The Perceptual, the Virtual, and the Real

On the experience of place in the digital age

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Abstract. *Since the dawn of philosophical thought man has questioned the validity of his experience of the world around him: Is the world just as we perceive it to be, or does its true essence lie beyond our reach? In our own time, technological, social, and economic developments have made such philosophical concerns more relevant to our everyday lives than ever before. However, the available terminology for discussing such matters is often too limited to fully capture their nature. This paper proposes a consistent terminology for the discussion of such matters and suggests a model of the different aspects from which they are comprised. This terminology will be applied to, as well as presented through, issues that are pertinent to architectural theory, to the experience of places, and to the intangible sense of place which digital phenomena can sometimes provide.*
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INTRODUCTION

Since the dawn of philosophical thought man has questioned the validity of his experience of the world around him: Is the world just as we perceive it to be, or does its true essence lie beyond our reach? Plato (1992) addressed this question in his allegory of the cave, in which he equated our perception of the world to that of projected shadows on a wall as opposed to the objects that cast these shadows but which we cannot see directly. Some two thousand years later, René Descartes (1985) introduced his distinction between res externa and res interna: the world 'out there' as opposed to the way it is experienced 'in here'. Over a century later, Immanuel Kant (1914) pondered the limitations of our 'forces of consciousness' as they construct these experiences out of the mere fragments we collect from what might truly be happening in the world 'out there'.

In our own time, technological, social, and economic developments have made such philosophical concerns more relevant to our everyday lives than ever before. As examples, let us consider the transitions in the nature of wealth, work, and places. If wealth was once measured in land and animal property, later represented by precious metals as a means of exchange and then pieces of paper to represent the metals, it is now just numbers stored on magnetic disks and shown on screens. If work once meant only the physical production of physical objects, gradually including also the services that support such production, now an increasing part of it is about the generation and processing of

ideas (Toffler, 2006). And if social interactions once required physical places for people to meet in, later followed by the exchange of letters and then also the transmission of voice and image, now online social networks provide a form of interaction in altogether new kinds of 'places'. In other words, across a wide range of phenomena, the gap between our perception of them and what their essence might actually be seems to be widening ever further.

The available terminology for discussing such matters, however, is often too limited to fully capture their nature. More often than not, a few loosely defined terms are then used interchangeably to cover a much wider range of distinct phenomena, resulting in inaccurate communication in a field of discussion that is complex enough as it is. As mentioned above, this issue has been addressed by many thinkers, and this paper's aim is not to engage in a comparative overview of their various findings. Instead, the purpose of this paper is to propose a consistent terminology for the discussion of such matters and to suggest a model of the different aspects from which they are comprised. This terminology will be applied to, as well as presented through, issues that are pertinent to architectural theory, to the experience of places, and to the intangible sense of place which digital phenomena can sometimes provide.

THE PROPOSED TERMINOLOGY

Perception vs. Essence
There are several existing terminologies for discussing the difference between our experience of the world as opposed to the truth of what it might actually be. One such terminology is 'in here' vs. 'out there', which might be reasonably understandable but perhaps not very accurate. Another one is 'illusion' vs. 'real', which may be more precise but implies a certain value judgment on the different validities of the two. Yet another term that is sometimes used in this context is 'virtual', but its loose meaning and multiple unrelated uses make it unsuitable for this

purpose (Ettlinger, 2008). Other terminologies exist as well, yet most of them require lengthier word structures to successfully express their meaning.

The terminology proposed here – and which has been used from the beginning of this paper in order to clearly introduce its topic of discussion – is the distinction between 'perception' and 'essence'. By 'perception' I am referring to our experience of the perceivable world at whatever level our senses and brains make us capable of comprehending. Correspondingly, by 'essence' I am referring to the true nature of the perceived object, to the way it really is beyond what the limitations of our perceptive abilities make it only seem to be. The difficulty in fully clarifying the difference between the two is that large parts of society consider the world as we perceive it to actually be reality, or in other words, that perception and essence are one and the same (Hawkins, 2008). The terminology of 'perception' vs. 'essence', then, is consistent, easy to follow, and takes no stance as to which of the two sides of this duality is more valid than the other.

For example, the terminology of 'perception' vs. 'essence' can assist the discussion of the Eiffel Tower and its various copies built around the world. Theoretically, a copy of the Eiffel tower might be built so accurately that it would make our perception incapable of distinguishing it from the original tower located in the Champs de Mars in Paris. However, what will always mark the difference is the essence of the copy – which is forever doomed to remain different from the essence of the original. Furthermore, this essence is not even bound to the tower's physical parts: Since its original construction in 1889, so many of its parts have been replaced for maintenance purposes that, in the narrow technical sense, it could be said to not even be the same tower anymore. Yet something of the Eiffel Tower is still there, intact and undiminished – that 'something' is the Eiffel Tower's essence.

The Perceivable World
Once the terminology of 'perception' vs. 'essence' is clearly in place, the next step is to distinguish what

exactly the types of objects that our perception is attempting to grasp might be. In other words, what kinds of things are waiting for us 'out there', ready to be perceived, and having an essence that lies beyond our perception?

I propose that two main elements of the perceivable world are tangible objects and abstract notions. Tangible objects are the kind of objects that are accessible to our senses: An apple, a table, a chair, and so on. In this paper I will limit the discussion to visible objects, but in principle also sounds, for example, could be considered tangible in the sense that they consist of air vibrations that can be detected by our ears. Abstract notions, on the other hand, are mental constructs that are rather accessible to the mind: thoughts, feelings, ideas, and so on. They too may have an essence 'out there' from which we can derive our own perception of them 'in here', but they are very much unlike tangible objects.

Tangible Objects: Physical and Virtual

In the next step, we need to distinguish between two main types of tangible objects: physical and virtual. This distinction stems from my research on virtuality in which I analyzed the multiple inconsistent uses of the term 'virtual' and proposed a particular definition of it (Ettlinger, 2008). As such, I am not using the term 'virtual' to mean either 'digital', 'metaphysical', 'mental', or 'fictitious' (meanings which have these respective existing terms for discussing them anyhow). Rather, I am using the term 'virtual' to mean 'what we perceive through pictorial images'. In that sense, whenever we look at, say, a painting, a photograph, a film, or a video game, the visual content which we perceive beyond their physical surface can be considered to be located in a different kind of space than the physical space in which our bodies are. This space is what I call 'virtual space', and any object that is located inside of it is then defined as 'virtual'.

Using this terminology, if we take the case of an apple and consider one apple in our hand and another apple seen through a picture, we can realize that the main difference between the two is that they simply occupy two fundamentally different types of space. Both are part of the perceivable world, and both are tangible objects, yet one of them is a physical apple located in physical space, while the other is located in the space that lies beyond the surface of a pictorial image – or in other words, it is a virtual apple located inside of virtual space.

Tangible objects, therefore, can be divided into two categories according to the two kinds of space in which they can be found: in physical space, or in virtual space. And as such, both kinds may have an independent essence, as well as provide us with cues from which we can create our own perception of them.

Abstract Notions: Conceptual and Perceptual

For the discussion of the abstract aspect of the perceivable world I propose the distinction between two major types of abstract notions: conceptual and perceptual. To emphasize the point, I am not speaking here of conceptual and perceptual as two different modes of comprehending the world, but rather as two different types of elements that exist in the world for us to perceive them. Conceptual notions include abstract ideas such as 'freedom' or 'beauty', as well as conceptualizations of tangible objects such as the generic ideas of 'apple' or 'kingdom'. Perceptual notions, on the other hand, are quite different. They are much more specific than concepts are, and they are even closely related to tangible objects, yet they still exist only as mental constructs – such as the case of 'the Kingdom of France'.

To take this example further, though 'the Kingdom of France' is an abstract notion, it is not merely a neutral concept as the general idea of 'a kingdom' is since it is directly related to a particular set of tangible objects in the physical world: geographical land, buildings, people, and so on. Yet on the other hand, 'the Kingdom of France' is not just the sum of these tangible objects either. After all, with only slight variation, the same set of tangible objects could even be related to another abstract notion altogether, such as, for example, 'the Republic of France'. The point, then, is that the abstract

notion of 'the Kingdom of France' has an existence in its own right – as a perceptual notion.

My proposed definition, then, is that a 'perceptual' is an abstract notion that is constructed by or associated with the perception of tangible objects (sometimes also conceptual notions can be added to the construction). In other words, the perceptual is directly linked to our perceptions of the world, but is the result of their merging into something separate from them, and which then assumes an existence as part of the perceivable world 'out there' – as a particular kind of abstract notion. In order to further clarify this definition and the meaning of this proposed term, let us first discuss several key aspects in the process of constructing perception.

NEUROLOGICAL NOTES ON PERCEPTION

Perceptual Images

The work of neurologist Antonio Damasio (2010) offers some observations on the nature of perception which will assist us in this discussion. Research on the structure and function of the brain reveals that a substantial part of it consists of neurons that produce maps of bodily states. For example, each particular body posture, each particular chemical state of the digestive system, and each particular stimulus on any of our sense organs is represented in the brain as a particular combination of activated neurons that form a particular 'neural map' or 'neural image'. For the purpose of this discussion, this means two main things:

First, as observed by philosophers of old, our brain's perception of the world 'out there' is indeed not directly that of the perceived objects, but that of the bodily state of our perceiving organs: Our experience of eating an apple is the juxtaposition of the separate neural maps of the state of our retinas, the state of our taste buds, the state of our inner ears, and the state of the palm of our hand as we grasp the apple and take a bite out of it.

Second, since the brain is part of the body as well, it too is subjected to mapping. That is, as the brain holds the various neural maps of our bodily states when we are eating the apple, another part of the brain simultaneously constructs a neural map of the state of the brain at that same moment. This kind of mapping is what accounts for our ability to make conceptual abstractions, but it also accounts for that aspect of perception that lies beyond any particular sensorial mode. As we know from personal experience, we can perceive various sounds as associated with different colors or textures; we can perceive a certain visual stimulus as somehow being tasty; we can perceive some smells as being light or dark; and we can even experience certain concepts as being related to particular body postures. We may initially think of such comparisons as mere metaphors (and sometimes they are) but they are nevertheless grounded in the very structure of our brains, which form what Damasio calls 'perceptual images' – neural maps that are independent of any particular sensorial mode, yet can potentially be translated into any of them.

Memories and Expectations

Another observation of relevance is the brain structure's effect on our experience of memories and expectations (Damasio, 2010; Hawkins, 2004). Damasio proposes that the brain does not store the complete data of our past experiences, but only a system of links between the various neural maps of bodily states that are associated with a particular experience. Thus, the perception of a certain sound retrieves the neural maps of the particular sights, smells, as well as internal bodily states that were experienced along with it – as we can attest to from personal experience. The point, however, is that the full experience was never stored but is rather re-experienced at the moment when its particular constellation of neural maps is being reactivated in the brain.

Similarly, when we form an expectation of a future experience, our brains construct neural maps of the various bodily states that would be involved in it. Here too, once this constellation of neural maps is constructed, the brain perceives it as an experience that is happening at that moment.

The importance of this nature of experiencing memories and expectations becomes apparent when we understand the dual role of brain maps. The continuous production of body maps in the brain does not only represent the overall state of the body at any given moment, but it is also the brain's means of instructing the body what state it should be in. This is why just the thought of freshly baked bread makes us literally smell it. The brain's perceptual image of the bread activates the neural maps of the bodily states that are associated with it, which the body then dutifully follows as operative instructions. And for this purpose, the brain's body mapping does not distinguish between the memory of an experience, an actual experience, or the expectation of an experience: In a closed loop of representation and instruction, to our brains, our smell receptors seem to actually smell fresh bread.

THE PERCEPTUAL

The above observations on the neurology of perception reinforce the principles underlying this paper's proposed idea of the 'perceptual'. What they show is that the experience of perception can exist independently of any particular object being perceived, and furthermore, it can even exist beyond any particular sensorial mode of perception. Rather, it is a neural map in the brain which – even though it is highly abstract – provides a very vivid and present experience whenever it is active. The perceptual, then, I propose, is a specific type of mental construct that is the result of linking multiple perceptions of various kinds into a single overall perception that is then separate from any of them.

Evoking and Linking Perception

In order for a perceptual to be constructed, its associated perceptions need to first of all be evoked, and then be linked to each other. This can be done in several ways:

Words – As I write this paper, I am sitting at a café where I was just served tea in a mug designed with embossed words such as 'hot', 'taste', 'mmm…',

'relax', and 'enjoy'. Successfully or not, it is an attempt to influence my perception of the actual tea that I am drinking out of this mug. The same principle is used in building developments that are given evocative names which are supposed to influence our perception of the places that they create. A cynical demonstration of this is given in Terry Gilliam's film Brazil (1985), where a nightmarish run-down housing project is known by the idyllic name of 'Shangri-la Towers'.

Graphics – Another means of evoking perception is the use of graphics, such as the design of logos and choice of typeface, which can provide their subject matter the perception of being anything from dynamic and friendly to authoritative and austere.

Images – Our perception of an object can be influenced by placing an image of another object next to it. An extreme example is again from the film Brazil (1985), where diners in a fancy restaurant are served with a green unappetizing pile along with the picture of a juicy steak – supposedly enough to evoke their perception to make them feel as if they were actually eating a steak.

Comparisons – A common means of evoking the perception of an object is the choice of other objects it is presented alongside with. For example, a car commercial might present its advertised car driving past a building by Santiago Calatrava so as to convey a sense of state-of-the-art technology and elegance.

Simulacrums – Perhaps the most extreme way of evoking perception is to produce objects that simulate other objects for which we might already have an established perception. Also known as 'simulacrums', this is the case of souvenir miniatures of the Eiffel Tower as well as large-size versions of it such as the one in Las Vegas: They attempt to evoke our perception of the Eiffel Tower from Paris through an object that is not the Eiffel Tower. Similarly, a toy that looks like a spaceship from 'Star Wars' and is sold at a toy store is a physical object designed to evoke our perception of the spaceship from the film – even though the two are clearly not the same object.

Constructing the Perceptual

Perhaps the most obvious demonstration of constructing a perceptual is the case of branding. For example, the brand name that the computer company Apple succeeded in creating goes way beyond its factories, employees, products, patents, or stores. Most of them are tangible objects, they are all closely related to it, and yet 'Apple' is a perceptual notion that exists separately from any of them. This allows us to distinguish three types of relationships between a tangible object and a perceptual notion: constructors, members, and symbols.

Constructor – A constructor is a tangible object whose perception is part of the construction of a perceptual notion. Apple's factories, workers, etc. are then constructors of the perceptual notion of 'Apple'. Similarly, in the previously mentioned example of 'the Kingdom of France', its physical land, buildings, and people are therefore constructors of the perceptual notion of that kingdom. In that sense, even a physical city, more than being a tangible object, is to a large degree rather a constructor of our perceptual notion of that city. New York City, for example, is far more than our perceptions of its physical buildings, activities, and people. It is a perceptual notion constructed by all of them, and reinforced even further by its representations in films, books, comic strips, and even the graphic form of the 'I<heart>NY' logo.

Symbol – A symbol is a tangible object that is perceived as representing a perceptual notion. In the example of 'Apple', Steve Jobs is clearly a symbol, and perhaps its flagship products are too. In the case of 'the Kingdom of France', the king was its symbol, and also the palace in Versailles could be considered as a symbol of the kingdom. Accordingly, with respect to the alternative perceptual 'the Republic of France', the same physical palace might not serve as its symbol but can still be considered to be one of its constructors.

Member – A member is a tangible object that is perceived as associated with a perceptual notion. Unlike a constructor or a symbol, a member does not take part in the construction of that perceptual notion

or represents it, but it is nevertheless clearly linked to it. In the example of Apple, if you buy yourself a Mac computer, you are associating yourself with the perceptual of 'Apple', thus turning yourself into a member of this perceptual notion. Such associations between a tangible object and a perceptual notion can be made using the various ways of evoking perception mentioned above. For example, the city of Memphis, Tennessee was established as an educational center modeled after the perceptual notion of rational enlightenment in the image of Ancient Greece. As such, it was nicknamed 'The Athens of the South', as a way of using words to associate Memphis with the city that symbolizes this perceptual notion. Accordingly, a full-size simulacrum of the Athens Parthenon was physically built in Memphis to enhance this association even further and emphasize Memphis's status as a member of this perceptual notion.

PERCEPTUALS OF THE DIGITAL AGE

The terminology presented in this paper is particularly useful to elucidate some of the main phenomena introduced by digital technology, such as the Internet, the idea of cyberspace, or the nature of social networks such as Facebook. These are each different from each other, of course, but they are often all inaccurately referred to as 'virtual'. Given the observations discussed here, it becomes clear that a much more precise description of the nature of these phenomena is that they are rather perceptual.

The Internet may be physically made of countless computers, routers, and cables, along with the programs that operate them and the data that is stored in and transferred through them, but the end result is a perceptual notion that is constructed from the combined perceptions of all of them. The same applies to cyberspace and social networks as well, with applicable changes due to their different respective constructors, symbols, and members. Thus, to refer to any of them as 'a place' is valid only in the sense that it is a perceptual place. They do not exist in physical space, and they do not exist in virtual space, yet they have enough tangible objects

related to them to construct a perceptual notion of their own.

Understanding these phenomena as perceptual also sheds light on some of the major events and trends in the development of the hi-tech industry. For example, the legal case against Microsoft in the 1990s had to do with its attempt at manipulating the public's perception of its Windows operating system so as to equate it with the perceptual notion of the Internet as a whole. This is the same struggle going on today between promoters of an open and free Internet, as opposed to the 'walled garden' policy attributed to mega-companies such as Apple, Google, and Facebook: By providing a wide range of Internet-based services while limiting others, such companies are competing in trying to appropriate their users' perceptual notion of the Internet as a whole to the limited perceptual notion of their own respective brands. Perceptual notions, therefore, can be worth billions.

The exact process of construction and function of these respective perceptuals is a matter which will be left to a separate paper, yet the terminology proposed here provides key tools required for the task.

WHAT IS REAL (AND WHAT IS NOT)?

A discussion of the virtual and the proposed idea of the perceptual cannot avoid the question of what real is, if only for the reason that the assumption that they must be non-real is so central to the popular understanding of them. The question of the real is a philosophical matter whose full depth is beyond the scope of this paper, but given the terminology presented here I would like to nevertheless attempt to provide a few possible answers. The popular notion of real associates it primarily with 'physical', and as we saw above, the perceivable world has several other kinds of contents that can be very real even if they are not physical: It has tangible objects in both physical space and virtual space, and it has abstract notions in both conceptual and perceptual form, all of which can potentially be real. So when are they real, and when are they not real?

To begin with, our human limitations may prohibit our perception from ever capturing the full essence of things, but I propose that we can often at least sense whether the gap between the two is wide or narrow. When referring to tangible objects, then, we might call something 'real' when we can sense that its perception is close to its true essence and 'not real' when its perception seems far from its essence. We could thus tentatively define 'real' as that whose perception is true to its essence. The aspect of essence which I propose we can detect and which makes us sense whether it is being respected or not is that of context. Thus, the Eiffel Tower in Las Vegas is not real because it is out of context, and so are the Parthenon in Memphis and the Hogwarts School in the Harry Potter theme park.

Additionally, when referring to perceptual notions, we do have the ability to detect whether their construction is consistent or not. Thus, a perceptual which is poorly constructed would be intuitively considered to be non-real. Analyzing and defining such cases will therefore assist us in arriving at a definition of what real might be. For example, a contemporary villa which is designed in the form of a Baroque castle evokes the perceptual notion of a kingdom that does not exist. If its owner insists that the kingdom does exist, we might say that it is his private delusion, but on a wider cultural level we could describe the nature of this kingdom using Jean Baudrillard's (2003) term hyperreal. In this paper's terminology, we could thus define 'hyperreal' as a perceptual notion that has little or no tangible constructors. Accordingly, such as in the case of the villa, a tangible object that functions as a symbol of a hyperreal perceptual might be defined as a 'farce', and the aspiring members of a hyperreal perceptual (such as the villa's owners) might be considered as 'phony'. Here too, the key to something being real is that its context is consistent, which is often detectable.

Another case of inconsistent constructions takes place when associated tangible objects and perceptual notions actually belong to two different types of space: physical and virtual. For example,

the Harry Potter theme park is a physically-built collection of simulacrums made to evoke the perceptual notion of the virtual world of Harry Potter as constructed by its film series – and in that sense, it is rather consistent. Disney theme parks, however, create a series of simulacrums of tangible objects from many films that have no relation to each other in virtual space, yet are physically put together to evoke the perceptual notion of Disney as a brand in the physical world, but which has no such equivalent existence in virtual space. Thus, the Harry Potter theme park is closer to being real because it faithfully reflects a perceptual notion from virtual space, whereas the Disney parks only simulate elements from virtual space to construct a perceptual notion whose sole existence is in physical space, and thus does not seem quite as real – that is, it is not as consistent with its context.

Along the same lines, product placement in films is the case where objects presented in virtual space attempt to evoke perceptual notions from the physical world in which the viewer lives. This may be a business necessity of financing film production, but it often comes off as 'not real' because it harms the consistency of the context of the film: Instead of providing an experience of places and events that are fully in virtual space, it keeps making irrelevant references to the physical world.

Following all of the above, we could then define 'real' as that which is consistent with its context. This definition, of course, is bound to our ability to perceive context in the first place, as well as determine which context is the one that truly matters when multiple contexts are involved. As such, this definition of real – though functional – is only relative and still dependent on personal perception. Could there be also a more decisive definition of what real is? I do not know whether or not such a thing as an absolute real might exist, but the above definition provides us with the ability to speculate on that. With only a slight expansion, we could define 'real' as that which is so according to the most inclusive context. How capable we are of perceiving which context is the most inclusive is another question altogether, but I propose that the closer we might come to this, the closer we are to knowing what is actually real.

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