Unravelling the Virtual: Discourse and Epistemology

Throughout the history of humanity, humankind has had a keen interest in the virtual. From the cave paintings that first appeared over 35,000 ago, to the augmented realities seen today across various social media platforms, it is apparent that we are deeply fascinated with representation. We have a strong yearning to leave a mark. What does all this say about us as a species? This obsession, perhaps inevitable, seems to be deeply embedded in the human psyche. We are enthralled with illusion and mimicking reality. We love to copy and alter what we see. Across western history, from the Renaissance to the present, a number of examples of the virtual have materialized. Moreover, with the entrance into postmodernism, a multiplicity of theories surrounding this topic have transpired. Through the investigation of the discourses of various visual media and fields of knowledge, we can understand how these virtual realities and ideas emerge.

When discussing the virtual, it is imperative to note that technology builds off previous technology, thus Renaissance perspective for example, can be seen as a logical extension of cave painting through the discourse of a vast timeline. In Michel Foucault's book *The Order of Things*, he describes the world as "the universal 'convenience' of things."¹ Moreover, he reflects on the term *convenientia* as a "resemblance connected with space in the form of a graduated scale of proximity."² To illustrate his point more clearly, he uses the metaphor of chain to explain this linking of resemblances, where each loop in the chain mirrors what came before and after. He says:

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¹ Foucault, 18
² Foucault, 18
"...by this linking of resemblance with space, this 'convenience' that brings like things together, and makes adjacent things similar, the world is linked together like a chain. At each point of contact there begins and ends a link that resembles the one before it and the one after it; and from circle to circle, these similitudes continue, holding the extremes apart, yet bringing them together in such a way that the will of the Almighty may penetrate into the most unawakened corners."³

All We Have to Reflect

The world is the field in which all that we have ever known has been built. This world, which we awoke to, is the point of departure for all things; the basis for all of our reflections. All that has ever been and will be is contingent on this world and its 'genetic makeup.' Like a group of men shipwrecked on some distant island, all that we have ever created came from this planet. We weren't 'given' anything from external sources. From the earliest stone tools, such as the hammer stone, developed over 2.6 million years ago, to the glowing screens of today's iPhones. It all came from here. You could say the ingredients to construct an iPhone were all present at the same time as the hammer stone, (2.6 million years ago), however, the emergence of the iPhone was dependent on a complex variety of factors for it to be called into existence, such as human evolution and the discourse of technology and its relation to epistemes that have come and gone. Using Foucault's metaphor of the chain, the hammer stone could be seen as occupying one end of the chain, and the iPhone inhabiting the extreme opposite, yet they are inescapably connected. The very first strike of the hammer stone, in that instant called out, transcending time and space. That blow, cementing the first link in a vast chain, causing the rest of the cord to tremble.

Foucault's concepts of discourse and episteme are extremely helpful when investigating the past, because they help us understand why certain things emerge in a particular time period. There's an adjacency the concepts contained in these terms share, and therefore are closely related. What does the term episteme mean? In The Order of Things, Foucault describes episteme as "the way that an inquiry into truth is organized in a given era."⁴ Essentially, it's the prevailing worldview of a particular era, and the way in which that era obtains and organizes knowledge. An episteme determines what thoughts we take seriously enough to really consider and is the foundation on which discourses surface. For example, an individual might plan what clothing to

³ Foucault, 19
⁴ Strurken and Cartwright, 149
wear on a given day, however the thought of leaving their house naked probably never even occurred to them. That's because being nude in public doesn't coincide with the current episteme. The key term to recognize here is "never even occurred to them." There's certain things we just don't think about. Thus through the lenses of Foucault, epistemes include these sets of 'unconscious rules' that really sort of determine what does and doesn't get taken seriously. In the formation of epistemes, which are always fluid, things that aren't given much attention, are just as effectual as what is being willfully pursued. In other words, these unconscious elements, Foucault would argue, are just as cogent as the conscious. The same is true with discourse, where the seemingly dormant within a given field of knowledge does in fact have agency in the formation of its body.

What is meant by the term *discourse*? Generally speaking, discourse is the written and spoken word within an area of knowledge. For example, there are discourses of art, music, and technology. According to Foucault, discourse both "defines and limits what can be said about something"\(^5\) and that it can "produce certain kinds of subjects and knowledge."\(^6\) In Chris Weedon's book, *Feminist Practice and Poststructuralist Theory*, she highlights Foucault's definition of discourse:

"...ways of constituting knowledge, together with the social practices, forms of subjectivity, and power relations which inhere in such knowledges and relations between them. Discourses are more than ways of thinking and producing meaning. They constitute the 'nature' of the body, unconscious and conscious mind, and emotional life of the subjects they seek to govern."\(^7\)

The concept of the *virtual* isn't new, and the term is often misinterpreted. A common misconception is that the 'virtual' only applies to digital media, such as digital images or computer games. However, this is not the case, as virtual images can be either digital or analog. Virtual images are "simulations that represent ideal or constructed rather than actual conditions."\(^8\) Some of the limner figure paintings that emerged during the Colonial Era could be said to be virtual, insofar as artists often took from multiple sources to compose the human figure.

\(^5\) Sturken and Cartwright, 439  
\(^6\) Sturken and Cartwright, 439  
\(^7\) Weedon, 108  
\(^8\) Sturken and Cartwright, 177
Limners, known for their portraiture, frequently "directed all their attention to the subject's face, which they believed created the picture's soul." In most cases they would fill in the torso later, borrowing from another source. Another prime example of the virtual can be seen in pornographic images, which are exorbitantly fabricated, and often depict far-fetched sexual scenarios.

"perspicere", the Latin term for perspective, means "to see clearly." Perspective is a visualization technique that became immensely popular in Italy during the mid-fifteenth century, especially in the fields painting and drawing. Believed to have been conceived by Italian architect Filippo Brunelleschi in 1415, linear one-point perspective in its most basic sense, incorporates a vanishing point, where objects within the picture plane recede the closer they get to that point. In perspectival painting, all parallel lines, or orthogonals, converge at the vanishing point, which is situated on the horizon line. This essentially directs the eye of the viewer into the projected space by creating the illusion of depth on a flat surface. The effectiveness of perspective in the Renaissance model, was contingent on the concept of a "spectator situated before a scene as if looking through a window or screen." Perspective was popularized during the Renaissance because it seamlessly reflected the episteme of the time period, which had a profound "interest in the fusion of art and science." Moreover, perspective was understood as "a scientific and rational way to organize space." Since perspective was optically truer to the way the human eye sees, it was extremely helpful and influential in realist painting, and has persisted to this day across various media, such as video games, and virtual reality headsets.

The concept of perspective serves as an excellent illustration highlighting the epistemic shifts that take place throughout history. The ancient Greeks for example, were well aware of the basics of perspective, however, it didn't even remotely achieve the level of popularity in their society that it received during the Renaissance. The Greeks rejected it because they felt it

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10 Sturken and Cartwright, 151
11 Sturken and Cartwright, 151
12 Sturken and Cartwright, 452
13 Sturken and Cartwright, 452
conflicted with core philosophical ideas that were dominant in their culture. They felt that its deceptive nature tricked the viewer, and thus had no place in a just society. Take for instance this passage from Plato's Republic; a Socratic dialogue written around 380 B.C. that reflects on what constitutes a just and moral society:

"Thus (through perspective) every sort of confusion is revealed within us; and this is that weakness of the human mind on which the art of conjuring and of deceiving by light and shadow and other ingenious devices imposes, having an effect upon us like magic..."\textsuperscript{14}

Perspective therefore didn't correspond to the Greek episteme of this time period, however, the episteme of the Renaissance accounts for the "birth" of perspective. Therefore, the notion of perspective was consistent with ideas that were popular during the Renaissance. It satisfied particular social demands that centered on the desire to fuse art and science.

In the fields of painting and drawing, perspective opened up entire virtual "worlds" for the artist and spectator alike, and it's crucial to note that it largely functioned on the premise of the "imagined position of the observer."\textsuperscript{15} Therefore, Renaissance paintings were self-conscious of the fact that not only were they going to be penetrated by the viewer's gaze, but also seen against 'reality.' For the first time it seems in art, the spectator became an active agent, and assumes a larger role in the function of the work. Both are dependent on the presence of one another to exist and operate correctly. Without a doubt, the perspective techniques developed during the Renaissance were far reaching, and dramatically changed the discourse of art. One can only imagine how thrilling painting and drawing must've been, at this time.\textsuperscript{16} Essentially, a wide array of virtual 'realities' became available and allowed for biblical narratives to be seen for the first time in unprecedented light.

Though perspective has been in use since the Renaissance, it hasn't always been used in the same manner across history. In some cases it has changed or taken on different meanings.

\textsuperscript{14} Taken from Plato’s Republic. http://www.classicalart.org/blog/a-brief-history-of-perspective

\textsuperscript{15} Sturken and Cartwright, 151

\textsuperscript{16} Probably as exciting as the first digital 3-D video games that emerged in the last century.
Take futurist painting for example, which was launched in 1909, following the debut of Filippo Tommaso Marinetti’s *Futurist Manifesto*. Futurist painters used fragmentation as the primary means for expression in their artworks. Borrowing from the cubists, this fragmentation offered multiple perspectives and viewpoints, as well as the idea of simultaneity. The episteme in place shortly after the turn of the 19th century allowed for this radical new type of painting to manifest itself. Modernism, now in full swing, brought dramatic technological changes that had never been seen or experienced before. Such as the skyscraper, automobile, and aeroplane. A vehement denunciation of the past, Futurism praised machinery as a new type of beauty; a symbol of "speed, progress, and freedom." Moreover, it celebrated youth factory workers and industrial workers, who were in direct contact with the city, and "felt its constant state of flux." Through the manipulation of perspective, and use of fragmentation, they felt their paintings reflected the speed, dynamism, and synchronous character of this newfangled urban environment.

The stereoscope can be seen as another type of virtual reality that surfaced towards the mid-19th century. In the stereoscope, the viewer peers through a double viewfinder (that is a viewfinder for each eye), at a pair of stereoscopic images. Each lens of the finder separately presents these two offset images, which are often split by some type of divider between the eyes, so that each eye sees the image intended for it. In this way, by looking through the lenses at the scene, the brain 'combines' the 2-D images, creating a sense of depth. The stereoscope was a highly personal instrument, as only one person at a time could view the scene inside. It is remarkably similar to today's smartphones, in the sense that they are both personal and individualized. Stereoscopes had the "ability to make viewing the private, voyeuristic domain of the spectator, even if the spectator used the device in a public space." Stylistically, there is a striking similitude between the stereoscope and today's virtual reality headsets inasmuch as they both share a resemblance to goggles. Users either attach or hold up the instrument to their face to experience a view. With virtual reality headsets like Google cardboard, the resemblances and functions are even more closely related to the stereoscope. Like the stereoscope, the Google

17 Raizman, 180-182
18 Raizman 180-182
19 Sturken and Cartwright, 188
cardboard user has to hold the device up to their face (a strap to attach it to one's head can be purchased separately), and likewise, it incorporates two separate eye holes, or lenses.

If we follow the trajectory of photography, we can understand how the stereoscope came to be, as the two are closely related. Similar to the notion of perspective, between the Greek and Renaissance epistemes, the mechanical and chemical components required to create photographs existed prior to its inception. Photography materialized however, because it fit particular social needs of the time, like the desire to "capture" landscape and nature in a "mechanically reproducible form."20 (Hence why a vast majority of early stereoscopic images were nature scenes.) Further, it is an exemplar model of modernity, considering that it suited a great deal of emerging modern concepts of the time, such as: "concepts of technological progress and mechanization," and modern "concepts of time and spontaneity."21 Before photos, realist painting was heavily relied upon as a way to document and record information about a subject. However, just as perspective was a technology that allowed for artists to depict scenes more rationally and 'true', photography was the outcome of a powerful longing to objectively view and document the world. It wasn't long after the birth of the photograph that the stereoscope, sequential photography, and motion-picture film emerged. All logical extensions of the medium that corresponded with the fast-pace of the late 19th century, and the desire to "visualize movement."22

Postmodern Ideas of the Virtual

In the philosophical treatise Simulacra and Simulation, philosopher Jean Baudrillard proposes that we are living in a kind of simulation, or what he calls the ‘hyperreal.’ With the entrance into a postmodern era, rampant with media technologies that produce “models of the real”23, he infers that we have “lost sight of the real."24 Baudrillard describes hyperreality as thus:

20 Sturken and Cartwright, 185
21 Sturken and Cartwright, 185
22 Sturken and Cartwright, 185
23 Sturken and Cartwright, 307
24 Sturken and Cartwright, 308
“In the hyperreality of pure simulacra, then there is no more imitation, duplication, or parody. The simulator’s model offers us ‘all the signs of the real’ without its ‘vicissitudes.’”

In postmodern society, these simulacra can be seen all around us. If we accept the aforementioned notion that the virtual is a simulation representing the ideal or fabricated, as opposed to "actual conditions" (or 'reality'), one only has to take a look around to realize we are living in a sort of 'less than reality.' In Baudrillard's terms, these 'less thans' are what constitute the simulacra. Today we consume less than food; food that mimics or pretends to be the real thing, laden with chemical additives and artificial flavors that only serve as a substitute. We wear 'less than' clothes, inasmuch as we are so far removed from its production process. We flip through less than magazines, replete with immaculate, photoshopped bodies, in highly orchestrated poses. Essentially these simulacra are "models of the real without origin or reality," hence the hyperreal, which occurs when the difference between reality and representation has eroded. These 'less thans' have supplanted 'reality.' Further, Baudrillard's ideas situate the human subject in an interesting place. The more the subject is assimilated into these simulations, the more removed from reality they become, thereby becoming destabilized to a larger degree.

Let's say that a couple, after eating at their favorite Chinese-American restaurant, decide to visit China. Upon arrival they become deeply disappointed by a variety of factors. Such as language barriers, tourist crowds, and the lack of the Chinese-American style cuisine that they're used to. They then start to "crave the artificial" Chinese-American experience. Consequently, they return home to their favorite restaurant, and opt never to go back to China. The simulacra eclipses reality. This point becomes central to Baudrillard's critique. The couple in this case prefers the artificial representation, the replica of the 'Chinese experience', to the real, authentic experience.

The discourse of the virtual has given rise to a multitude of ideas surrounding the concept of virtual reality in contemporary society; the technological processes of humankind has

25 Baudrillard, 2
26 Sturken and Cartwright, 177
27 Baudrillard, 3
28 Zweibelson, 16
started to make us aware of other possibilities. The development of more realistic 3-D computer
graphics in the 1990s for instance, has prompted the advent of the Simulation Argument, a
theory first proposed by philosopher Nick Bostrom. One core tenet of his theory argues that
under the assumption technological process will not cease anytime soon, one day there very well
could be a civilization so advanced that it could possess enough computing power to simulate an
entire 'reality.' As a consequence, it prompts the question: are we currently 'living' in a computer-
generated reality? The theory has gained quite a following, which includes prolific figures like
astrophysicist Neil deGrasse Tyson, as well as Elon Musk, CEO of Tesla and founder of SpaceX.
The Simulation Argument seems to fit the current episteme, which has a deep fascination and
reliance on tech devices, as well as a growing interest in artificial intelligence. Just like
perspective served as a mechanism to merge art and science and fit the growing needs of its time
period, so too we seem to be obsessed with fusing life and technology, to the extent that many
tech devices are now wearable or implanted. Further, the fact that we can develop virtual worlds
today is testament to the idea that we could already be inside a simulation, or that the idea is
feasible at least.

With the tech driven nature of today's world, as well as the saturation of visual media, the
lines between what is 'real' and what is not have become increasingly blurred. It is conceivable
that human beings love to escape and avoid the pains of 'reality' that simulacra can offer us. We
are mediated by the thin veil of the simulacra, which keep us from seeing what truly is. In the
realm of the virtual we can lose ourselves and be whoever we want, almost whenever we want.
We're the stars of our own show.

Humankind indisputably has an ardent preoccupation with the virtual. As a species we
love novelty. Perhaps Plato was onto something in his passionate critique of art and the
tendencies of human nature in his Republic. It seems that we are deeply obsessed with illusion
and fantasy. The allure of art and the virtual can be intoxicating, "having an effect upon us like
magic."29 The "art of conjuring"30 also seems to be inherently part of who we are. After all, we
are visual creatures, with a strong desire to leave a mark, and express through visual language the

29 Taken from Plato’s Republic. http://www.classicalart.org/blog/a-brief-history-of-perspective

30 Taken from Plato’s Republic. http://www.classicalart.org/blog/a-brief-history-of-perspective
things that perhaps can't be said. Plato, Foucault, and Baudrillard are very similar, in the regard that they all encourage us to question what is being presented to us. To not take anything at face value. The more we get in touch with ourselves and nature, the more we start to see through the veil of illusion. We can objectively look at what is being projected at us, in the same way a cinematographer would look at a movie set.

Works Cited

Baudrillard, Jean. *Simulacra and Simulations* (Ann Arbor, MI; University of Michigan Press, 1994.)


https://www.newyorker.com/books/joshua-rothman/what-are-the-odds-we-are-living-in-a-computer-simulation


https://en.wikipedia.org/wiki/Stereoscope

https://en.wikipedia.org/wiki/Stereoscopy


https://www.youtube.com/watch?v=tlTKTt47WE

So far in The Virtual Revolution, we've looked at the impact of the web on power, international politics, and business. Now, in the final episode of the series, we're focussing on us. Is the web, with its instant connections and access to information, having an impact on our relationships and possibly even the way we think? 'Generation Web' - the generation who have grown up knowing only a wired world - will enter adulthood having spent 10,000 hours online. But during the filming of The Virtual Revolution, we ran a small scale trial. Just over one hundred people of different ages and genders took the test - some who use the web rarely, others who use it all the time. The results were suggestive. Epistemology is the philosophical school of thought which studies knowledge and how we can actually know things about the universe. It asks questions such as What is knowledge and its limits, Are there methods which can be used to derive new knowledge, How can we know that our world around us is real, and many other questions. Alongside ontology, it makes us question our own existences as individuals and forces us to try making arguments defending the concept that we exist in a real world and not in some virtual reality. Furthermore, epistemology has led. Continue Reading. Question: Why is epi... The ontological and epistemological foundations of qualitative and quantitative. Approaches to research. With particular reference to content and discourse analysis of textbooks. Dieronitou, Irene University of Nicosia in the field of Education Policy & Leadership, Cyprus. dieronitou.i@unic.ac.cy. INTRODUCTION This paper aims to explore the epistemological and ontological issues concerning social research and their implications to the research of textbooks regarding cultural depictions. My reason for focusing on content analysis and discourse analysis rests in the fact that both exhibit contrasting approaches to research stemming from the two major research paradigms, positivism and constructivism respectively. The article examines the paradoxical representation and self-representation of historical and contemporary games as both just entertaining fun, and also serious ideological business. Using Johan Huizinga’s metaphor of the game as a magic circle, the article looks at how games pursue the contradictory aims of entertainingly but also neutrally, fairly and accurately representing the world through rules and systems, while also delivering ideological critiques and pedagogical values? The article shows that games are intrinsically a utopian medium, historically designed with pedagogical and social discourse. Certain lexical and discourse-based items that indicated attitude, certainty and alluded to common knowledge were identified and counted. Following that, the functions of all the items were examined qualitatively based on their actual occurrences in context. My corpus of materials is not electronic, so the counting of items was conducted manually and particular attention was paid to the context in which they were used.