reason might be the slightly dated feel that a “top-down” approach conjures up—an image of social control engineering.

On the whole, cyberneticians are really nice people and recoil at the thought that they might be involved in constructing realities that involve taking people’s money, overfeeding them, and locking them up, even if other hypothetical realities include helping people to get well, offering them the opportunity to learn and to live in comfortable surroundings. The reverse is generally true of architects, however nice they may be as people. The production of a building is generally thought to be a top-down process, even if the reality is more complex than this and involves a large number of stakeholders each performing a very specific role.

A THEATRICAL MODEL

Pangaro neatly sidestepped the ethical problem of a “top-down” approach in his paper “Pask as Dramaturg.” In it, Pangaro describes the top-down approach as “organizational modeling,” identifying the essentially auto-poetic quality that underlies the creation of a performance that did not previously exist. He describes, in relation to Pask, how these creations contain the detritus of earlier ideas reformulated to be new vibrant entities. By focusing on Pask, Pangaro draws attention to the extraordinary creative pleasure that can exist in a team that invents the future.

The theatrical model has one great attribute: by including the audience as “observers in” the system, we immediately offer them the possibility of disbelief and boredom. Disbelief and boredom are major drivers of change in a human construct that is otherwise working. This applies in “everyday life.” While in everyday life it is not always possible to walk out of the show altogether, there is usually something else going on in another part of town.

TWO TYPES OF OBSERVER

What are the basic characteristics of the theatrical top-down system? A minimum meta description of a top-down social system includes “creators of” the system and “observers in” the system; the creators both design the system and find the initial resources to make it happen. I will argue that the “observers in” the system are either “active” or “passive,” and that the distinction between active and passive is critical.

Gordon Pask was one of the great twentieth-century second-order cyberneticians. Like Heinz Von Foerster, he was a performer and a showman. He also built objects that went beyond demonstrations and explorations. He built artifacts to entertain and engage his audience—pieces of interactive architecture that are as fresh today as they were when he...
first created them 50 to 60 years ago, even though today we only have his account of them. Although Pask was both egocentric and eccentric, his interactive architecture started with an appreciation of an observer's point of view. He placed the observer's aesthetic appreciation of his work at the center of many of his endeavors.

In Pask's view, an aesthetically potent environment should have the following attributes:

a) It must offer sufficient variety to provide the potentially controllable novelty required by a man. (However, it must not swamp him with variety— if it did, the environment would merely be unintelligible.)

b) It must contain forms that a man can interpret or learn to interpret at various levels of abstraction.

c) It must provide cues or tacitly stated instructions to guide the learning and abstractive process.

d) It may, in addition, respond to a man, engage him in conversation, and adapt its characteristics to the prevailing mode of discourse.

Pask goes on in his paper to describe his “Musicolour” machine (an interactive music and lighting device that needed a pantechinicon to move it, and which made its final appearance in 1957) and his “Colloquy of Mobiles” (a group of three interacting mobiles that also interact with their observers. This was exhibited at the Cybernetic Serendipity Exhibition at the Institute of Contemporary Arts in 1968). Both machines were technologically ambitious, both entertained their audiences, and both had an inbuilt attribute that Pask considered a problem, which could be considered a result of Pask’s own abilities as a performer.

Pask described how the Musicolour light system interacted with a group of musicians and could interact with the public who were dancing (via the group of musicians). In reality, the public was easily distracted from the lights and responded to the musicians directly. He also described how the Colloquy of Mobiles worked in much the same way, in that the public could interact with the mobiles through their light signaling arrays. In reality, in moderate light levels, the public was easily distracted by the moving mobiles and did not try to intercept their signaling “conversations.” Both phenomena are capable of a simple explanation, which is that there are, in a group situation, at least two different classes of observers: those that interact and those that observe interaction.

BOREDOM AND NOVELTY

Pask’s description of how a performing system must present a degree of novelty to its observer is given in point a) above. He also describes, in the same paper, how a constructed performative system becomes “bored.” Indeed, both the Musicolour and the Colloquy of Mobiles contain electromechanical functions that he describes as the machines “getting bored.” In the absence of any input stimulus, the system becomes increasingly sensitive. When there is repetitive input, the system “directs its attention” to the potentially novel. Although “boredom,” in this case, is a metaphor, it is likely that Pask was of the opinion that boredom and a need for novelty exist in all classes of observers in a performative system. It could be argued that boredom becomes more likely when observers are consciously aware that the construct has been constructed—and is consequently mutable—and that it can be changed. This argument leads to a possible hypothesis, which is that an urge for novelty and change may be greatest among the “creators of” these social constructs. Because Pask was a creator of performances, he built his own expectation of boredom into his machines. The “creators of” a top-down system inevitably become the “observers in” the system as time proceeds.

A LANDSCAPE OF TRIVIAL MACHINES OR A USER ILLUSION?

Any form of built environment is immediately experienced through a variety of senses, and is constructed by the observer through a process of learning. The constructed experience is the subject of potential delight in Wooton’s terms. How is this to be induced? The arguments contained in “The wonder of trivial machines” suggest that an environment could be constructed out of an array of exquisite objects: enclosing structures, lighting systems, environmental modulators, routes, passages. The “observers in” these worlds of natural magic would construct their own understandings and would be delighted in the process of doing this. Wherever possible, the physical constructs would be laid out to engage seasonal variation and moment-to-moment changes in the natural weather systems, so that the observers in these buildings and landscapes are offered the possibility of repeatedly reconstructing their environments.

The reality is that this approach is rarely tried. Something else is being attempted: buildings and spaces are constructed to embody adjetival qualities such as “biggest,” “tallest,” “boldest.” However, we live in an age of unprecedented building and landscape conservation. The punters, the “observers in” the worlds that are being constructed, are clearly not that enthusiastic about them, preferring the worlds that were constructed some centuries ago, mostly in the seventeenth and eighteenth centuries, as a result of Sir Henry Wooton’s work.
The architecture that Wooton promoted was the illusory representation of an architecture that was, by then, fifteen hundred years old, and which was, itself, largely a representation of an architecture that was five hundred years old at the time. An architecture that is founded on illusion has considerable staying power, possibly because it has the concept of an audience embedded in it. A durable architecture of possibilities may be constructed as an architecture of illusions.

An explicit consideration of audience and illusion leads us to consider the relationship between the practice of stage magic and the creation of both physical and “virtual” architecture. The stage magician has to thoroughly consider his or her audience. Bruce Tognazzini describes this in an article that draws parallels between magic and the software design that supports graphical user interfaces. Tognazzini finds an eerie correspondence between the two:

“Perhaps no field other than magic is tied so closely to the field of graphical interface design: the people working at Xerox PARC of the 1960s and early 1970s were aware of the principles of theatrical magic when creating the first graphical interfaces, to the extent that David Smith named the interface itself the “user illusion.” We are designing interfaces for an interface system based on magic, yet there is almost nothing written about it in our literature. Magicians have been struggling with the principles, techniques and ethics of illusion for at least 5000 years. There is a lot we can learn from them.”

The identification of two parallel realities is the key to understanding magic. “Actually there are two simultaneous acts performed in magic: the one the magician actually does—the magician’s reality—and the one the spectators perceive—the spectators reality. The magician’s reality consists of all the sleights of hand and manipulation of gimmicked devices that make up the prosaic reality of magic. The spectator’s reality, given a sufficiently competent magician, is entirely different: an alternate reality in which the normal laws of nature are repeatedly defied, a reality where the magician, as well as his or her tricks, appears supernatural.”

Tognazzini goes on to quote Henning Nelms to show the way that these realities are represented in the magician’s mind. “All of the most successful showman-conjurers agree that you must believe in your own magic; you cannot hope to convince an audience unless you first convince yourself.”

Second-order cyberneticians (including biologists such as Humberto Mantura and Francisco Varela) have created massively powerful understandings of nature—and human cognition as part of nature. They are all, in one way or another, interested in circular descriptions, which fold in on themselves. Stage magic is an example of an interaction that can only be understood by treating the relationship between magician and audience as circular, continually iterated over time during the performance. But what happens if the magician is not there and all that is left is a set or a stage? Tognazzini’s electronic interfaces are like this; the user interfaces to the architectures that support design in the physical world could be considered in the same way.

“The magician’s tools should be disguised to look like objects in the real world, if these are common things, objects with which the spectator is familiar, this spectator will accept them in terms as he knows them.”

Magicians and interface designers have no problem with the idea that a “real world” exists “out there,” from which metaphors can be drawn that will convince their audiences. Designers and architects might be uncomfortable with this opportunistic notion. Their discomfort would be natural because they construct the “real world” from which many of the metaphors are drawn and, in principle, can change it if they wish. This is where the parallels between stage magic and architecture are closer than those between stage magic and interface design as understood by Tognazzini. The interface designer seeks to construct a stable “reality” using whatever means are available. The magician uses “real world” metaphors to create the illusion that the audience’s understandings of the “real world” do not apply. The magician constructs a new, albeit temporary, reality that destabilizes the old. A new physical environment is a new, possibly long-term reality that frequently replaces the old.

Tognazzini has abstracted a range of tools that might be useful in physical architecture and design. All the tools go to making a construct of the observer for the magician and the electronic interface designer that is far more sophisticated than any of the trivializations of “the user” the architectural profession currently employs. The question of whether and where these representations could be regarded as representations of potentially non-trivial machines will be examined in a future paper.
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AN ARCHITECTURE OF POSSIBILITIES

One can conclude that constructs of human behaviors with appropriate supporting physical artifacts will establish an architecture of commodity. Is this the whole story? Perhaps architecture goes beyond this. Computer hardware and software engineers think so. They have appropriated the term “architecture” for their own uses, and in all cases, the term is used to describe the structure of something that can contain a particular program, together with a lot of other similar programs.

Tom Demarco differentiates “architecture” from “design.” He describes architecture as a framework for the disciplined introduction of change. He also describes “architecture” as applying to a family of products, while “design” applies to a single product. Tom Demarco is a software engineer writing from the perspective of someone who wishes to create a durable and useful product—and from a standpoint that architecture that lasts for fifteen years is extraordinarily durable.

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Figure 1 Teatro Olimpico showing fixed set

The conundrum of commodity in this context is that many spaces in the built environment will probably, over their lifetime, contain a range of different activities that are, in themselves, part of larger, precise short-term constructs that can be framed and are analogous to play. Frank Duffy and John Worthington26 took the theatrical analogy to develop an approach to office design that differentiated the building from the “set” inside it, ascribing different life spans to each. The “set” is the local partition layout and the associated doors and internal finishes. “Furniture” in the “set” can be modified to provide an even faster change in response to changes in day-to-day company procedures. The “furniture” and the “set” are the physical aspects of “framing” as described by Bateson.

Moving and replacing partitions and local finishes can be very expensive and disruptive.27 John Weeks put forward an alternative strategy,28 which he calls the “long life loose fit,” referring to the creative use of redundancy.29 In this approach, spaces are large enough to contain generic human activities, rather than small enough to contain particular human activities.

PALACES

The idea of a generic architecture means that the specific environmental support for groups of framed behaviors must exist either in the “set” or in the “furniture.” Fred Scott30 and Bob Evans31 convincingly argued that the palaces of the Renaissance adopted the latter. They suggested that the absence of corridors in these buildings meant that it would not be possible to convincingly attribute invariant functions to particular rooms, and that any functionality that existed lay with the occupants and their assorted pieces of loose furniture at any one time.

The palaces of the Renaissance are full of frescos, decorated ceilings, colonnades, and wonderful, permanent floor finishes. In these palaces, the generic spatial description is complete. The palace is the antithesis of the contemporary office block. Something is being framed in the palace that goes beyond any particular framed set of activities within it.

Is the palace a form of generic stage, like the fixed set in Palladio’s Teatro Olimpico in Vicenza? The theatrical analogy only works in this case if one envisages a theatre without blackout, one that uses daylight for illumination, where furniture and local setting are as visible as the surrounding enclosure.

Tom Demarco’s distinction between design and architecture appears to hold in the built environment. Design is contained by architecture and has different attributes. Specific user behavior is very closely constructed in design and is much more indeterminate in architecture. When these constructs are made through a top-down process, the architect and the designer can be the same person operating in different modes, or these roles can be split. A good example of an architect who operated in both capacities in the seventeenth century is British architect Inigo Jones. More than half and the designer can be the same person operating in different modes, or these roles can be split. A good example of an architect who operated in both capacities in the seventeenth century is British architect Inigo Jones. More than half

The concept of “use” is much more difficult to grasp in architecture than in design because the user is much more elusive. It may be more appropriate in this context to readress Wooton’s notion of commodity, if for no other reason than because Wooton was writing at a period when the palaces that Evans and Scott describe were being replicated across the UK for wealthy clients. Wooton was a Latin scholar and a master of rhetoric. His “commodity” can be taken to be the Latin “Utilitas,” a word that is not easy to translate into modern English. It is sometimes translated as “utility” but can also be understood as “expediency” or “advantage.” Cicero uses it in the context of “communis utilitas,” which can be translated as the common good, or common expediency, or common advantage. He describes it as an attribute of the body politic or of external things, and includes among the latter fields, ports and other things that go beyond necessity, such as the spaciousness and uncommon ornamentation of a city.
Constructing the User

Following Cicero’s terms, we must reconstruct the user of a piece of architecture as a generality, a “body politic” whose appreciation goes beyond immediate necessity. The architecture must also be expedient and give advantage. Can this be pinned down in the twenty-first century?

Wooton’s “body politic” was the oligarchy that ruled Britain in the early seventeenth century, a very small section of the overall population; he probably knew most of it either directly or through his family and friends. Today’s body politic is assumed as the whole population. However, the number of people who have direct control over significant spending on the environment and on major building projects is probably little different, as a proportion of the population to the seventeenth-century figure. These people, the commercial and public clients, developers, project managers, and their architects, are the “creators” of the theatres of everyday life in the twenty-first century.

Although it is possible to use this argument to examine critically contemporary urbanism, it is probably more fruitful to use it to examine buildings, groups of buildings, and semi-private landscapes. The contemporary city as a physical entity is often hopelessly compromised by current modes of transport and communication that, on the one hand, destroy its homogeneity and, on the other, make it less and less relevant. The city as a whole is perceived to offer very little in the way of “communis utilitas” to many of the “creators of” the buildings within it. Private and semi-private space is a different matter. There are often very strong political and economic pressures that drive the “creators of” these environments. The aim is to ensure that the “observers in” these environments find them of value.

The spatial organization and the aesthetic qualities of the surrounding enclosures in the palace (or any contemporary version of the palace) could be considered a form of metasystem that “contains” the specific “performances” that occur within it. If so, it is a very strange form of metasystem, far distant from the “Metasystem Transition” proposed by Valentin Turchin.34 Turchin’s Metasystem is an evolutionary construct where higher levels of control emerge in system structure and function through a “bottom-up” process.

Perhaps “metasystem” is the wrong term for John Weeks’ “loose-fit” building or a Renaissance palace. In a modification to Ross Ashby’s Law of Requisite Variety, it was suggested that variety is reduced in control systems by a process called “buffering,” which exists independently of the control function in the system. It is appropriate to consider many human interventions in the physical environment as physical buffers that ensure stability in the face of disturbance. Ranulph Glanville gives the example of reservoirs that accommodate changes in rainfall and the “slack” space that architect Cedric Price incorporated into his buildings.35 Both the palace and the loose-fit hospital contain buffer spaces in the form of generously sized rooms, wide internal “streets,” and internal courtyards.

One can also view the construction of physical walls and edges as a way of reducing variety in occupant behavior. The distinction between the frame that forms part of moment-to-moment behavior and the environment that supports a range of behaviors allows us, with caution, to consider the latter to be analogous to a channel of communication of a finite and particular capacity, with a particular functional “frame” being analogous to a message. Noise in the channel can be taken to be the distortion that the environment places on moment-to-moment behaviors. A hypothetical example of this is an environment consisting entirely of long, thin rooms. Consider a group of people trying to hold a round-table discussion in such a place. The long, thin rooms will necessitate a long, thin table, and conversations will fragment along it, except when the meeting is formally addressed from a particular point.

It is possible to describe buffers, walls, and edges as constraints that reduce variety, while still permitting the introduction of change. The resulting environment can be considered a terrain on which temporary local systems develop and evolve. As such, it resembles the “terrain” that is described by Valentino Bratteberg in his book, Vehicles,36 and some of the “patches” that exist in a “Star Logo” environment. The users of this terrain are people, performing complex framed behaviors and bringing their own furniture and tools to support these behaviors.

The nature of this terrain poses significant questions for the architect if it is to be directly experienced by the users, if it is to be more than a shell. An inference from the communication analogy is to suggest that such spaces should be as bland as possible while they await the furniture that will frame a day-to-day event, so that the “noise” in the building is kept to a minimum. The problem with this approach is that the furniture is often also bland. The resulting spaces frequently offer the observer very little in the way of visual stimulus. This comment especially applies to the main circulation and waiting areas in large public buildings and the external spaces outside of them. These spaces could offer variety in Pask’s terms, forming part of a second-order cybernetic system when reconstructed by their observers. The visual cues to be read in this way may well be embedded in surface illusions and spatial sequences, vital to the Utilitas of the place, rather than being an expression of its functionality.

CONCLUSION

It is likely that the concept of Utilitas that Sir Henry Wooton translated as commodity described a building attribute other than direct functionality. It is probable that this quality allows for the orderly introduction of change on a day-to-day basis by reducing variety. The resulting buildings can also offer the observer a separate investigation into each building’s aesthetic qualities without prejudicing its long-term performance.
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29 WEEKS ALSO DESCRIBED THIS AS A “DUFFEL COAT” APPROACH. HE HAD BEEN IN THE NAVY IN THE SECOND WORLD WAR WHERE DUFFEL COATS IN THREE SIZES WERE ISSUED TO ALL SEAMEN. LIKE THE HOODS OF TODAY, DUFFEL COATS ONLY LOOSELY FITTED THE WEARERS AND, THEREFORE, CONCEALED RATHER THAN REVEALED THEIR PARTICULAR IDENTITIES.
33 THE SPECIFICITY OF THIS TYPE OF EVENT CAN ENCOMPASS A GENERAL PERFROMATIVE INTENTION. PEACOCK ARGUES THAT JONES’S MASQUES WERE PROPAGANDA VEHICLES USED BY CHARLES I TO IMPORT A EUROPEAN CONCEPT OF ANTIQUITY AND THE NEAR DIVINE STATUS OF ROYALTY. THE MASQUES ARE VERY SIMILAR TO SPEER’S CONSTRUCTS FOR THE NUREMBERG RALLIES IN GERMANY IN THE 1930S.
36 BRAITENBERG, V (1986). VEHICLES: EXPERIMENTS IN SYNTHETIC PSYCHOLOGY. MIT PRESS, MIT.