

BOOK REVIEW

THE METAPHYSICS OF VIRTUAL REALITY - MICHAEL HEIM

A critical book review by Thierry de Gorguette d'Argoeuves*

Michael Heim is often considered a philosophical visionary. He has been called “the philosopher of Cyberspace”¹. Back in 1993 he published the pioneering work “The Metaphysics of Virtual Reality”² (MVR). Back at this time, there was no Amazon.com, no eBay.com, no Google.com, no Facebook.com or Twitter.com, and of course, no Secondlife.com. There were a mere 623 websites available compared to the present estimated 250 million³. Moreover PC's were still in their infancy with the fifth generation of Intel x86 processors. Interestingly enough, 1993 was the year of the introduction of the first Internet browser “Mosaic” and was also the year the first version of “Doom”, the famous immersive video game, was launched on the market. The internet had not yet touched our lives to the degree in which it has today.

But Michael Heim, writing at this early time, began confronting an array of new tools, raising many questions about a real life experience from a “virtual reality”. He began raising questions and framing problems which are relevant for us to this day.

In writing this book review, I hope to re-appraise the pioneering work of Michael

Heim, seventeen years later and consider the fast paced technological changes which took place during this period of time, and allow for an ontological rather than metaphysical, approach to virtual reality. This is where we could start a “diagonal” review of this major book which is really enlightening now that we are confronted with the invasive presence of the virtual world in our daily existence. Michael Heim has a cautious approach to technology. This reflects an anxiety concerning the great influences of these cybertechnologies on our daily lives. For instance he warns that “*technology enfolds us in its web of assumptions*” (MVR 12/13) and he wishes to reduce the “remove” that our machine logic and virtual reality technologies insert between being and our inner self. With “The Metaphysics of Virtual Realities”, we are at a turning point in Michael Heim's thinking which started in “Electric Language”⁴ with the non-linear sequence of thoughts, and was followed with the publication of “Virtual Realism”⁵ and the proposed “narrow path”.

Michael Heim's definition of VR is initially derived from the Webster dictionary, “*virtual reality, is an event or entity that is real in effect but not in fact*” (MVR

*Thierry de Gorguette d'Argoeuves is a PhD Candidate at the Assumption University Graduate School of Philosophy and Religion. He is a Lecturer at the Graduate School of Business, teaching Management of Information Systems. He is also the President of the International Association of Business Communicators - Thai Chapter.

108/109). Recognizing himself, that the definition is not really “enlightening”, he goes on to develop it as follows “The essence of VR”, he identifies seven concepts that we can regroup into 1/Virtual Reality is about interactive simulation, 2/Virtual Reality often takes place within networks allowing communication through remote presence and adequate interface, 3/Virtual Reality leads to an immersion into artificial worlds or environments which might augment our reality.

In these definitions of VR we are faced with philosophical dilemmas. What is reality or being? How can reality or being be considered virtual? And what would be the status of such a virtual reality? These are questions of Ontology and Metaphysics. In an interview (taking place in an airport following a conference after this publication)⁶, Michael Heim gave his own definition of “Metaphysics” or rather, he “softened” the traditional, strict Western-European understanding by qualifying his approach of “metaphysics light” like an American “Coke-lite” mixed with Asian fluid values. This might explain why he touches upon so many philosophical disciplines besides metaphysics, such as: theology, hermeneutics, epistemology, phenomenology, and ontology. Let’s not forget that he has been strongly influenced by Heidegger and is also a teacher of Tai Chi⁷. We can say he is a strong believer in a balanced and mixed East-West approach.

Going back to the illustrated definition of virtual reality by Michael Heim, let’s focus first on interactivity and simulations. A

computer can do little without interaction. If considered as a media between the user and the content provider, the PC, the systems and the network as a corner stone, it is the first time in human history that the being can interact with a human made media. Books, radios, TVs leave us as passive receivers. The chapters 2, 3 and 4 of the book highlight this interaction. The Graphic User Interface (GUI) is acting like a digital companion opening windows to the world of communication and exchange of knowledge. The chapter 3, entitled “Hypertext heaven” could be now named “HTML[#] heaven” and should be enhanced with the addition of XML[@]. We “surf” through clicking, we change virtual locations, we import or export content, we, as clients, are the masters of servers which obey whatever our requests are. But one could say that what Michael Heim identified as a way back into an intuitive path (MVR 28/29), depends on whether a word is highlighted as “hyper” or not and who decided on this hyperlink⁸. New avenues have been created with RSS⁺ and generally speaking the circulation of “objects”. Heim’s cautiousness re-appears here when he reminds us that “hyper” in psychology means “agitated”. *“Hypertext thinking may indeed reveal something about us that is agitated, panicky, or even pathological”* (MVR 38/39). This author would like to suggest here that computer users are facing a triple veil: the GUI and its new language based on signs and icons, the mouse, and the presence or not of possible associations (links) with other virtual loca-

[#]Hyper Text Mark up Language

[@]eXtensible Mark up Language

⁺Real Simple Syndication

tions.

Virtual Reality as posited by Michael Heim implies interactive simulations. In other words, we have another means of testing ourselves through a virtual self which becomes a variable of an equation. Rather than the “as if” (MVR 132/133) that he uses, we would prefer a “what if?” From the early flight simulators to the present sophisticated Decision Support Systems, we have now a new capability. The systems help us simulating ourselves, under assumptions given to a computerized model. Through successive iterations, uncertainties are being reduced virtually before we actualize and make our decision “real”. As a evidence, one can look at the names of software companies which emerged in the early nineties, Oracle and Cognos, for instance. Daily inventory replenishments are entirely automated making the virtual *supply chains* the condition for the next day physical delivery. Do you want to borrow money from your bank? Visit its website and simulate your monthly reimbursements, the CDSS* simulates the amounts to be paid by your virtual self. Now, do you trust the model? Even as Michael Heim warns, “*computers will hide the distortion they introduce*” (MVR 12/13).

Michael Heim was probably right to take a cautious approach. The Boolean logic that he describes is still the basic relation between 1s and 0s which are the only raw material that can be processed at the machine level. The only intelligence that the computer system can reproduce is still lent from our brain and enframed into algorithms that we dictate to application software.

Yet, many of the technological changes

and advances have questioned many of his distinctions and oppositions. The dream of the “Hypertext Heaven” has since then, become more of a reality because of the technological advancements allowing us to create our own “pipes” and even “mash-ups”. The “what if” is more of a process, one of virtualization, than of an output, a virtual reality.

Referring now to the virtual proximity generated by networks and their enhanced communication, it is obvious that computer systems have enhanced our capabilities to “be”. Getting rid of distance and time changes the way we are as a being. Our being can be present and represented by a virtual self, a second self who interacts with other virtual selves, individually or aggregated in communities of interest. Our virtual agent accesses huge amounts of knowledge stored anywhere in the world, communicates with anyone wherever their location in real time and exchanges photos, videos, ideas and testimonies. This second category of virtual reality is a reality. Michael Heim, although not aware of what was lying ahead in the future, mentions that a vision is behind the development of any new major technology development (MVR 118/119). And he adds “*Often a technological vision taps mythic consciousness and the religious side of the human spirit*” (MVR 116/117). What is this virtual self? An avatar! From an email address, to a picture or a fiction character on an on-line game, we are trying ourselves at playing the Divine. We create an avatar, half God, half human. Is the virtual self a virtual clone? Or are we “playing God”?

*Consumer Decision Support Systems

It sounds like Michael Heim's answer is yes. "*What better way then to emulate God's knowledge than to generate a virtual world constituted by bits of information?*". Leibniz appears many times in the book. The binary world of Leibniz is holding thanks to an emulation of the divine intelligence. God as a super computer? Who wrote the software could be the next question...

Michael Heim touches the core issue when he compares the Leibniz's monads to terminals all connected to a central processing unit (CPU) (MVR 98/99) which itself is synchronized in real time with all monad activities. No doors, no windows, the walls of the monad's cell are - to re-use Gilles Deleuze's comparison, like "*digital tapestries*". Hence, the question: are we heading towards an isolated being, mimicking billions of others as a modern monad of digital networking? Well, there are two ways to answer. On the one hand as Michael Heim suggests, on-line we might be freer because the communication is not a one way line to the CPU but a many to many web of virtual meeting points: "*we assemble the monads*" (MVR 100/101). On the other hand, the recent developments on the Net are pretty intriguing. Why 500 millions internet users would gather in one community? Is that what Gibson called the "*infinite cage*"? (MVR 80/81). As much as we can understand the need to root the virtual being in some kind of virtual territory - where we belong - it shows that eventually we alienate our own self and "*we do not even realize when we are trapped in our minds and cybersystems*" (MVR 80/81). To say the truth, rather than "Facebook" aren't we talking about an "Egobook", representing our

tiny "I" drawn into the ocean of the masses of virtual other "I's"?

Wrapping up this second section about Virtual Reality, it shows again that Michael Heim envisioned rightly that our being in its reality is involved, affected or enhanced by the virtual. And here we have approached what is probably fundamental about this book: the virtual self is part of the being.

Let's move to the third component of the virtual reality definition by Michael Heim: the augmented reality. Leaving aside 2000 years of discussions about what is reality, spanning various schools of philosophy, we will consider that a being is aware of its existence through its senses and through its thoughts. Interestingly enough, the CAVE⁹ and its Platonist resonance, was one of the early experiments of Virtual Reality concerning augmented senses. A recent trend is the citizen video journalist capturing with a mobile phone a real event, and broadcasting it in almost-real-time to millions of people whatever their location. Is this Virtual Reality, "real"? Many recent events have proven that real events would be consequent to those virtual ones. Including scams! As an individual experience, virtual reality, a process, is definitely enhancing being itself. From searching a distant library to enjoying a 3D movie or being part of a space adventure in a 360 degree theater, there is here something that being as such, would never be discovered without these technologies. This is where Michael Heim talks about a "*symbiotic relationship and ultimately a mental marriage to technology*" (MVR 84/85). Fine! But this is no longer virtual reality considered as an output. It is now a reality lived through virtual reality tools.

An augmented reality has to relate to

our real being. Can I see what I can't see by myself? Will I absorb this virtual reality in my stock of knowledge? Can I consider my virtual flight over the Amazon River as an experience? Can I sort out, read, analyze all the articles that I found through a search? As Michael Heim states: "*With the influx of homogenized bits of information, the sense of overall significance dwindles*" (MVR 16/17). Let's rephrase the question: can I appropriate the virtual reality as my personal experience? When directing my avatar on secondlife.com, as a movie director, am I creating a reality that I live from within? Or do I create "more reality" when as a teacher, I teach in real time 100 avatars, virtual students in a virtual class from a real distant university?

"Intuition" is a recurrent word in Michael Heim's book. This leads to the question: do you "feel" augmented? Will you use this knowledge, this experience, this encounter as an inner trigger for your next anticipation, your next decision? Will it influence your way of being?

To go back to one of our initial questions: has Michael Heim opened the gateway to a new ontology of the modern being?

A first remark is about what is central to all philosophers who touched on virtuality: the language. Like Berkeley, Leibniz, Whitehead, Bergson, Michael Heim's starting point is about language. The "Electric Language" (ibid) and the hermeneutics of the Gadamer and others don't go along well. Leibniz wanted to create a universal language able to describe anything without the need of interpretation. Berkeley hated phi-

losophers language considered as a "veil"¹⁰. Indeed, except for the background noise of video games or special equipments (HMD)*, virtual reality on a PC is often a world of silence or a world of written words and more often it is a world of signs and icons. This is pretty disturbing and might announce a shift in a specificity of our human species; language has been our traditional way of communicating and passing over memory and culture. Will "*Translate this page*" by Google be intuitive enough to allow the virtual inter lingual community? Michael Heim is right when he demonstrates that the word processor performs at the speed of thought and is not sequential (MVR 41/42). Now I interact with my own virtual thoughts which become real through my virtual screen because of a collection of bits on my hard disk. Let's note here that we are witnessing an increasing "written culture" which through SMS, MMS, Tweets and emails has created its own signage, if not its own new spelling. Heim's remarks on the parallel between the mind's meditations and musings and the computerized simulations (MVR 22/23) is remarkable but might be a bit optimistic concerning the kind of "control" we have when virtualizing through the system.

The second remark will refer mostly to chapters 5 and 6 of the book; what have we lost or gained from cyberspace as compared to a direct physical interface? One more time, we have added a veil, losing some control over our own thinking. Remember Heidegger and the typewriter "*[it] veils the essence of writing and of the script*"¹¹. Is the mouse the new typewriter?

*Head Mounted Display

Are we going to ignore the cyberspace? Certainly not, and Michael Heim was already convinced that it could be a source of enhancement for the actual being. Trying again to bridge the gap, Heim suggests the computer as a component, and with the help of McLuhan, describes a kind of new level of knowledge through electronic storage (memory), and with the one from Walter J. Ong, he evokes that the “*word processor alters thoughts processes and even our sense of reality*” (MVR 66/67). Does the computer disconnect the self from the being? Are we enframed in a Heideggerian fold?

Michael Heim in his three last chapters offers two answers which complement each other: the sensual (erotic) relationship between the self and cyberspace (MVR 82/83) and the essential nature of Virtual Reality (MVR 108/109) leading to a “*philosophical experience*” (MVR 136/137). The reader will appreciate again Heim’s “narrow path”, his delicate balance to reach out from real to virtual and vice versa. Interestingly enough, he wants us to be “anchored” in reality. There is, consequently, a reality in the virtual, created by the relation between the anchor and the virtual. Obviously, we are far from Heidegger’s “Dasein”, but we have probably augmented reality and therefore augmented the potentialities of the being in the real world. We have enriched the process of creating further realities through virtualization. This is where the anchor is: the inner self is, by essence virtual¹², continuously virtualizing, projecting itself into the next potential event. Virtual Realities might come as a helping hand, generating an augmented being. Virtual Reality is ontological as far as it con-

tributes as an output, to a richer process of anticipation and virtualization leading to an actualization by the being.

Endnotes

¹Referred to in an interview available at <http://www.thing.desk.nl/bilwet/TXT/HEIM.INT> accessed on 2nd August 2010

²MICHAEL HEIM - The Metaphysics of Virtual Reality - Oxford University Press - 1993

³A excellent Internet timeline is available at <http://www.zakon.org/robert/internet/timeline/> accessed on 21st June 2010

⁴MICHAEL HEIM - Electric Language: A Philosophical Study of Word Processing - 1987 -

⁵MICHAEL HEIM - Virtual Realism - Oxford University Press - 1998

⁶See reference 1

⁷See Michael Heim website at: <http://www.mheim.com/> accessed on 2nd August 2010

⁸And actually, reading a book, we follow the “hyper linking” of an author. Let’s quote Berkeley in the Treatise Concerning Human Knowledge: “Whoever therefore designs to read the following Sheets, I intreat him to make my Words the Occasion of his own Thinking, and endeavour to attain the same Train of Thoughts in Reading, that I had in writing them”. http://en.wikisource.org/wiki/A_Treatise_concerning_the_principles_of_human_knowledge accessed 12/8/07

⁹CAVE: Cave Automatic Virtual Environment: <http://www.evl.uic.edu/pape/CAVE/> accessed on 20th July 2010

¹⁰G.BERKELEY - A Treatise Concerning the Principles of Human Knowledge: Talking about usage of words by philosophers: “That we have first raised a Dust, and then complain, we cannot see”

¹¹HEIDEGGER - Parmenides - 1992 - p85

¹²The Merriam Webster Dictionary defines virtuality as essence and/or potentiality. <http://www.merriam-webster.com/browse/dictionary/virtuality> accessed 2nd August 2010