Virtual Intelligence the Ninth Family of Intelligences to be Added to Howard Gardner's List

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Abstract

Howard Gardner [1] has cut out in his works our intelligences in the form of families. This theory has been called multiple intelligences. Every human being possesses a multitude of more or less developed intelligences, more or less relevant, more or less powerful. Understanding these multiple intelligences is not an easy task in the face of the complexity and ingenuity that characterize humans and requires the acceptance of new discoveries of intelligences that can enrich Howard Gardner's work. With the theories concerning the behavioral differentiations between the real and the virtual that I developed and which are the subject of publications in my book "Net-profiling: behavioral analysis of cybercriminals" [2] and my scientific publications evoking also my theories including "Avatarisation" and "the Transverse Zone" [3-6], I propose to Howard Gardner a ninth family of intelligences in order to explain and understand the behavior of cybercriminals and other profiles addicts to connected objects. My theory of "Virtual Intelligence" integrates elements from Howard Gardner's other families of intelligence while adding some new born and developed intelligences of this virtual space and the elements that constitute it. Relevance will allow better synchronization and analysis of profiles using virtual space for malicious purposes as well as profiles addicted to virtual space, without obscuring profiles developing new pathologies such as "Avatarization" (Touzeau, 2015).

Keywords: Net-profiling; Transverse zone; Cyber criminality; Behavioral differentiation; Avatarization; Virtual intelligence; Howard Gardner

Introduction

If we consider Howard Gardner's work, his definition of multiple intelligences comes down to: ability to solve everyday problems, have the potential to produce goods or services of value in a specific cultural or collective context, have problem-solving skills, i. e, how to approach a situation with a goal to achieve, and determine the appropriate path to get there get through, to be able to create a cultural good, namely to acquire and transmit knowledge, the expression of an idea, feeling). Howard Gardner considered that there are several families of intelligences of which eight were finally retained. The net-profiling, knowing how to make profiles in virtual space, as well as my research work questioned me on the fact of understanding if multiple intelligences could correspond to virtual space. And the observation was that if there were synergies, there was a need to rewrite, develop,

improve and even create new intelligences. I will quote them by highlighting the characteristics of these families that interest the ninth that I propose to add, namely, "Virtual Intelligence".

Discussion

Below, will be explained the characteristics having an interest concerning my theory of "Virtual Intelligence" identified in the 8 families of intelligence corresponding to the theory of multiple intelligences of Howard Gardner

Verbal / Linguistic intelligence

This family of intelligences concerns the ability to be sensitive to linguistic structures in all their forms. It is particularly developed among writers, poets, orators, politicians, advertisers, journalists, etc....
This intelligence is particularly recognized in someone who likes to read, who speaks easily, likes to tell stories and likes to hear them, who likes games with words (crosswords, Scrabble, etc.), word games, puns. A communicating person whether in real or virtual space will always communicate? In fact, it also concerns virtual space. However, based on my research, I have found that cybercriminals, in particular, are using new means of communication. So they created codes, tools, one or more languages to communicate in this space differently. It should be noted that people communicating in this way are not necessarily communicative in real space. Yet they use sitting language and code in virtual space. This element is not part of Howard Gardner's first family of intelligence. However, the fact of using new codes, languages, rules created by users of this virtual space, requires new intelligences including verbal linguistic, without making the cybercriminal someone very communicative. It is of the remainder, except exception of which an example will be quoted below, discreet and communicates under pseudonym or avatar. So I added these news intelligences to the ninth families of intelligences I created (Touzeau, 2015): "Virtual Intelligence".

It was noted that lack of verbal/linguistic intelligence can create disorders ranging from academic failure to violence. Could cyber bullying be one of the disorders for a non-communicative cybercriminal in real space?

Visual/Special intelligence

It is the ability to create mental images, and to perceive the visible world with precision in its three dimensions. It is particularly developed among architects, landscape architects, painters, sculptors, naturalists, those who try to explain the universe, battlefield strategists, directors,

etc.. This family of intelligence is perfectly suited to the user of the net, dark net and therefore cybercriminals. They have indeed a perception of a totally virtual and transversal universe without a real concrete projection, imaged, drawn, palpable, etc.. In other words, a potential to live, orientate, deploy in an impalpable, universal, borderless, rapid space without materialization. It is in this that it corresponds all the more to the "Virtual Intelligence". As human beings, virtual space addicts and cybercriminals have a remarkable potential to physically move in real space and to project and move in virtual space, sometimes doing so simultaneously in both spaces. These are still new intelligences that should integrate the ninth family of intelligence that I have created: "Virtual Intelligence".

Musical/Rhythmic intelligence

As with verbal/linguistic intelligence, this intelligence remains in an individual whether in real or virtual space. On the other hand, it is not attractive in terms of "Virtual Intelligence".

Logical/Mathematical intelligence

It is a question of having the potential to reason, to calculate, to keep a logical reasoning, to order the world, to count. It is intelligence that has been described with great care and detail by Piaget [7] as "intelligence". In fact, it is developed in mathematicians and scientists, engineers, investigators, lawyers, etc....It is precisely this type of profile that makes black hats in particular. Logic, dynamic, structured creativity, sometimes complex animates these minds that have developed virtual space and continue to do so. A cybercriminal in order to decrypt entities like the CIA, tools like the I-phone will use all this intelligence. Just like designing a ran- somware malware such as Wannacy, a cyber attack on a connected means of transport [8], creating sites in the DarkWeb or DeepWeb to circulate videos, images and terrorist documents, put 50,000 residents in the dark for several days, [9] etc.. This intelligence integrates "Virtual Intelligence" by considering the elements developed above. However, once again, the integration of these intelligences in virtual space brings a development of other mathematical-logical intelligences because they synchronize in two different universes: the real is pyramidal while the virtual is transversal. This supposes two universe logics with different analyses, calculations, methods that will be orchestrated together to achieve the objectives. The numbers of the cyber attacks speak for themselves.

Body/Kinesthetic intelligence

Same consideration as Musical/Rhythmic Intelligence

Intrapersonal intelligence

It is the ability to have a good knowledge of one self. It is particularly developed among writers, the "wise", philosophers, mystics. This family of intelligence is particularly interesting for cybercriminals because it is not developed. One of the characteristics of cybercriminals is to act quickly, in a calculated way, following one or more objectives with- out worrying about the impact on humans. Gain takes precedence. Indeed, wisdom has no place with a cybercriminal. In my work on my "Avatarization" theory, a cyberbullyer attacks his prey without measuring its impact. He acts in the virtual, and considers that the impact of his act will be perceived in the same way. Hence many cyberbullyers surprised at the harm they have done to their victims, some of whom have killed themselves.

Interpersonal intelligence

It is the ability to relate to others. It is particularly developed among politicians, teachers and trainers, consultants and advisers, salespeople, public relations people. Bad B [10], one of the greatest black hats of all time, will use Interpersonal Intelligence to value his victories, which will lose him from the rest. An example that will not be followed by many cybercriminals who use the principle that the virtual space is a hidden space. Interpersonal intelligence is in fact contradictory according to cybercriminals who will use more avoidance to show themselves as they are in the practice of their crimes. The cases that will enhance their image and reveal them- selves more are the profiles of egos developed, cyberbullyers who do not consider their act as a crime. The "Avatarized" profiles modifying their behavior and creating one or more characters that they cannot live or would have liked to behave in their profile a developed interpersonal intelligence."Virtual Intelligence" redefines this interpersonal intelligence according to the profiles of virtual users, mainly cybercriminals.

Naturalistic intelligence

Same consideration as Musical/Rhythmic Intelligence.

"Virtual Intelligence" Definition

My analyses and cross-checking following the net-profiling and my theories allowed me to define "Virtual Intelligence" as follows: "Virtual intelligence is the ability to evolve in a parallel world that requires resources similar to other families of intelligences. It has synergies with other families of intelligence such as geospatial, analytical and creativity. Virtual intelligence is the ability to structure, understand, design, animate and develop a technical computing universe, with dedicated language and codes, and integrate them into the real world to create a parallel world that will lead to an Avatarized environment. It concerns all the people who work around the connected tools. The potential of people with virtual intelligence allows them to access different universes by creating their own codes or deciphering those that exist without having to study them. These people are intellectually active and less focused on their emotions"

Conclusion

Virtual space did not exist at the time when Howard Gardner developed his theory of multiple intelligences. Considering that virtual space is animated by human beings capable of developing behavioral differentiations in the virtual as indicated in my theories published in my scientific book (Touzeau, 2015), sometimes reproduced in whole or in part in the real world, and, with regard to the characteristics of the theory of multiple intelligences divided into eight families by Howard Gardner, a ninth family dedicated to these new intelligences used in virtual space allows an objective understanding of cybercriminals and certain users of virtual space. While some of the characteristics of Howard Gardner's eight families of intelligence are appropriate to the intelligences developed in virtual space, some need to be redefined or enhanced to fit the profile of cybercriminals and hard-core users of virtual space. The definition of this virtual space and the intelligence of these occupants aspire to be able to refine the profile of cybercriminals allowing for finer investigations adapted to cyberspace.

This ninth family of multiple intelligence will also help humanities professions understand addict profiles in cyberspace. Adapting intelligences by integrating new universes, their impacts on our people and our lives, changes in our behavior will advance the understanding of Man in virtual space. Wouldn't the work of multiple intelligences be, in the digital age, a perfect example that profiles (real space) have evolved in and thanks to the virtual making develop the profile in net-profile in the same person!

References

1. Howard Earl Gardner is an American developmental psychologist, father of the theory of multiple intelligences. His work is sometimes reflected in the school environment which, according to Howard Gardner, should be the raison d'être of the school: the development of all forms of intelligence.

2. Nadine Touzeau, author of scientific book: https://www.amazon.fr/NET-PROFILING-

comportementale- cybercriminels-Nadine-TOUZEAU-ebook/dp/B018CFSZWO– 2018 New French editor.

3. Touzeau N (2017) Behavioral Cybercriminals Differentiations between the Real World and the Virtual Space. J Forensic Res 8(6): 401.

4. Touzeau N (2018) Transposition of Modus Operandi from the Real to the Virtual Using Several Signatures: Case of "The Drowned of the Garonne" Serial Crimes in France. J Forensic Sci & Criminal Inves 7(5):1-2.

5. Touzeeau N (2018) Avatarization, Another Way to Understand Cyberbullyers Behaviour in the Real and the Virtual Worlds as Discribed by Net-profiling. Journal of Cognitive Neuropsychology 2(1): 1-6.

6. Touzeau N (2018) Transverse Zone: Explanation and Definition in Comparison with Comfort Zones. J Forensic Sci & Criminal Inves 9(1):1-4.

7. Jean William Fritz Piaget, born on 9 August 1896 in Neuchâtel, Switzerland and died on 16 September 1980 in Geneva, is a Swiss biologist, psychologist, logician and epistemologist known for his work in developmental psychology and epistemology through what he called genetic epistemology (or genetic structuralism). The insights he brings to "intelligence", understood as a specific form of the adaptation of living beings to their environment, to the stages of its evolution in children and to their theory of learning will have a significant influence on pedagogy and educational methods.

8. The accident involving German wings flight 9525, a scheduled flight between Barcelona (Spain) and Düsseldorf (Germany), occurred on 24 March 2015 at 9 h 41 in the French Southern Alps, on the territory of the municipality of Prads-Haute-Bléone, following a voluntary act by the co- pilot1. All 144 passengers and six crew members on the Airbus A320-211 were killed on impact. Two hypotheses are more plausible than Lubitz's suicide. The first is that the plane was shot down by mistake; the second is a cyber attack. According to the second hypothesis, many vehicles, including planes, were cyberpirated long before this crash.

9. Michael Calce is a hacker (Montreal, Canada), formerly known as Mafiaboy. He gained notoriety after launching a series of denial of service attacks against large commercial websites including Yahoo!, Amazon.com, Dell, E*TRADE, eBay and CNN1 in February 2000, when he was only 15 years old. These attacks, which made headlines in the international press, are estimated to have cost these companies a total of about US$1.7 billion. He managed to put a town in the dark for a few hours. The FBI and the RCMP became interested in Mafiaboy after he claimed on IRC that he was the author of these cyber attacks. He became the prime suspect after bragging about closing Dell's website, information that had not been published at the time. He was arrested on 15 April 2000.

10. Vladislav Horohorin, a 27-year-old Israeli-Ukrainian, better known by the nicknames "Bad B" or "Vlad H", is considered one of the biggest bank card smugglers in the world, known and revered by cybercriminals. He will work 10 years before being charged in November 2009 in the United States for "fraud in the instruments of access to bank accounts and aggravated identity theft".