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# FROM WISDOM TO DIGITAL WISDOM AS NEGOTIATED IDENTITY

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## Abstract

Anyone could observe the huge debate nowadays on the influences of the digital on the education. Example: Marc Prensky's concepts ('digital natives'»digital immigrants', 'digital multiplier', 'digital wisdom', etc.), were followed by sharp reactions (ex.: Timothy VanSlyke), confessing, different approaches of the identity of the being (Human Being) under education, finally. In the Academe, technology has to be studied as one of the essential modes of being human. We have to guide our students to be digitally wise and to attain digital wisdom.

There is a real multiplication of the dimensions of the human being, when Singularity is more and more near. We deal with a whole set of different identities [plural (?), multiple (?), alternative (?), concurrent (?), divergent (?), virtualising (?)].

Yet we are more and more often discussing about the process of merging of humans with their machines. Because there are several different perspectives on the merging process, we have to manage a scale of merging, as we may have to manage a scale of wisdom and the problem of a specific form of the wisdom of the homo sapiens digital. In our society, we have just passed from individual having a dominant identity, crashing its recessive identities, his shadow(ed) identities, toward a constellation of concurrent and sometimes alternatives identities, engaged in a permanent negotiation, that could, may be the sign of the wisdom appropriate for our Digital Era.

From human wisdom, we have passed toward digital human wisdom/human digital wisdom - a symbiotic, non-generic and un-unitary wisdom. The merging process analysis engages the search for the identity and a discussion on the identity/sameness relationship and leads us from 'no entity without identity' to 'no identity without a process', because in the Digital Era, our identities are negotiated.

*Keywords:* wisdom, digital wisdom, homo sapiens digital, identity

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## 1. Pretext of the discussion: identity of the Human Being subject of education

Something essential is happening when approaching to Singularity.

In the age of spiritual machines, we have to deal with the Idea of an inexorable process of humans and machines merging.

The pretext for our discussion here is the confession made by *William Nelson Joy* (commonly known as *Bill Joy*), in the *Wired Magazine*, in the first lines of his highly quoted paper *Why the future doesn't need us*: "From the moment I became

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*involved in the creation of new technologies, their ethical dimensions have concerned me, but it was only in the autumn of 1998 that I became anxiously aware of how great are the dangers facing us in the 21st century. I can date the onset of my unease to the day I met Ray Kurzweil, the deservedly famous inventor of the first reading machine for the blind and many other amazing things. Ray and I were both speakers at George Gilder's Telecosm conference and I encountered him by chance in the bar of the hotel after both our sessions were over. I was sitting with John Searle, a Berkeley philosopher who studies consciousness. While we were talking, Ray approached and a conversation began, the subject of which haunts me to this day."* [http://www.wired.com/wired/archive/8.04/joy\_pr.html]

In order to have a philosophical discussion, we have to reach that special state of mind when our knowledge is loaded in an *anamnetic* mode – to be haunted by an Idea when haunting that Idea. One could read *anamnesis* [αναμνησις] as *an-a-mnesis* [αν-α-μνησις] so as *state of the mind [knowledge] without oblivion* (and not just as *remembering*) [1] – similar to the lecture of *aletheia* [αλήθεια], understood as *divine run (ale-theia)* [ἀλή-θεια] [toward *anamnesis*] [αν-α-μνησις] and not *truth* [2, 3]. We are here because we are haunted by the Idea of an inexorable process of merging of humans and machines as we are living in *the age of spiritual machines* [4].

Secondly, we have not to be content only *to communicate*, but *to cumminecate*, instead. In order to understand the subtle difference between those two terms, one should use some the lecture defended by Constantin Noica – may be the last *Weltanschauung* creator, of the past century – from the Romanian language perspective – applicable, despite the common expectances, to some other Indo-European languages as well. In the Romanian language, we have two main words describing the process and the situation of communication, both rooted in Latin: *comunicare* and *cuminecare* [5].

We are here not only to re-confirm our common capital of deep beliefs that something crucial is happening in the relationship of the Human Being and (his) Tool, but also to defend an optimistic projection for the future of the human beings.

There are several claims assumed and deployed in this paper.

The first *thesis* defended in this essay is: we are experiencing the passage from *the understanding of the [human] identity as status* to *the understanding of the [human] identity as process*.

The second thesis is: when experiencing the embodiment of artefacts and the preparation for the embodiment into artefacts, the dimensions of being human are changing and we are passing from *humonism* (human monism) to *symbionism* (an expression of a particular symbiogenesis, as driving force of evolution) [*Tautology identified by Mivart, Miller 1880*, online at <https://groups.google.com/forum/?fromgroups=#!msg/talk.origins/tVrV5jUjnjo/1RSVTA0yPkMJ>, accessed on September 5, 2012] – one of a living being and a device

In the same time, we are passing from the classical human wisdom to the digital human wisdom/human digital wisdom – toward a symbiotic, non-generic and un-unitary wisdom – this is the third thesis.

The last thesis defended here is: we are facing the reality that the young human beings we have to educate are different, nowadays, from those or only from a quart of century ago. Our Digital Native Students (Digital Human Beings) have a quite special relationship with their machines, with their tools [6]. The question is: have we to choose between the necessity of a radical new pedagogy and the necessity of reinterpreting /adapting the traditional pedagogy to the new realities of the educational situation?

## **2. From digital natives to digital Homo Sapiens**

Despite the attacks claiming the concept of *digital native* is already olddated/inactual/obsolete, we have to decide if our students are or not the same with the ones hundred of years ago.

One of the most decided pleads for this concept – the young human being (the student) is different from the one it was once – is defended by Marc Prensky [*Writing*, <http://www.marcprensky.com/writing/>, accessed on September 5, 2012]. In 2008, on September 19, he used a series of four questions to challenge the audience, participating to the 25<sup>th</sup> Anniversary Celebration of NJECC: *Are today's students different? What should our students know? How should we teach them? Is technology in class a help or a curse?* [L. Thumann, *Engaging the 21st Century Student*, September 20, 2008, <http://thumannresources.com/tag/21stcenturyskills>, accessed on September 5, 2012]. The challenge worked, not only because its concepts have already a history behind them, but because they are engaging a deeper, philosophical, discussion, on the identity of the Human Being under the Digital Era/Emergent Technologies Era.

The shortest enumeration of the concepts he introduced in the last decades will count at least: *digital natives/digital immigrants* [6], *herding* [7], *digital multipliers* [8], *21<sup>st</sup> Essential Problem Solving Skills* [M. Prensky, *Prensky's Five Skills Framework for Problem-Solving*, 2009, [http://www.marcprensky.com/writing/Prensky-Essential\\_21stCenturySkills.pdf](http://www.marcprensky.com/writing/Prensky-Essential_21stCenturySkills.pdf), accessed on September 5, 2012], *digital wisdom* [9].

*Grosso modo* his ideas could be resumed as it follows:

1. There is a discontent, a gap, an increasing difference “between what students want and what they’re receiving”. That is why “student’s frustration is rising” (Julie Evans – CEO of the Project Tomorrow) [M. Prensky, *The 21<sup>st</sup> - Century Digital Learner*, *EDUTOPIA Magazine*, June (2008), online at <http://www.edutopia.org/ikid-digital-learner-technology-2008>, accessed on September 5, 2012.].
2. Our students “are no longer the people our educational system was designed to teach” [6]. Our “schools are stuck in the 20<sup>th</sup> century”, meanwhile „students have rushed into the 21<sup>st</sup>”. So, the following issue arises: „How can schools catch up and provide students with a relevant education?” [7]
3. It is now “we must find alternatives to our primary method of education organization” – called by Prensky *herding*. „Herding is the involuntary assignment of students to specific classes or groups, not for their benefit but for ours. Nobody likes to be herded, and nobody learns best in that environment”. In

this case educators become ‘teacherds’ rather than teachers. Moreover, „creating smaller schools or classrooms is no solution if the result is simply moving around smaller herds” [7].

4. “Today’s students *think and process information differently* from their predecessors. These differences go further and deeper than most educators understand. “Different kinds of experiences lead to different brain structures“, says Dr. Bruce D. Perry from the Baylor College of Medicine. “It is very likely that *our students’ brains have physically changed* – and are different from ours – as a result of how they grew up. But whether or not this is *literally* true, we can say with certainty that their *thinking patterns* have changed” [6].
5. This students, the so called *Digital Natives* ‘are used to receiving information really fast’; ‘like to parallel process and multi-task’; ‘prefer their graphics before their text rather than the opposite’; ‘prefer random access (like hypertext)’; ‘function best when networked’; ‘thrive on instant gratification and frequent rewards’; ‘prefer games to <serious> work’. Meanwhile, the *Digital Immigrants* “have very little appreciation for these new skills that the Natives have acquired and perfected through years of interaction and practice”; “these skills are almost totally foreign to the Immigrants, who themselves learned – and so choose to teach – slowly, step-by-step, one thing at a time, individually, and above all, seriously”; “Digital Immigrants don’t believe their students can learn successfully while watching TV or listening to music, because they (the Immigrants) can’t”; “Digital Immigrants think learning can’t (or shouldn’t) be fun” [6]. Having that unique accent of a Digital Immigrant means ‘dialling’ a phone number, not using the Internet first; printing out your emails; printing out a document to edit; bringing people physically into your office to see an interesting website; ‘did you get my email?’ phone calls; believing life happens off-line [6].
6. The biggest problem facing education today is (still) this: “our Digital Immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language” [6].
7. „I believe fluency with multiple spoken languages will continue to be important, and that multimedia, interactivity, and other game-derived devices will be increasingly significant tools for communicating thought twenty-first-century. Nevertheless, I firmly believe that the true key literacy of the new century lies outside all these domains. I believe the single skill that will, above all others, distinguish a literate person is programming literacy, the ability to make digital technology do whatever, within the possible, one wants it to do – to bend digital technology to one’s needs, purposes, and will, just as in the present we bend words and images. Some call this skill human-machine interaction; some call it procedural literacy. Others just call it programming.” [10]
8. “If we (and our students) are willing to be creative, I see no reason why there should be a digital divide at all anywhere” in the world. “There is also a second, more subtle, cause of the ‘digital divide’. Certain educators, who are themselves, afraid of the technology, are not making the best efforts to have all their students use technology as much as possible. Although this is often justified in ‘our kids don’t need technology to think’ language, it is really just another form of digital

division and deprivation. Finally, we could agree that it is easy to pass off eliminating the ‘digital divide’ as someone else’s responsibility, but it is really our own. This is a clear place where educators can be a big part of the solution – even without additional funding. I suggest we begin thinking of ourselves as ‘digital multipliers’ – i.e. people who find creative solutions that bring every student, no matter what his or her background on income level, into the digital world – and get the job done.” [8]

9. Those concepts lead to the conclusion that „technology’s role – and its only role – should be to support students teaching themselves (with, of course, their teachers’ guidance). Technology does not, and cannot, support the old pedagogy of telling/lecturing, except in the most minimal of ways, such as with pictures or videos. In fact, when teachers are using the old ‘telling’ paradigm, adding technology, more often than not, gets in the way.” [11]

Several years ago we used to say that in the universities we are learning/teaching a way of understanding, of searching, of filtering, of using relevant information. Now, almost all our classical, traditional perspectives on what higher education means became somehow obsolete/olddated, due to the changes digital technologies have produced in the learning practices of the secondary or tertiary education. We have to manage the education of this new type of student, the Digital Native – one that could/should be considered as announcing the Digital Human Being. Under the circumstances, *what could be that very specific and distinctive characteristic that could differentiate university from K12 education?* [12]

### **3. Digital wisdom**

When fully accepting we are living in the Era of the Emergent Technologies/the Digital Era/the Knowledge Society, we have to as well agree there is everywhere in our societies an increasing need for a better knowledge management – something we could simply and shortly name: *philosophy* [13].

Our technological loaded world is more and more requiring wise citizens and not just better informed ones, because we will easily observe the fatal consequences of the missing of adequacy and equilibrium in the human knowledge and actions – which shows technology’s increasing importance for our lifes and the importance of a good ethical education for researchers, engineers, etc. [14].

In the *Academe*, technology has to be studied as one of the essential modes of being human. Mircea Eliade observed that we can explore/assume/experience of the Being, the fact-of-being, in several very different and irreducible ways: as a scientist – searching for Truth, as an aesthete – searching for Beauty, as a moral person – searching for Good, as a philosopher – searching for Sense, or as religious individual – searching for the Sacred [15]. There were several decades we understood we could also interface/explore/experience the Being as engineers – searching for the design and expansion of human order [16]. The last acquired of our modes of interfacing with the Being is the *digital wisdom* – the search for the *digital wisdom* as a search for the wisdom itself: we have to/we search to become *homo sapiens digital* [9].

This is only the first of the differences comparing to the secondary education: in Academe we learn /teach the best methods of information and value management – or this could be one of the most stimulating definitions of philosophy (search for because love of wisdom) itself – *together* with our students – as suggested by the very word *universitas*. From this perspective, we also have to guide our students to be *digitally wise* and to attain *digital wisdom* in such an intimate way as to be able to use the technology and its Digital Tools as an essential part of being human – and so naturally, that the Digital Natives will not even be aware of it [12].

„The digitally wise distinguish between digital wisdom and mere *digital cleverness*, and they do their best to eradicate digital dumbness when it arises... They know that just knowing how to use particular technologies makes one no wiser than just knowing how to read words does. Digital Wisdom means not just manipulating technology easily or even creatively; it means making wiser decisions because one is enhanced by technology. Therefore, the digitally wise look for the cases where technology enhances thinking and understanding. No digitally wise leader would make any major decision, no digitally wise scientist would come to any conclusion without digital tools enhancing their own thinking. They may rely on intuition, but that intuition is informed, inspired, and supported by digital enhancements and by the additional data digital tools provide. Those who are truly digitally wise do not resist their digitally-enhanced selves but accept them gladly, even as they make careful judgments about what digital enhancements are appropriate and when.“ [9]

Due to our linear understanding of the complexity of the Human Being, it is obvious this perspective on the wisdom – the Digital Wisdom – will not have many defenders.

Moreover, the Digital Wisdom could have another, more radical sense – one directly related to *the special identity* of the Human Being that has been merged with the Machine.

#### 4. Dimensions of *merging*

In various dictionaries [17, 18], one could find that *to merge* means: to combine (be combined)/to join together into a whole/to cause things to do this and also could find that *the result of the merging* of two entities (e.g. companies) into one is called *merger*. In fact, we will quickly discover merging as covering a complex reality and we will also understand *the process* of merging could be described using several synonyms.

A synopsis of this semantic richness/complexity could be synthesized as shown in Tables 1-5.

As it is well known, a synonym has not exactly the same meaning with his ‘equivalent’. Therefore, there are *several different perspectives on the merging process*, as we saw it from the above synopsis of the synonyms: *merging as combining, as collaborating, as integrating, as melding and, finally, as becoming one*. Face to this situation, *what is the most appropriate linguistic sequence for the merging description?*

Those various perspectives on merging, are suggesting there are various degrees of merging. This is why we will defend a fifth thesis: we are facing and have to manage a scale of merging.

Considering this reality from those different degrees of merging, the most appealing seems to be some forms (only) of the *merging as cooperation or, better, symbiosis*.

**Table 1.** Merging as combining.

to	Synonyms	
collide	In about 3 billion years, the Milky Way and Andromeda will collide. Then over a span of 1 billion years or so after a very complex gravitational dance, they will <i>merge</i> to form an elliptical galaxy	Humans & machines collide
interpenetrate	mix or <i>merge</i> together	Humans & machines are merging
amalgamate	combine, <i>merge</i> , unite, integrate, fuse, blend, mingle, intermingle, mix, intermix, incorporate	Humans & machines amalgamate
band	join, group, unite, <i>merge</i> , combine, team up, gather, ally, affiliate, associate, federate, consolidate	Humans & machines band
blend	mix, combine, admixt, mingling, commingling, amalgamate, unite, <i>merge</i> , compound, alloy, fuse, compose, homogenize	Humans & machines blend
compose		
compound		
mix		
mingling	mix, blend, combine, compound, homogenize, <i>merge</i> , unite, join, amalgamate, fuse	Humans & machines are mingling
condensate	lose separate identities and <i>merge</i> into a single entity	Humans & machines condensate
converge	meet, intersect, join, <i>merge</i> , unite, come together, become one, coincide, concur	Humans & machines converge
homogenize	make uniform, combine, coalesce, fuse, <i>merge</i> , blend, emulsify	Humans & machines homogenize
uniformize		

**Table 2.** Merging as collaborating.

to	Synonyms	
cooperate	working or act together	
symbiosis	living together of organisms of different species	

**Table 3.** Merging as integration.

to	<i>Synonyms</i>	
concatenate		
assimilate	merge or ,blend', individuals from one cultural group into a second group	Humans are assimilated by machines . Machines are assimilated by humans.
incorporate		
integrate		

**Table 4.** Merging as melding.

to	<i>Synonyms</i>	
meld	join, blend, combine or <i>merge</i> things into one	Humans & machines are melding
coalesce	unite, join together, combine, <i>merge</i> , amalgamate, integrate, affiliate, blend, fuse	Humans & machines coalesce

**Table 5.** Merging as becoming one.

to	<i>Synonyms</i>	
becoming one		Humans are merged into machines. Machines are merged into humans
unite		
unify	unite, bring together, <i>merge</i> , fuse, amalgamate, coalesce, combine, blend, mix, bind, link up, consolidate.	Humans and machines are unifying
synthesize	combine, unite, unificate, <i>merge</i> , amalgame, fuse, coalesc, integrate	

There are some reasons it was here emphasized '*seems to be some forms (only)*':

1. In the case of *cooperation*, we have to expand the possible situations with the cooperation of humans and machines (which is not clearly considered as possible, in the definitions presented above) and to consider the voluntary human cooperation with machines – sometimes even the unintentional cooperation of humans and machines – but not the coerced (forced) cooperation.
2. In the case of *symbiosis*, we have to expand the possible situations with the inclusion of the collaboration of living beings with non living beings (machines) and/or to accept that some artefacts could also be considered as somehow living

beings. This new sense will initiate an unexpected perspective on the merging of humans and machines, one continuing the idea of the *sybiogenesis* (= symbiosis is a major driving force behind evolution) of Lynn Margulis. This 'lecture' will favour not the *parasitism* or the *helotism*, but the *mutualism*, one that could accept eventually that a complex living systems (as could be considered the merger of humans and machine) could also be illustrative for the idea that "*Life did not take over the globe by combat, but by networking*" [L. Margulis and D. Sagan, *Asquiring Genomes, A theory of the Origins of Species*, online at <http://www.isepp.org/Pages/San%20Jose%2004-05/MargulisSaganSJ.html>, accessed on September 5, 2012].

Secondly, *the very existence of a scale of merging is enforcing us to be more aware of the nature of the process of the merging and of the observation that a merging process – for example a symbiosis – could be complete or not, total or partial* [L. Margulis and D. Sagan, *Asquiring Genomes, A theory of the Origins of Species*].

Thirdly, in order to have a merging process, there have to be some common characteristics of the beings and/or things involved in it. Under the circumstances, it is very possible that humans and machines merging could/should favour those humans (the Digital Natives) that have some different characteristics from those of the common Human Being living before the Digital Era. If so, we meet again Marc Prensky, who suggested that among the *essential 21st century skills* one will find:

- a) *Knowing the right thing to do (behaving ethically; thinking critically; setting goals; having good judgment; making good decisions);*
- b) *Getting it done (planning; solving problems; self-directing; self-assessing; iterating);*
- c) *Doing it with others (taking leadership; communicating/interacting with individuals and groups (using technology); communicating/interacting with machines (= 'programming'); communicating/interacting with a global audience; communicating/interacting across cultures;*
- d) *Doing it creatively (adapting; thinking creatively; tinkering (Stephen Covey) and designing (John Seeley Brown); playing; finding your voice);*
- e) *Constantly doing it better (reflecting; being proactive; taking prudent risks; thinking long-term; continually improving through learning)* [M. Prensky, *Prensky's Five Skills Framework for Problem-Solving*].

Let us observe that many of these characteristics are already common with the ones nowadays intelligent machines have [19]. From this perspective, *the merging of humans and machines is a natural and inexorable process* [20].

## **5. Identity versus identities for the (digital) Human Being?**

The common, natural use of the notion of identity is a real polysemic one.

Identity can be explored from several perspectives: philosophic (metaphysic), mathematic, logic, genetic, legal, psychologic, etc.

The identity of the merger (understood here as the result of the merging process) has a particular interest for the analysis done in this essay. More precisely, the question is: *will the human identity be preserved or will be lost in the merging process?*

In search for an appropriate answer, we could, firstly, appeal the historical evolution of the *identity*. The Latin etymology of *identitas* comes from *id* and *ens* (= a pronoun and a noun) that, as notion, describes the *essence* (*ens* = what is in itself and what is shown as being). The ancient Greek term, *evlos*, is also designating what is inside, in the inner space, in the content of something.

We should also consider that, in philosophy, *identity* is sometimes also called *sameness*. Here, we use to say that *identity is whatever makes an entity definable and recognizable, as possession of a set of qualities or characteristics that distinguish that entity from other entities*. However, let us observe that *sameness* only corresponds to *the numerical identity*, which can be hold between an entity and itself. This is why it is difficult to say, that *the meanings of 'identity' and 'sameness' are identical* [21].

In the case of a *qualitative identity*, we deal with the common character of two objects of our thought, distinct in space and time, but sharing the same qualities. This is why the entities can be more or less qualitatively identical [21].

For some philosophers (Frege, Lewis, a.o.), identity is not a problematic notion *“for it is just that relation everything has to itself and nothing else – and what could be less problematic than that”*, while for others it is *“since it is difficult to see how a thinker could have the conceptual resources with which to explain the concept of identity whilst lacking that concept itself”* [21].

Because of the various perspectives deployed starting from the basicness of the linking identity and quantification, here, the accent is not on *the logic of identity, on the principle of the indiscernibility of the identical, on the absolute or relative identity, but on the criteria of identity, on the identity over time, on the identity across multiple worlds, on the contingent identity or on the vague identity* [21]. The link relating identity and quantification seems to be not very interesting in a discussion focused on the merging process of (Digital) Human Being and Machine. That is why it will be not really followed here.

Considering the link between the identity and the nature (of something) it is difficult to say, with Harold Noonan, that the meanings of ‘identity’ and ‘sameness’ are identical (SEP) and immediately after that to observe they have more than one meaning, if accepting synonymy as a complexity generating machine (as we saw in the exploration of the meanings of ‘merge’).

Let us observe that identity is not oriented toward the phenomenological ‘surface’ of an entity or a process but toward its content, its ‘essence’ (if it is to use an old style of referring to it).

That’s the inner, the *ipse* side of the identity.

From this perspective, the different identities of the Digital Natives and Machine, that are sharing some common characteristic, are permissive to the process of the merger as a sort of half symbiosis and half synthesis of the humans *and* machines.

Yet, philosophically, the identity of an entity exists from its very beginning, but having the *power to become the same* when *evolving*. Identity seems to be linked to *the power of being* – considered by Aristotle who observed it [Aristotle, *Metaphysics*, Book 9, section 1046a, online at <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0052%3Abook%3D9%3Asection%3D1046a>, accessed on September 5, 2012], for the first time, as: *nothing could be without the power of being*. (Obviously, the *power of being* is *different from* the *potential mode* of being [22]).

One could observe that there is a real multiplication of the dimensions of the human being today. This is why will claim that the very problem of identity is a founding clue for necessity to have a complex and not linear analysis of the identity. In this case, the ‘logic’ is a universal non-generic one, as we will not be able to reduce the complex richness of the universality to the linearity, predicability and unidimensionality of the genericity (*all the x are y* [23])

Indeed, we – as it is the case of the Digital Natives, too – have several very different identities, sometimes concurrent: we are those multicell organisms participating in this conference [V. Gulicic, *Wisdom of Homo Sapiens Digital. Wisdom as negotiated Identity*, Ateliers de reflexion prospective sur les sciences et les technologies cognitives, Atelier no 18 – *Convergences. Mutations phyves siques et cognitives sur les homes et la machine*, RISC-CNRS, 2009, online at <http://pirstec.risc.cnrs.fr/ressources/accesfichier/139>, accessed on September 5, 2012], we also are the owners of some bank accounts, lands, building, cars etc., we are the sets of data associated with an/some online ID(S), we are the avatars in the Second Life virtual world, we are the collection of social roles in our cities or workplaces, we are our dreams and/or our sexuality etc.

Even Sir William Hamilton had right to observe that “identity is a relation between our cognitions of things, not between things themselves” [<http://www.mondofacto.com/facts/dictionary?identity>, accessed on September 5, 2012], the merging process of Humans and Machines, implies the physical melding of the Humans with Machines which makes relative their nature (identity). So, considering identity as ‘nature’, as ‘defining characteristics’ etc. we have to admit the capital importance of the physical process itself, because our ground intentionality is always confessing something essential about the world (as it challenges the problem of referentiality). That is why Colin T.A. Schmidt observes “What percentage of human does one need embedded in oneself in order to be considered human” [24] (See also the questions he is focussing on: “1. Are or can Humanoid Robots in quest of our Selfhood? 2. Should we define an artificial version of Selfhood? 3. How are we to react towards the Other if unsure of the nature of that Other? 4. Are we ready to lend our full human status to (partially) non-human objects? 5. Is it worth members of human society losing some of their status in order to further the automation of human intellect and embodiment?” [24]). The *relative identity* (nature) of the entities are leading our analysis toward the relativism of the values itself. Or that is deeply related to what we commonly call ‘wisdom’.

Managing this plural/multiple/alternative/concurrent/divergent/virtualizant/etc. identities seem to lead us toward the necessity of a specific wisdom of the human being in our digital society. Our natural ability to manipulate, in a multitasking way, multiple set of data – by/through changing/switching permanently and continuously its various virtual identities – seems to favour/to privilege the ability of the human being to have a mutualist symbiotic relation with the machine *and not necessarily* to be integrated into a machine (or Singularity). The crowded research results are boldly sustaining this claim [V. Gulicic, *Wisdom of Homo Sapiens Digital. Wisdom as negotiated Identity*] – as they are expressing the power of the human mind to overpass the so called power of computaion of the best of the best of our machines just because the machine, being created using a linear and generic logic cannot deal with the complexity [V. Gulicic, *Wisdom of Homo Sapiens Digital. Wisdom as negotiated Identity*].

Moreover, the complexity of the concept of identity is sending us to not considering it a relation or a propriety, but a process. In this case, we are passing from ,no entity without identity’ to ,no identity without a process’ and save the best results of the linear researches on identity.

The Digital Natives have a natural, increased capacity to *manage complex sets of identities*, without loose the coherence of their identity. Its natural capacity to manipulate in a multitasking way, multiple set of data, changing/switching permanently and continuously its various virtual identities seems to favour/to privilege the capacity of the human being to have a mutualist symbiotic relation with the machine and not necessarily to be integrated into a machine (or Singularity). Moreover, they seem to be naturally adapted to manage multiple simultaneous changes in the very core of each of their identities, to manage identity as process and not as a set of characteristics. They are passing from ‘no entity without identity’ to ‘no identity without a process’.

This is why it seems the notion of wisdom itself has to be reconsidered when it is about the Digital Native, as we will see in the next section.

## **6. Wisdom as negotiated identity**

We observed that the problems posed by the identity of the Digital Homo Sapiens, the human being privileged in the merging process of humans and machines have clear metaphysical dimensions.

We also saw that the discussion’s aim is about overpassing the natural taxonomy and about demanding real changes of perspectives and critics.

Can we consider a specific wisdom of the Digital Era?

Is a Digital Native of the 21<sup>st</sup> century able to be wise?

The whole discussion leads us toward redefining the wisdom itself.

Wisdom is usually understood as quality or state of being wise; knowledge of what is true or right coupled with just judgment as to action; sagacity, discernment, or insight.

In a recent but already very quoted paper that landmarks the neurobiology of wisdom, the authors have considered several ‚subcomponents of wisdom’ as they were identified in „several published definitions/descriptions of wisdom by clinical investigators in the field”, as are the „prosocial attitudes/behaviors, social decision making/pragmatic knowledge of life, emotional homeostasis, reflection/self-understanding, value relativism/tolerance, and acknowledgment of and dealing effectively with uncertainty” [25].

Let’s remember: “*Digital wisdom means not just manipulating technology easily or even creatively; it means making wiser decisions because one is enhanced by technology*” [9]. It seems the notion of *wisdom* itself has to be reconsidered when it is about the Digital Native, as we will see in the next section.

My suggestion is that we could re-define of the wisdom as capacity to manage fine/delicate/ineffable equilibriums. From this perspective, in the symbiotic relationship with the machine, the humans will bring with them not the intelligence, but the wisdom, the intuition, etc., so valuable added values.

Concluding, let us observe that in our society, we have just passed from individual having a dominant identity, crashing its recessive identities, his shadow(ed) identities, toward a constellation of concurrent and sometimes alternatives identities, engaged in a permanent negotiation, that could, may be the sign of the wisdom appropriate for our Digital Era. From human wisdom, we have passed toward digital human wisdom/human digital wisdom - a symbiotic, non-generic and un-unitary wisdom.

The relatively new rediscovered *wisdom of the crowd* [26; en.wikipedia.org/wiki/The\_Wisdom\_of\_Crowds; D. La Chapelle, *What Supports the Emergence of Collective Wisdom?*, 2003, online at [www.collectivewisdominitiative.org/papers/lachapelle\\_emergence.htm](http://www.collectivewisdominitiative.org/papers/lachapelle_emergence.htm); J.R. Young, *Crowd Science Reaches New Heights*, The Chronicle of Higher Education, May 28, 2010, online at <http://chronicle.com/article/The-Rise-of-Crowd-Science/65707>], as an expression of *collective intelligence* [27], could always support such conclusions.

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