THE E-ELEPHANT IN THE ROOM:
A COMPACT GUIDE THROUGH DIGITALITY

Stefano Brusaporci
University of L'Aquila
Department of Civil, Construction-Architectural and Environmental Engineering
stefano. brusaporci@univaq.it

ESSAY 160/11

DIGITAL CULTURE
DIGITAL MEDIA
DIGITAL EDUCATION

The paper presents the main steps of digital media growing, highlighting how experiential and narrative modalities, and the related cultural issues, have evolved over time. In parallel with the development of information technology, computer graphics, the Internet, ICT and AI, the concepts and characteristics of cybernetics, virtual reality, augmented reality, hyper-connection, metaverse and artificial intelligence are studied. The paper organization is based on analysing some of the main texts that deal with these specific topics, and the texts are used to trace a fil rouge through the field of digitality.
The paper is addressed to students, but at the same time to scholars to discuss the interpretation of the arguments and the issues of digital education. This paper seeks to foster a critical understanding and cultural sensitivity regarding the true nature and significance of the digital realm.

Fig. 1 Gere, *Digital Culture*, 2002. Book cover.

Teachers often devote part of their lessons to topics referred to digitality because they believe that this theme is very important, not only for the education in the use of advanced tools –whose methods of use students often know even better than the teachers–, but to develop a critical consciousness and a cultural awareness. Though the topic of digitality is endless and the savvy reader may find the contents of the paper didactic –if it happens I will be happy as this means that the reader has a good grasp of certain topics–, through the discussion of some essays on the argument, the purpose of this paper is to examine the interpretation of key arguments and the challenges facing digital culture and education, last but not least to raise questions in those who already use digital applications and instruments in a shrewd way, but often without dwelling on the real characteristics and significance of the digital dimension.

The spread of economic digital applications and systems with increasingly advanced performance characteristics, coupled with the development of ICT Information and Communication Technologies, have made digital systems an essential part of our daily lives, with tools that accompany the user anywhere and at any time, with applications to be used remotely through simple and intuitive interfaces. The technological theme goes hand in hand with the cultural one, according to interrelated implications, where the cultural aspects do not have to be understood simply consequential from digital innovations (Gere, 2002).

In general, the theme of digital technology began to develop in the fifties. The concept of cybernetics, a term coined by Norbert Wiener in 1948, is pivotal and based on the idea that the processes underlying biological, artificial or social systems (regardless of their nature) could be understood through mathematical and statistical analytical approaches, based on feedback information. They are also the harbingers of cybernetics as a reflection on a post-human based on a physical interaction between biological and mechanical, therefore digital. Proceeding broadly, we could

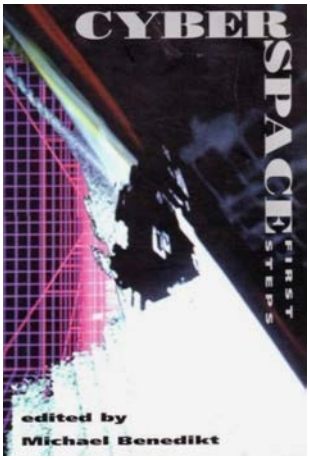

Fig. 2 Benedikt, *Cyberspace: first steps*, 1991. Book cover.

look at the years immediately following, a period referable to post-modernism and post-structuralism.

In particular, the possibility offered by computers to generate rendered images allows the development of virtual reality applications substantially based on immersion, primarily visual, in digital worlds. In this sense, Sutherland in 1965 prefigured a display so advanced that it could simulate physical reality in an indistinguishable way. It is not just about displaying images but about creating immersive experiences where the user can interact with virtual objects as if they were real, conceptually providing immersive environments, 3D graphics and the development of Head-Mounted Displays.

From the seventies, and therefore with a significant acceleration in the eighties, there was the birth of personal computers and the spread of video games. Consequently computer graphics and digital environments, and in particular three-dimensional ones, have become part of cultural practice and the collective imagination. There is a wide debate on virtual reality, and therefore on the dichotomy/transliteration/real-virtual integration (Krueger, 1991; Rheingold, 1992). Interest is aroused by the virtual experience and cyberspace, as is evident at the conference held at the University of Texas at Austin in 1990 (Benedikt, 1991).

The cultural reflection on digital culture took on strength in the nineties, with the effective diffusion of home consoles in homes, to find use both in the professional sphere and in everyday life, and then around the middle of the decade with the birth and spread of the Internet. All this raises questions not only technological, but also cultural, sociological, anthropological, epistemological, cognitive, educational, infographic, ethical, political (Barrett, 1994; Feenberg, 1995). Digital systems favour the collection and processing of information according to procedures not unlike those used by our mind, that is, according to visual and spatial systems, non-linear, different from the traditional alphabetical organization.

De Kerckhove (1991), based on studies on the relationship between mind, body and digital technologies, indicates

how it modifies the modes of interaction and facilitates the processes of conception and elaboration, according to a sort of 'sensory remapping'. In particular, he outlines a framework where technologies come to frame the mind, offering new tools of interconnection and interpretation to overcome the alphabetic approach, recovering and renewing ancient processes based on bodily interaction, spatiality, touch, favoured by interactive three-dimensional virtuality.

Negroponte in *Being Digital* (1995) coined the term 'digitality', to indicate a condition that derives from the possibilities offered by digital and the web: a new era, a digital life of post-information that goes beyond analogy and cybernetics, where the human being, in a certain way ousted by machines, and reduced to a posthuman rank, returns to the centre of the discourse.

Strongly critical positions are offered by Baudrillard (1976) who identifies mechanisms of alienation in the mechanisms of communication, induced by the incompatibility between the speed of digital interaction and the proper time required by the processes of symbolic exchange. In this way, simulation leads to a hyper-production of reality that leads to sedating the imagination, the latter understood not as a mirage or fantasy that distances us from reality, but as a vehicle to get closer to the meaning and essence of things. On the contrary, virtual reality creates realistic three-dimensional environments, that is, a perfect immersive reality devoid of symbolic dimension, without meaning and aura (Baudrillard, 1997).

Similarly is the vision of Virilio (1993) is critical: he attributes to the new media the sterilization of the imagination of the spectators, primarily caused by the acceleration in time and space of information, a 'new spectacular' where the thing described comes to take over the real thing.

Lévy's (1995) approach is different, referring to the virtual starting from the etymology of the word: Something endowed with virtue, which exists potentially, which has the possibility of being able to be. In this sense, a reading in

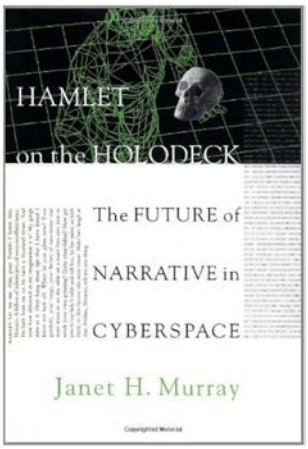

Fig. 3 Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*, 1997. Book cover.

opposition to Baudrillard's de-realization or Virilio's space-time implosion, and which has little to do with illusion and falsehood. Not an opposition to reality but countless opportunities for the actualization of forms and solutions starting from a dynamic configuration of forces and purposes in response to the stimuli of reality.

At the dawn of the new century, there is the spread of the Internet, the birth of social media, the mass marketing of smartphones. Bolder and Grusin (1999) highlight how media acquire characteristics of transparency and naturalness, based on immediacy, hypermediality and remediation: immediacy makes applications perceive less 'arbitrary', more 'real' for the user; hypermediality is exemplified by windows operative system, that is visual interfaces offer the possibility of managing information in a simple and simultaneous way; finally remediation as media that continuously transcode other media (mediation of mediation).

In *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* –whose title takes up the so-called 'holodeck' present in the science fiction television series *Star Treck* capable of creating a realistic 3D simulation of a real or imaginary environment in which you can interact freely with the environment, objects and characters, and where you can experience a story– Murray (1997) reflects on how digital technology is transforming the way we tell stories, through new forms of interactive, immersive and participatory storytelling. In this sense, digital is configured not only as a technological tool but as an expressive means that allows the development of multiform stories, where multiple plots and endings coexist. Murray highlights how the digital medium is characterized by four fundamental properties: procedurality, according to rules and algorithms; participation, with the active involvement of the user; spatiality, with navigable and immersive environments; encyclopedicity, i.e. the ability to contain large amounts of information. They come to define a new aesthetic of digital narration, characterized by immersivity, the user's ability to influence the story

(Agency), the ability to kaleidoscopic transformation of avatars, environments, behaviours, models, points of view, plot. Overall, Murray proposes a vision where digital does not destroy traditional storytelling, but expands it, offering new expressive possibilities.

Manovich (2001) emphasizes how the media speak a new language, according to the following five fundamental principles: numerical representation, i.e. all digital content is numerically encoded, so that it can be manipulated by algorithms; modularity, i.e. digital media are composed of independent modules (e.g. pixels, frames, 3D objects) that can be combined and reused; automation, i.e. creative and technical processes can be automated, reducing human intervention; variability, i.e. digital content can exist in multiple versions and dynamically adapt to the context; cultural transcoding, i.e. digital media transforms cultural data into computable data, changing the way culture is produced and perceived.

In this way, a media product, unlike traditional ones assembled once and for all according to human intentionality, is now based on modular data structures organized according to computer principles, which give rise to cultural products in a continuously different way based on computer processing and interactions with users. Manovich underlines how new media have a different nature than traditional ones and place us in a new phase with respect to McLuhan's theories –that is 'the media is the message'–, requiring us to shift attention from the theme of media characteristics to the study of software. The theme of software is explored in his next essay *Software Takes Command* (2010) where he explores the 'software culture', or the set of digital programs and environments that mediate our experience of the world, shaping thought, aesthetics, communication and social representation. According to Manovich, software has become the universal engine of the global information society. It expounds the concept of 'metamedium', the cornerstone of a new period of cultural hybridization.

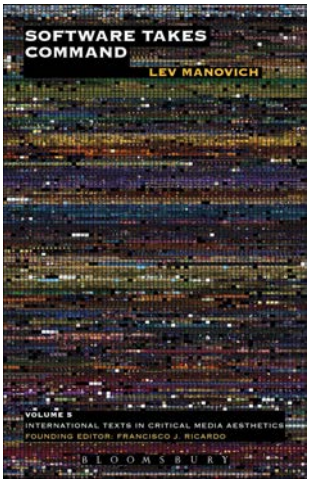

Fig. 4 Manovich, *Software Takes Command*, 2010. Book cover.

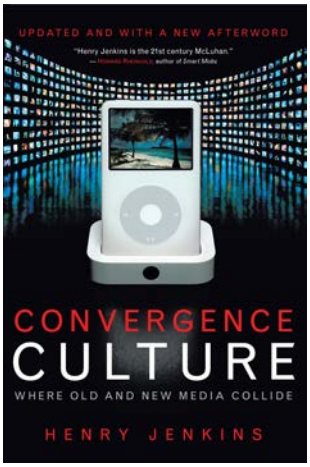

Fig. 5 Jenkins, *Convergence Culture: Where Old and New Media Collide*, 2006. Book cover.

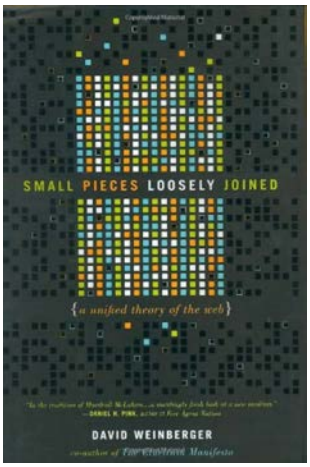

Fig. 6 Weinberger, *Small Pieces Loosely Joined: A Unified Theory of the Web*, 2002. Book cover..

With social media there is a transition from mass consumption to daily and continuous mass production. Jenkins speaks of 'convergent culture' (2006), taking up and renewing the concept of 'collective intelligence' (Lévy, 1995), made possible by digital communication and based on participation and systems of common interest, no longer referred to institutional centres, specific territories and societies. In particular, the phenomenon of convergent culture arises in relation to three concepts: the convergence of media, participatory culture, and collective intelligence. The term participatory culture goes beyond the traditional concepts of media producers versus passive spectators, although not all actors can exert more weight than others. 'Convergence' refers to the flow of content across multiple platforms in relation to the participatory behaviour of users and the media industry.

As a result, the public space of meeting and dialogue changes: the Internet and social media foster relationships and discussions, particularly within interest groups populated by users with similar interests. These are spaces of affinity where ideas can be shared, lines of thought can grow and spread (Weinberger, 2002).

Jenkins (2009) lists as forms of participatory culture: affiliation (membership in online communities); the production of independent content according to new forms of expression such as videos, comments, memes; collaborative problem solving, i.e. I work in formal or informal collaboration, such as in online games or Wikipedia; circulation, e.g. podcasting and blogging. Potential benefits can derive from this context: "[...] opportunities for peer-to-peer learning, a changed attitude toward intellectual property, the diversification of cultural expression, the development of skills valued in the modern workplace, and a more empowered conception of citizenship" (Jenkins, 2009, p.xii). And at the same time elements of attention in terms of participation gaps (unequal access), problems of transparency (regarding how the media represent events),

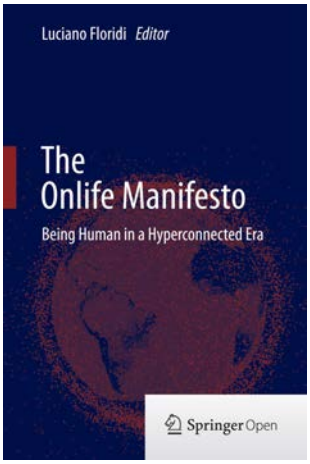

Fig. 7 Floridi, *The Onlife Manifesto: Being Human in a Hyperconnected Era*, 2015. Book cover.

ethical issues. But above all, new skills are required, such as play, performance, simulation, appropriation, multitasking, distributed cognition, collective intelligence, judgment, transmedia navigation, networking, negotiation (Jenkins, 2009, pp. xii-xiv). Also in this case, a sensible approach requires focusing more on cultural than instrumental aspects: Jenkins (2009) points out that the questions posed by participatory culture are basically eminently cultural issues and not only technological.

With the development of ICT and the spread of smartphones, the system of interconnections has extended to envelop the objects that surround us (IoT - Internet of Things and Smart Objects). A condition described by *The Onlife Manifesto, Being Human in a Hyperconnected Era* which refers to an everyday life where ICT marries reality through a hyperconnection that correlates real and digital in a single dimension (Floridi, 2015).

The conditions are in place for a new participatory cultural dimension, defined by a constant and ubiquitous immersion of people in a global infosphere. The term infosphere recalls Lotman's "semiosphere": in a context of crisis of traditional epistemological models, Lotman comes to configure the image of knowledge not as a stable and predictable construction, but as a network that has no centre and that offers an unlimited number of interconnected meshes to be identified and travelled freely (Salvestroni, 1985). A decidedly contemporary, ecosystemic, integrated and integrating vision, which stitches together continuous and discreet. The semiosphere is a cultural biosphere, which evokes and is well suited to a system of knowledge that is discontinuous in the fragments of applications and in the nodes of the network but continuous in the cloud, discontinuous in the fragmented multimedia and multidirectional communication but continuous in the geo-spatial flows of the infosphere.

In this context, augmented reality and mixed reality play an important role. These concepts have been already proposed at the time by Milgram and Kishino (1994): the two

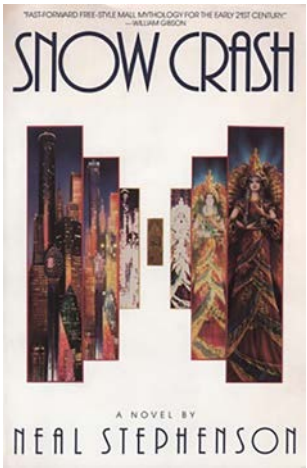

Fig. 8 Stephenson, *Snow Crash*, 1992. Book cover.

scholars develop the concept of reality-virtuality continuum, which goes from completely real reality (without virtual elements) to augmented reality (AR), i.e. a real environment enriched by virtual objects, to augmented virtual reality (AV), i.e. a virtual environment enriched by real elements, up to completely virtual reality. It is a single dimension where, except for the extremes (the real world and the totally virtual environment), different states of mixed reality are experienced, in this way reconnecting different types of experiences in a single conceptual system. Both augmented reality and mixed reality presuppose the information enrichment of the physical world that surrounds the user, made possible by the real-time superimposition between the image of what is framed through a screen and digital data and objects.

The possibility offered by ICT and devices that accompany each of us always suggests the possibility of a continuous mixture between real and virtual, which can be declined both in an immersion in a totally synthetic environment, and in an experience of reality systematically always flanked in every place and by digital tools. Hence the idea of the metaverse, a term coined by Neal Stephenson in the 1992 science fiction novel "Snow Crash". A general definition of the metaverse is proposed by Matthew Ball (2022, p. 55) who describes it as a highly scalable and interoperable network of real-time rendered 3D virtual worlds, which can be experienced synchronously and persistently by an effectively unlimited number of users with an individual sense of presence within them, and which guarantee the continuity of data relating to identity, history, rights, objects, communications and payments. In a general sense, the metaverse represents a cultural logic referable to a virtual environment, in perspective increasingly integrated with the real one, indeed, constantly parallel to the physical one, where, unlike the virtual reality of the first hour, it is now constantly inhabited by the global universe of users, who find a way to interact seamlessly here. In particular, the idea

of the metaverse refers to social networks that see in this idea the evolution of their environments.

Arcagni (2023) dwells on the theme of the metaverse understood as a cultural logic and relational space, emphasizing its cultural aspects and critical issues. It highlights the characteristic of representing a system of thought made possible by immersive technologies, where the communicative dimension is based on the principles of immersion, participation, sharing, and interaction. It is a performative model, made possible by different technologies and at the same time favoured by a cultural system of reference based on the pre-eminence of: a non-linear and haptic thought/action; the centrality of space in relation to knowledge and communication; a single, vast, immersive social environment. Furthermore, at the basis of the logic of the metaverse, there are two main rules: the gamification of narrative mechanisms, typical of video games; the spatial logic of distribution and use of contents. (p.34-35).

The metaverse, based on an engaging cognitive and participatory activity, both from an intellectual and physical point of view (thought/action/space), is rooted in an inclusive meta-context that combines a situated digital dimension and a digitized real one. Compared to traditional analogue and digital media, the concepts of action and space induce new phenomena, and renew what Baudrillard predicted with the hyperreal where the simulacrum loses the function of copy to emancipate itself as a new reality. According to Arcagni, it is a dimension based on a disturbing aesthetic, referring to an uncanny space where "non-place" environments are represented as humanized as they are called upon to replicate models of life, fashions and myths, as well as social systems and communities, like the physical world.

This is a critical vision, which can be reduced if lived with full awareness of metaverse nature, also in relation to the context of hybridization of physical and digital dimensions.

On the 'quantitative' issue of data roots the development, growth and diffusion of Artificial Intelligence, made possible

by a series of concomitant factors: the deeply stratified neural computing networks, made up of countless decision-making units, insignificant when considered alone, but extraordinarily powerful when aggregated on a large scale, to the point of escaping human comprehension; a colossal amount of data available, which allows you to have quantities of useful information to learn to recognize and process multimedia content, training the neural network to develop products and improve its performance, that is, to self-learn on the basis of the information available, which therefore the more you are, the more you can improve the result; the development of high-performance processors –in fact those created by the graphics market– organized in huge computing centres; last but not least –and at the base of everything– the extraordinary economic investments made by the IT giants, which make it essentially the prerogative of these investors. On the one hand, AI's incredible abilities follow, and on the other, a public bias dictated by issues of fairness, privacy and fears of both the social changes it may lead, such as in the field of work, and the opacity of the processing process, which appears not entirely controllable (Fei-Fei Li, 2024).

In relation to the incredible capabilities that AI demonstrates and to its ever-increasing evolution, it seems natural to ask how humanity can differentiate from AI. Prencipe and Sideri (2023) trace the humanistic question by emphasizing how the art of formulating questions remains a jealous attribute of the human. Benanti and Maffettone (2024) reflect on the relationship between AI and the humanistic dimension, a theme that raises obvious ethical questions. Moriggi and Pireddu (2024) wonder if a machine can think, if and how it is intelligent, if it can deceive by pretending to be a person.

These questions require to consider ourselves and our values, opening to an epistemological framework that must question us by opening to the definition of a new humanism, understood as a moment of crisis of consciousness of

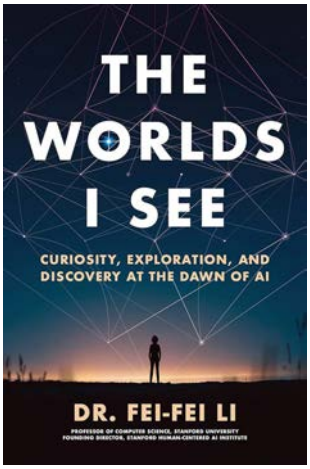

Fig. 9 Li, *The Worlds I See: Curiosity, Exploration, and Discovery at the Dawn of AI*, 2023. Book cover..

the end of a previous order and the need to define a new one. A new attribution of meaning is needed, where the categories of acting, understanding and intentionality open to an existential risk, posed by the projection of human traits on digital systems. The challenge is to keep the human dimension at the centre, which in turn can find in AI a means to be augmented, developed and deepened.

However, Floridi (2025) highlights how AI should be understood not as a form of intelligence but as the ability to act with high levels of performance, and emphasizes that what distinguishes man from AI is 'semantics', i.e. the meaning given to actions. In particular, the true human peculiarity is the 'beautiful glitch', i.e. freedom of thought, creativity and the ability to think 'out of this world' and not anchored to the here and now or data, producing innovation. The importance of AI can lie in supporting the enhancement of this human 'added value', recovering the relational and artisanal dimension of doing. According to Floridi, what is needed is not human-centric AI, but a relation-centric approach capable of building meaning in the interaction between people, machines, society and the environment.

Colamedici carries out an experiment: starting from the concept of post-truth, and from the questioning of unifying narratives, as favoured by social media, he writes with –or has written by– AI a book titled "Hypnocracy" where he develops the concept of post-truth to develop the ability to recognize and navigate between parallel reality systems. In this sense, the book is attributed to a Chinese scholar who does not exist but made real by the narrative system of the book (Xun, 2025). In particular, he book highlights how the algorithmic systems underlying social media –a pervasive dimension of today's society– tend to produce a relational cultural logic that redefines praxis, meaning and perceptual modalities, based on multiple, personalized but limited, even economically oriented discourses and truths. The author concludes that what we are witnessing is not simply a quantitative accumulation of technologies that alter the

states of consciousness, but the approach of a qualitative leap in the evolution of consciousness itself. Hypnocracy aims to control every aspect of experience, and it may have unintentionally created the conditions for the emergence of something radically different: cracking the algorithmic order, under the weight of its own pervasiveness and forced certainty, the possibility of glimpsing a free space rise.

The concept of 'virtual' as declined by Lévi comes to mind, that is, a 'field' that can be questioned, from which effective manifestations can arise thanks to its ability to decline its ontological centre of gravity (Lèvy, 1995): The model is no longer configured as a finished product, but rather as an open ecosystem, and is 'virtual' in the etymological sense of something endowed with 'virtues' in relation to its dynamic ability to conform, analyse and communicate content and support experiences.

Already in 1967 Calvino reflected on narrative as a combinatorial process, wondered if a computer could carry out procedures of conception and composition of poems and novels. In this sense, Calvino specifies that he is not referring to a machine capable of carrying out a mechanized and mass-produced literary production but capable of developing a product on the basis of lived experience, the unpredictability of mood and the illuminations of memory: in short, Calvino highlights how a text of literature, in order to distinguish itself from automated writing, must arise from a condition of disorder. In this way:

> The real literary machine will be the one that will itself feel the need to produce disorder but as a reaction to its previous production of order […]. In fact, given that the developments of cybernetics focus on machines capable of learning, of changing their program, of developing their sensitivity and their needs, nothing prevents us from envisaging a literary machine that at a certain point feels the dissatisfaction of its traditionalism and begins to propose new ways of understanding writing and completely upset their codes (p.209).

> Calvino points out, even when there is this type of machine, what will disappear will be the role of the author, but in any case "literature will continue to be a privileged place of human consciousness [...] The work will continue to be born, to be judged, to be destroyed or continuously renewed in contact with the reading eye" (p. 211). And he concludes: "Let the author disappear [...] to leave his place to a more conscious man, who will know that the author is a machine and will know how this machine works (p. 212).

Calvino predicts creative characteristics that AI does not yet seem to possess, as today it stands as an agent capable of incredible performances. In any case, the contest is constantly evolving. At the same time, considerations regarding the centrality of the reader/observer/user appear to be of particular interest, especially considering our immersion in the digital, with the related issues of emancipation and conscious management of the virtual, participatory and narrative dimensions of AI and the metaverse, and the intertwined correlations between digitality and physicality.

Educational issues are very important and media education is a hotly debated topic, where essential arguments are the digital literacy, the critical ability to relate to digital media, the ability to use tools and the ability to create content, the knowledge of the characteristics of communication systems, not least the challenges posed by AI (Baacke, 1997; Selwyn, 2013; Rivoltella, Panciroli, 2023).

Copeland (2006) wrote for the European Commission a paper entitled *European democratic citizenship, heritage education and identity* where he underlines the significance of the correlation between heritage education and citizenship education, because

> Heritage education provides a cultural dimension for citizenship education which: – enables an understanding of contemporary issues by drawing on experience and knowledge of relevant facts, ideas and processes from the past of cultures; – demonstrates an understanding of people's cultural needs and wants and the implications

Fig. 10 The e-Elephant in the Room (generated using AI).

of these for social and racial equity; – enables an understanding of the causes of, and possible approaches to, resolving conflict and controversy in a democratic society; – enables critical appreciation of decision-making processes in the cultural heritage (p.27).

He highlights the following and consequent themes: 'Education about citizenship and heritage', 'Education

through citizenship and heritage', 'Education for citizenship and heritage'.

In conclusion I think that Copeland lesson can suggest useful issues also in relation to digitality, that is a parallel and interrelated argument with the heritage one, both substantial parts of our daily lives. Mutatis mutandis, a digital education must be correlated with citizenship and heritage education, because separate these topics is very difficult, if not impossible.

REFERENCES

Arcagni, S. (2023). *La zona oscura. Filosofia del metaverso*. Luiss University Press.

Baacke, D. (1997). *Medienpädagogik*. Niemeyer.

Ball, M. (2022). *The metaverse: And how it will revolutionize everything*. Liveright.

Barrett, E. (Ed.). (1994). *Sociomedia. Multimedia, hypermedia, and the social construction of knowledge*. MIT Press.

Baudrillard, J. (1976). *L'échange symbolique et la mort*. Gallimard.

Baudrillard, J. (1997). *Illusion, désillusion esthétiques*. Sens & Tonka.

Benanti, P., & Maffettone, S. (2024). *Noi e la macchina. Un'etica per l'era digitale*. Luiss University Press.

Benedikt, M. (Ed.). (1991). *Cyberspace: First steps*. MIT Press.

Bolter, J. D., & Grusin, R. (1999). *Remediation: Understanding new media*. MIT Press.

Calvino, I. (2023). Cibernetica e fantasmi. In *Una pietra sopra* (pp. 201–221). Mondadori. (Original work published 1967).

Copeland, T. (2006). *European democratic citizenship, heritage education and identity. Council of Europe*. https://rm.coe.int/0900001680927395

De Kerckhove, D. (1991). *Brainframes: Technology, mind and business*. Bosch & Keuning.

Feenberg, A., & Hannay, A. (Eds.). (1995). *The politics of knowledge*. Indiana University Press.

Floridi, L. (Ed.). (2015). *The onlife manifesto: Being human in a hyperconnected era*. Springer. https://doi.org/10.1007/978-3-319-04093-6

Floridi, L. (2025). *La differenza fondamentale: Artificial agency. Una nuova filosofia dell'intelligenza artificiale*. Mondadori.

Gere, C. (2002). *Digital culture*. Reaktion Books.

Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York University Press.

Jenkins, H. (Ed.). (2009). *Confronting the challenges of participatory culture*. MIT Press.

Krueger, M. W. (1991). *Artificial reality*. Addison-Wesley.
Lévy, P. (1994). *L'intelligence collective: Pour une anthropologie du cyberspace*. Éditions La Découverte.
Lévy, P. (1995). *Qu'est-ce que le virtuel?* Éditions La Découverte.
Li, F.-F. (2024). *The worlds I see: Curiosity, exploration, and discovery at the dawn of AI*. Flatiron Books.
Manovich, L. (2001). *The language of new media*. MIT Press.
Manovich, L. (2010). *Software takes command*. Bloomsbury Academic.
Milgram, P., & Kishino, F. (1994). *A taxonomy of mixed reality visual displays*. IEICE Transactions on Information and Systems, E77-D(12), 1321–1329.
Moriggi, S., & Pireddu, M. (2024). *L'intelligenza artificiale e i suoi fantasmi*. Il Margine.
Murray, J. H. (1997). *Hamlet on the holodeck: The future of narrative in cyberspace*. MIT Press.
Negroponte, N. (1995). *Being digital*. Alfred A. Knopf.
Prencipe, A., & Sideri, M. (2023). *Il visconte cibernetico*. Luiss University Press.
Rheingold, H. (1992). *Virtual reality*. Mandarin.
Rivoltella, P. C., & Panciroli, C. (2023). *Pedagogia algoritmica. Per una riflessione educativa sull'intelligenza artificiale*. Scholé.
Salvestroni, S. (1985). Nuove chiavi di lettura del reale alla luce del pensiero di Lotman e dell'epistemologia contemporanea. In J. M. Lotman, *La semiosfera: L'asimmetria e il dialogo nelle strutture pensanti* (S. Salvestroni, Ed., pp. 7–45). Marsilio.
Selwyn, N. (2013). *Education in a digital world: Global perspectives on technology and education*. Routledge.
Stephenson, N. (1992). *Snow crash*. Bantam Books.
Sutherland, I. E. (1965). *The ultimate display*. In Proceedings of the IFIP Congress (Vol. 2, pp. 506–508).
Virilio, P. (1993). *L'art du moteur*. Éditions Galilée.
Weinberger, D. (2002). *Small pieces loosely joined. A unified theory of the web*. Basic Books.
Wiener, N. (1948). *Cybernetics. Or control and communication in the animal and the machine*. John Wiley & Sons.
Xun, J. (2025). *Ipnocrazia*. Tlon.

Article available at
DOI: 10.60923/issn.2724-2463/23767
How to cite
Brusaporci, S. (2024). The e-Elephant in the Room: A Compact Guide Through Digitality. *img journal*, *11*, 44-61.

© 2024 The authors. The text of this work is licensed under a Creative Commons Attribution 4.0 International License.