Introduction

This book explores the recent evolution of the digital media and communication. If media are not just tools, but complex environments capable of reshaping our social identities and cultural values (McLuhan 1964/2002), it is fundamental to understand their interactions with our being. Between the recent enthusiastic narrative on the Fourth Industrial Revolution and the Neo-Critical approaches against the domination of algorithms, this work investigates the complex relationship between digital media and human creativity, a relationship that continuously generates new hybrid ontologies. Therefore, the book explores two main trajectories: the convergence between production and consumption (prosumption) and the integrations between the digital and the physical sphere (phygital).

The exploration will start from the heart of the Industrial Revolution, when the distinction between production and consumption was formalized thanks to the introduction of new communicational "frames" and devices, until the recent convergence between production and consumption (Jenkins 2006), triggered by new media. The creation of a consumer-centric environment determined by technological progress but also by the "mobile revolution" (Raine & Wellman 2012), generates dynamic integrations between the virtual and the physical world. The most impactful process of our time is the so-called platformization of our lives, so that our daily experiences are completely colonized and managed by digital platforms. If the culture of nineties was dominated by the power of virtualization, so that bits were considered much better than atoms (Negroponte 1995) in the contemporary digital revolution, atoms strike back and show their decisive relevance.

Our world is marked by a proliferation of emerging media (Floyd & Katz 2015) that intersect dynamically the digital world and the physical one: 3D printing, Emotional Robotics and AI, digital platforms and recommendation systems, Internet of Things (IoT); Augmented Reality (AR); Geographical Referencing System; blockchain, NFTs, and the Metaverse, to name a few. All of them are examples of a new phygital trend that is changing drastically our cultures and our way of communicating. Even the notion of automation, usually considered as a cold and operational feature of Post-Fordist organizations, in a datafied society can be applied to culture, emotions, and tastes (Uricchio 2017). At the same time, the real innovation of Big Data is not just to provide enormous amounts of data that can be used to train AI and artificial neuronal networks. The added value of Big Data is the combination

of quantitative and qualitative elements or to better manage the qualitative world through quantitative methods and means. We basically live in a quali-quantitative world in which ourselves and our being can be measured, exploited, and managed in a huge global marketplace of identities.

The expression "empathic media" (McStay 2016) means not only that platforms and devices develop forms of "emotional artificial intelligence" but also all those innovations who have been able to interact with the emotional nature of the human beings. The ever-closer relationship between emotions, artificial intelligence, and creativity represents a dominant trend of our time. It can be examined, for example, by comparing the recent cinematographic imagination with some innovations on the market. Through this comparison, we can understand the general paradox of our times. The most advanced technologies enhance the emotional dimension that has become a central aspect, not only in the human–machine interaction but also more generally in the world of design, communication, and consumption. This book highlights the close link between technologies and emotions in the evolution of our collective imagery: from monsters, to robots, to cyborgs, to the new phygital nonanthropomorphic objects.

The hybrid is a cultural metaphor that accompanied the glorious nineties, to explain a composite series of processes: from the fusion between various cultures in globalization, to the hybridization between man-machine (the cyborg), or between man and the digital image. As in the case of the Nymphs described by Agamben, who are "created not in the image of God but of man, they constitute a sort of shadow (...). The story of the ambiguous relationship between men and nymphs is the story of the ambiguous relationship between man and his images" (Agamben 2013, p. 45).

The eugenic dream of a purified digital image, of a technocratic and hyper-efficient society and of a body enhanced by technology, is perversely flipped in its opposite: the power of the hybrid. For this reason, the culture of the nineties reacted to the development of hi-tech society with the imperfect aesthetics of lo-fi and with the celebration of mutation, in art, cinema, fashion etc. The logic of hi-tech applied to the infosphere (Toffler 1979, Floridi 2016) produces the hybrid that blends the virtual with the real (phygital), as well as blends production with consumption (prosumer). From the utopian dimension of the nineties to the pragmatic turning point of the new millennium, the hybrid metaphor is "operationalized" in the field of information technology, data modeling and the semantics of computer-based information systems (Meersman & Debruyne 2010). Our contemporary times are characterized by the conflictual contradictions between the enthusiastic promises of a hybrid future empowered by the Metaverse, and re-emerging traditional values based on the return to strong identities.

The creation of a customer-centric universe is developed across the history of communication, first as a rhetorical strategy, more recently as a proper technical and infrastructural environment. Hence in Chapter 1 of the book, I propose a socio-archeological approach to study the evolution of media in four main phases: Hosting, Diffusion, Profusion, and Dilution. The first one is the phase of Posters and Univer-

sal Expositions, the second one is based on the Fordist Mass Society and Mass Media, the third one is the phase dominated by TV and by the spectacle, and the fourth one goes from the innovation of the Web 1.0 to the world of platforms.

In Chapter 2, I analyze the transformation of communication and branding through three main theoretical models coming from the humanities: the Society of the Spectacle (Debord 1970), the Double Bind (Bateson 1972), and the Confession device (Foucault 1978). In the first model, we can see the dematerialization of commodities transformed into spectacle as the main strategic resource of capitalism. With the second one, we can analyze the binds between global brands and new consumers. The third model is useful to understand the logic of self-branding and the communication of the influencers, based on the exploitation of authenticity.

Chapter 3 explores the cultural background of the digital platforms: the so-called Californian Ideology as a peculiar vision of reality determined by the hybridization between the psychedelic counterculture and the yuppies business culture. The platformization of life is modifying not only our daily experience but also building a social organization based on new emerging values (The Netflix Society), while the automation of taste is reshaping social identities and replacing the role of previous social organizations such as youth subcultures.

In Chapter 4, I discuss the big change announced by the Fourth Industrial Revolution, representing the most advanced frontier of technological innovation, transforming the economy of the future in a disruptive way. It has been implemented in an unpredictable way by the coronavirus pandemic, producing three main scenarios of interactions between users and digital technologies: (1) Isolation, (2) Integration, and (3) Co-design.

Chapter 5 examines the intersections between ontology and new digital means. The *ontobranding* perspective (Barile 2013) suggests that the contemporary technological innovations are based on a dynamic interaction between reality and virtuality, where emotions become one of the main resources managed by the technical systems and things/places are interconnected and communicate in a worldwide network.

In Chapter 6, the main differences between Virtual Reality and AR are discussed not only as two different technologies but also as two different ontologies. If recently the AR has overwhelmed the VR in the public debate and media coverage, the innovation of the Metaverse will probably integrate both in a new dynamic experience.

In Chapter 7, the same comparison will be developed between real and virtual influencers. Reconnecting to some topics of Chapter 2, they are both involved in the representation of their authenticity as a key factor in the success of their communications. Lil Miquela is an interesting case study of a virtual influencer designed to express new social trends such as the LBGTQ activism.

Chapter 8 analyzes the use of digital technologies in the reinvention of retail spaces that are treated today by the overwhelming power of digital commerce platforms. The huge debate about the store of the future is an experimental lab in which the integration between digital and physical means of communication generates new hybrid ontologies.

Chapter 9 explores the innovation of wearable technologies in the context of the Fourth Industrial Revolution, suggesting three main categories to classify and study them.

Chapter 10 introduces and examines the world of NFTs and its link to the Metaverse as the last example of hybrid ontologies. Even if the NFTs are intangible values, the blockchain provides them a new unicity, determining a shift from the authenticity of the artwork to the authentication of digital images.

In this phygital world based on new hybrid ontologies, everything that exists can be individualized, emotionalized, communicated, and exploited in a complex and competitive marketplace of identities. The time has come to reflect both on the desirable and regrettable aspects of contemporary innovations, exploring this "brand new world" made up of smart objects, customized contents, tangible images, and lucid emotions, at the same time enriching and saturating (Hodkinson 2016) our daily experiences.