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Post-truth and mass communication

Diffusion of fabulous and
misleading
interpretations of reality
and possible ways out

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ABSTRACT

The digital transformation now underway produces well-being and emancipation. However, the contemporary world has entered an era of post-truth, as alternative or presumed facts have begun to have a greater importance than real facts, to the point of replacing the latter in the attention of the public, while feelings and emotions gain more weight than objective evidence. In this thesis, the ways of affirming falsehood are explored, conveyed by entertainment television programs, social media and commercials, which gradually replace the truth in the attention and mind of the general public, on the wave of feelings and emotions which gain more weight than objective evidence. A discussion follows on the disadvantages and risks associated with the obfuscation of reality, which affect not only the current generation, limiting the capacity for judgment and choice, but also the future generations. The final part of the thesis corresponds to the objective of evaluating a possible integration of legislative, technological and educational approaches, for a joint action against disinformation. It is a goal that is not easy to achieve, given the spread of increasingly complex and dubious narratives. The only certain data is that relating to the volume and impact of these contents, which increase over time, making their validation, or their filtering, more and more challenging.

INTRODUCTION

The contemporary world has entered the era of post-truth when alternative or supposed facts have begun to have a greater importance than real facts, to the point of replacing the latter in the attention of the public, while feelings and emotions have gained more weight than objective evidence.

The transition from truth to post-truth has occurred and is still taking place in various contexts. For example, scientific research based on solid and reasonably certain facts can be discredited by skeptics, using arguments that are meaningless from a scientific point of view but rhetorically effective and convincing for the general public. Extremely powerful and effective mass communication tools, based on digital technologies, are used to create a broad consensus in public opinion on questionable theories without real basis, but supported by some elites who use them for purposes of economic and political type. We have an example of this in the formulation of a "post-true" narrative of climate change, which has developed more or less in the following way: scientific knowledge and the warning signals of climatologists have been progressively diminished and weakened by adverse media campaigns, oriented to the pursuit of a precise objective, functional to the plans of an industrial production attentive to large numbers but insensitive to environmental problems. On this basis, a narrative was constructed aimed at forming an uninformed social consensus, favorable to indefinite industrial development because it brings short-term and therefore tangible well-being. Having done this and obtained majority popular support, politicians in favor of the industrial elites were more easily able to pursue their goals, to the benefit of the few and to the detriment of the entire community.

From the example just cited, it can be deduced that, in a post-truth world, objective facts have less influence on the opinions and decisions of individuals and the masses, compared to emotions and personal beliefs reinforced by appropriately studied narratives. In this way, by those who can turn the contents

of mass communication in their favor, a sort of illusion of omnipotence is cultivated: that of always being on the side of reason, in any case and despite any counter-proof or denial coming from history. or by those who have studied certain topics in a serious and scientific way and know what they are saying.

From the point of view of the audience of advertising campaigns, managed in a post-truthful way, it happens that many people deliberately select those facts and data that support their favorite conclusions, in tune with the populism of politicians, classifying any information that contradicts their own beliefs such as fake news (fake news or hoaxes). This is not a recent problem and originates from the effects of the great mass media, among which, as will be seen, television has played a decisive role. In addition, the Internet and social media have recently begun to share information at an incredible speed (practically in real time) and in a much wider geographical area (almost global) than traditional analogue media. Today, most web users read the news through their social networks, rather than through independent newsletters. This creates a false information balance since, as mentioned, these people tend to seek data and points of view compatible with their own pre-existing values and opinions, neglecting the opposite points of view. New technologies, including artificial intelligence, can improve the efficiency and effectiveness of fact checking (with the use of news filtering algorithms capable of identifying fake news), but they can also promote production and dissemination of deepfakes which, as will be discussed in detail in the chapters of this thesis, represent the most insidious and harmful form of artfully distributed false information. Having come to diagnose the perverse effects of post-truth and its growing affirmation, it is legitimate to ask whether and how it is possible to better educate the generations of young and old, to equip them with the literacy necessary for navigation in a post-truth world. . In this regard, in the final part of the thesis, the objective will be to evaluate a possible integration of legislative, technological and educational approaches, for a joint action against disinformation. Not an easy goal in a world like the present one, full of increasingly complex and dubious contents. The only non-contestable prediction seems to be

that relating to the volume and impact of such contents, which will only increase, making their validation, or their filtering, more and more challenging.

The treatment of this thesis is organized as follows. The first chapter presents and discusses the different theoretical positions on the meaning of post-truth, from a philosophical and scientific point of view. It will be seen that this term has ancient roots (lies and hoaxes have frequent feedback throughout the historical panorama), despite having acquired new prominence in the contemporary age, given the redundancy of messages and their growing hold on the vast public. Traditional unidirectional media (press and television) have been followed by today's interactive social media, in which everyone can express their point of view, communicating with other users. However, the increase in rumors, each of which bears its own opinion, did not produce the strengthening of the truth (or a more effective unmasking of the lies), but an excessive fragmentation due to the multiplication of points of view that are sometimes contradictory and often misinformed. This has led to the paradox of a truth that is not unique (and in this case contested by most as an instrument of affirmation and deception in the hands of the powerful) but polyvalent, like the faces of a prism. Each of them corresponds to the opinion and emotions of those who have expressed their opinion, more or less shared, but the overall result is not an understanding favored by dialogue but a subjective and often harsh contrast, conducted to the bitter end.

The second chapter gives space to the theme of mass-media, first analogue and unidirectional and then digital and multidirectional, with socializing effects and amplification of the opinions of an enormous number of users. It will be seen that these media have had, in general, distorting effects such as to favor the advent and consolidation of post-truth. The first among them has been and continues to be television. Instead of classical ontology, or the theory that establishes the criteria for the existence of objects in the real world, the media have favored the appearance of a plurality of ontologies, often discordant and each functional to a given type of documents, weak and strong. In parallel, we witnessed the debut of

new important concepts, the meaning and functionality of which will be explored. The more current and disturbing aspects of post-truth are discussed, including deepfakes. As will be seen, the link between objective truth and its replications or counterfeits is increasingly attenuated, thanks to Artificial Intelligence software, until a complete distortion of identities and facts is obtained.

In the third chapter, the example of Facebook will be presented, which is still the social media with the largest number of users and which has a significant history of disinformation, carried out by the authors of fake news and deepfake.

In the fourth chapter, which is the final part of the thesis, the possibility of combating the degradation of objective truth will be discussed not only with the weapons of vigilance and repression, but also through educational recipes, such as to train young and old to thought critical and digital literacy.

Chapter 1: The era of post-truth

1.1. The concept of post-truth

The first book that speaks, right from the title, of the "age of post-truth" is no older than 2004 (Keyes, 2004) and does so in much the same terms in which it is spoken today about that: the term "post-truth ", elected in word of the year in 2016 by the Oxford Dictionaries, was defined in them as follows:" relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief ", that is a type of persuasive rhetorical strategy in which the subjective and passionate component is prevalent and more influential, to the detriment of the referential and scientifically verifiable one.

The Treccani dictionary states: "post-truth: argument characterized by a strong appeal to emotionality, which, based on widespread beliefs and not on verified facts, tends to be accepted as truthful, influencing public opinion". In this sense, the centrality of the passionate element is confirmed, and the emphasis is placed on the fact that beliefs tend to replace verified facts; therefore the issue of unreliability of what has been publicly declared is highlighted.

The previous definition of the Treccani dictionary authorizes the common use of the term "post-truth" as a synonym for false information, deliberately and consciously such, created ad hoc for the most diverse purposes: from pure pleasure to confusion and disinformation up to specific economic and political interests. With regard to this widespread use of the aforementioned term, while many books, essays, sociological and communication theory articles deal with the subject in a philosophical and social context, we note the writer Alessandro Baricco who, on the subject, takes a mainly critical position. This author, in an article published in the newspaper La Repubblica on 30 April 2017 (Baricco,

2017a), argues that the term "post-truth" is unfounded, to the point of questioning its existence and relevance, citing the well-known said "nihil sub sole novi" (there is nothing new under the sun) about post-truth, since the lies they have always existed and with them their use in politics and in life. "I have news to give" - adds Baricco -: "this story of post-truth is a hoax. I would like to be more precise: it would be nice if we all stopped using the expression "now that we live in the post-truth era" because it is unfounded and misleading. It doesn't help to understand. On the other hand, it often helps to clear questionable behavior and foolish ideas. End". Subsequently, in the same article, Baricco (2017a) adds: "To be brutal, it could be dismissed as follows: post-truth is the name we elites give to lies when it is not us who tell them but others". Therefore, the term post-truth, according to this author, would today be reducible to a false alarm that expresses, if anything, the inadequacy of intellectuals in approaching and working within the current media world. Therefore, the same prefix "post" within the term post-truth, therefore, would not indicate a temporal transition (after the epoch of truth), much less a change in the epistemological paradigm (beyond the truth) but rather it would manifest, bitterly, the inability of intellectuals to keep up with the times.

However, Baricco's position can be called into question starting from an article published as an interesting "counterpart", again in La Repubblica (Ferraris, 2017a), in which the philosopher Maurizio Ferraris argues that, despite his lucid analysis, Baricco commits a fundamental error, that is, it does not consider that philosophical problems come from the world, not from seminars or articles published in specialized journals. Therefore, it is relevant to understand why the phenomenon of post-truth is emerging today. Ferraris (2017b) goes on to point out that in any case, even if things were as stated by Baricco, the question would arise as to what are the new logics of today's world, so obscure as to not be understood by the elites of intellectuals. We must therefore not stop at the irritation or disappointment due to the lack of elasticity of today's intellectuals, also because knowing these new dynamics does not necessarily mean condemning or holding them back, but it means penetrating them and learning to

manage them. It is therefore a question of not reducing post-truth to mere communication skills, always in the hands of a few individuals animated by manipulative purposes, but of identifying in it and in its emergence one of the characterizing and essential traits that help to understand our contemporary society.

1.2. The four conversational maxims of Paul Grice and their violation today

Anna Maria Lorusso, in her approach to post-truth (Lorusso 2018, p. 6), explains that her work, dedicated to the subject, "(...) was born from an intolerance, a belief and a desire. Impatience is for the word post-truth and for its vague uses; the conviction is that the theme of post-truth cannot be liquidated as a banal fashion of the moment, but has a relevant significance on a cultural, media and philosophical level; the desire is to show how the discipline I teach - semiotics - can be useful to better understand this problem. " The author continues her examination (Lorusso 2018, p. 9) by proposing that the term "post-truth" corresponds to an "epistemological paradigm", that is to a model of acquisition of scientific knowledge that can be "deprecated and criticized in the philosophical "in search of possible alternatives. Filippo Ferrari and Sebastiano Moruzzi (2020, p. 16) agree with Lorusso, refer to the Italian and foreign philosophical tradition and argue that philosophical models "offer the basis for developing a theoretical framework useful for understanding key aspects of post-truth."

It can therefore be deduced that since post-truth is closely linked to the acquisition of knowledge, philosophical analysis offers suitable tools for deepening the characteristics, genesis and risks of this particular cognitive model.

Taking a cue from Ferraris (2017b) it is appropriate, in order to grasp the most relevant and unpublished aspects of the theme of post-truth, to articulate the discourse by relying on the conversational maxims proposed in the last

century by the British philosopher Paul Grice, and their current and constant violation. Specifically, Grice (1989) reformulates the fundamental categories of experience used by Kant in the "Critique of pure reason" (Kant, 2012), namely quantity, quality, relationship and modality, and applies them to the sphere of communication. If for Kant, an eighteenth-century philosopher, without these categories a coherent experience is impossible, in parallel, according to Grice, as they are immanent in the rational cooperation between speakers, without the respect and use of the four behavioral norms enunciated by Kant it is not possible the communication.

If one starts from the quantity, which Grice (1989) explains with the constraint of "not being reticent or redundant", the contribution to the conversation must be commensurate with what was requested by the interlocutor and the respondent will provide the amount of information needed, no more, no less. In the current age, speakers and "post-truth speakers", as Maurizio Ferraris (2017b) proposes to call practitioners and theorists of post-truth, do not run the risk of breaking the Gricean maxim due to reticence, but run daily into the vice of redundancy. This is not only due to today's natural communicative propensity, which seems to authorize each interlocutor to produce their own personal version of the truth, but also to the nature of the media that can be used. The digital revolution, a typical phenomenon of the last thirty years, provides enormous ease in expressing and disseminating one's opinions on the Web, reshuffling roles a bit. Now, in fact, a true separation between who gives the cards and who takes them, in the game of verbal communication, is more and more nuanced; everyone has their own pack of cards and many claim that their own contains all the aces, that is, it is the legitimate and only reproduction of reality. The result is a superimposition of dissimilar and almost always conflicting truths. The infringement of the Gricean maxim in question inevitably leads to the inflation of information and, consequently, to confusion, which affects communication.

Within this "confusing regime", as Lorusso suggests to call it (2018), a phenomenon occurs with significant and potentially devastating effects for the

truth understood in an objective sense, by virtue of which the spread like wildfire and sharing viral of a message, to the extent that it obtains a higher social response in comparison to other similar or contrasting narratives, qualifies the message itself as an expression of a factual truth, superior to a simple opinion. Even Alessandro Baricco (2017b), despite his skepticism on the subject of post-truth, wisely grasps this looming question, noting that "an inaccurate thing but capable of circulating quickly in the blood system of the world, is more true than an exact thing that however it moves slowly. (...) For this reason, for some time now, the truth tends to seem to us a rather pop product, and less and less an esoteric secret, the privilege of a sect of experts ".

In the words of Wittgenstein (2014), what we tend to do more or less consciously, when surfing the Web, is to verify and recognize the truthfulness of a news, dependently on the frequency of its repetitive diffusion. This is comparable to reading a certain article several times, published by the same author on a given newspaper or in different newspapers, with the effect of becoming more and more convinced of the truthfulness of the information contained therein. In that case, the repetitiveness creates the truth. This viral inflation and spread of similar or identical messages, repeated for an indefinite number of times, leads to confuse and superimpose one's personal opinions on scientifically proven truths. The need for institutional legitimacy is no longer felt, because epistemological authority is legitimized by virtue of direct experience, mediated by one's own convictions. It must be added, however, that from the time of Galileo until a few years ago, this has never been a satisfactory criterion of truth or validity of judgment. An example of this is the patient who has a direct experience of the disease he is suffering from, but he does not know how to explain reliably, and more authoritatively than a scientific researcher, what he really has and why a certain type of therapy, applied to the pathology that afflicts him, is more effective than other remedies.

A further novelty of this era is therefore the use of experiences drawn from personal experience which, seen in the past as a marginal and sometimes

distorting element in the consolidation of a truth, today acquires the rank of a proven source of scientific authority.

The second Gricean maxim, concerning the quality of messages, is expressed as follows (Grice, 1989): "Be sincere, and give truthful information according to what you know for sure". In other words, the speaker's contribution will be sincere by virtue of the fact that he has sufficient evidence to support the truth of what he says, not being aware of any element that proves any falsehood of it. The violation of this maxim, according to Grice, is possible by an ill-intentioned man in order to be able, in an inconspicuous way and for his own personal interest, to deceive another individual. The current infringement of this maxim is quite common, but it shows an essential difference with respect to the premises of Grice (1989): it is not a question of the knowledge of the falsity of what is asserted, but of the lack of sufficient awareness of its truthfulness, based on reliable data. For example, whoever wrote the so-called "Donation of Constantine" (apocryphal text published in 1517 and containing a false edict issued by the emperor Constantine) was aware of writing a forgery, albeit for valid reasons, while today those who dispute the truth are often , in turn, a victim of counterfeiting, being persuaded to tell the truth. This aspect is due to the original manifestation of characteristics that escape philosophical analysis, among which the obstacle of ignorance and the delusion of presumption stand out. In this regard, those who roam today's widespread communication system tend to give much more importance to their own private beliefs and the weaknesses of other individuals, rather than to proven facts that have occurred in the outside world. Furthermore, the postruists, unlike those who lied in the past, are inclined to systematically and often scornfully criticize any authority holding a truth value, such as the traditional scientific one, considered an overbearing and monopolizing source of epistemological injustices.

The third maxim formulated by Grice (1989) is the invitation to be "pertaining": the speaker's contribution must be inherent to the topic of the conversation. The relevance of the arguments uttered should generally depend

on a reciprocal logical relationship between what is expressed and the corresponding facts that actually occurred. The novelty of the current era is the malleability of the criterion of relevance: what is strictly correlated to the objective element is no longer considered relevant, but has to rest more and more on opinions or on the natural human need of self-affirmation and social recognition through own statements. This relationship based on psychological imperatives, not having an objective background capable of putting a stop to human inventiveness, produces a potentially infinite number of subjective points of view, each of which aims to modify reality, making it consonant with its own limited contribution, presented as conclusive. Such a subjective perspective is not without side effects: in fact, the possibility of providing truly decisive arguments is no longer possible, so that any discussion or debate can continue indefinitely, having as its only limit the imagination of those who produce reasoning detached from reality but functional to the affirmation of one's ego. The possibility of criticism and rectification therefore becomes increasingly remote and, indeed, every counter-argument or dissonant voice coming from the interlocutors, even if based on logic and on the reality of the facts, will be experienced as a confirmation of one's argument or an incentive to propose others, formally valid but inconsistent. The "debunking" (denial), therefore, is no longer sufficient today, especially if carried out with a warlike spirit, since it produces exactly the opposite of the desired effects: from an attempt at refutation to an incentive to multiply error (Lewandowsky et al., 2017). This shows that fake news (unlike the classic lies) are not biodegradable, but instead appear infinitely recyclable, even though it is not easy to unmask them, since every denial reactivates them and gives them new strength and greater resonance.

The fourth and last maxim proposed by Grice (1989), is an invitation to "avoid ambiguities": the speaker, in order not to undermine the principle of cooperation, must adopt words that allow him not to be obscure or ambiguous. The infringement of this maxim, in the current era, takes on paradoxical characteristics: the sentences disclosed by the post-altruists are not

compositions of obscure and verbose statements but are, on the contrary, syntactically flawless and clear as the sun from a lexical point of view. Nonetheless, they remain ambiguous, senseless and at times absurd. An example of this is the "Protocols of the Elders of Zion", a work published in the early twentieth century - which the Encyclopedia Treccani presents as an example of "anti-Semitic propaganda falsification, probably written by an agent of the Russian secret police".

The Tsarist police - largely inspired by an openly imaginary writing by Maurice Joly written in 1864 as a pamphlet against Napoleon III - with the creation and dissemination of this false historical document accomplished very interesting literary acrobatics. In this sense, the Protocols drew on a general and indefinite, but deep-rooted feeling of suspicion and resentment towards Jews, with a more functional design than Joly's inspirational pamphlet and a name, that of the "Universal Jew" labeled as cosmopolitan, heedless, ruthless, greedy, calculating and cunning.

Here is the proven technique: both to a layman and to insiders, everything will be more plausible and persuasive through a sophisticated and unprecedented articulation of falsehood which, exceeding and using in its favor the classic dichotomy of true and false, forges convictions exploiting the clarity of an objective fact. On the other hand, if such a fact does not exist, or is not clear enough and applicable to the context, another one similar to the truth is invented, more lucid and captivating than real events and therefore difficult to contest.

Alessandro Baricco (2017b), despite his comments on the aforementioned perverse technique are finalized to criticize, once more, the coining of the term post-truth by the literary elites, grasps the point with sharp precision: "A false fact that tells about a real truth. It is one of the most used lockpicks, for centuries, for breaking into consciences ».

1.3. Historical genealogy of post-truth: from modernism to postmodernism

The main aspects of post-truth were discussed in the preceding paragraph, and it should now be clear why it is far from being an obvious and marginal or precociously obsolete phenomenon. However, to better grasp the nature of post-truth, a second step may be useful: broadening the perspective and taking into consideration the broader context in which it is placed. To quote McIntyre (2018, pp. 11-13): "The Oxford definition focuses on" what "post-truth is: the idea that feelings sometimes matter more than facts. But just as important is the next question, which is "why" this ever occurs ". In other words, it is fundamental to ask oneself what were the presuppositions that contributed to shaping the cultural climate in which a phenomenon such as that of post-truth was able to be born and flourish and why, therefore, feelings and opinions ended up count more than the facts.

Some of the leading scholars of the subject such as D'Ancona (2017), Ferraris (2017b) and McIntyre (2018) believe that post-truth is the undesirable, but in some ways inevitable, result of a theoretical-practical trend favored by the affirmation of postmodern thought, since post-truth found its theoretical legitimacy in postmodernism and its political diffusion in populism, which followed. The close relationship that the aforementioned authors think exists between postmodernism and post-truth is well summarized in the position of Ferraris (2017b), who goes so far as to say that the first is the ideological preview of the second, while the second is the degenerate fruit of the first. Starting from this position of Ferraris, the goal is to analyze, schematically, what are the central ideas of postmodern thought that functioned as a springboard for the advent of post-truth, and the main phases, as well as the changes in the relationship with the truth that characterized the twentieth century, which has just ended.

Brian Duignan, in the pages of the Encyclopaedia Britannica (Duignan, 2022), develops the thesis of a postmodernism formed as a reaction against the

assumptions and intellectual values of the modern period, which have characterized the history of Western thought (which has affected, approximately , the centuries from the seventeenth to the nineteenth). Indeed, Duignan notes, many of the doctrines typically associated with postmodernism can rightly be described as the mere denial of general philosophical views, which were taken for granted during the Enlightenment in the 18th century, although they were not unique to that period.

The most important among the aforementioned points of view, supported by modernists but which postmodernist thought has subsequently disavowed, are the following (Duignan, 2022):

1. There is an objective natural reality, a reality whose existence and properties are logically independent of human beings, their minds, their societies, their social practices or their investigative techniques. Postmodernists dismiss this idea as a kind of naive realism. Reality as it is, according to postmodernists, is a conceptual construct, an artifact of scientific practice and language. This point also applies to the investigation of past events by historians and to the description of institutions, structures or social practices by scientists who delve into these issues.

2. The descriptive and explanatory claims of scientists and historians can, in principle, be objectively true or false. The postmodern denial of this point of view - which derives from the rejection of an objective natural reality - is sometimes expressed by those who affirm that there is no such thing as "Truth".

3. Through the use of reason and logic, and with the more specialized tools provided by science and technology, human beings are likely to change themselves and their societies for the better. It is reasonable to expect that future societies will be more humane, more just, more enlightened and more prosperous than they are now. Postmodernists deny this Enlightenment belief in science and technology as tools of human progress. Indeed, many postmodernists believe that free (or unguided) scientific research led to the development of technologies for large-scale killing during World War II. In this regard, post-modernist thinking

goes so far as to say that science and technology, and even reason and logic, are inherently destructive and oppressive, because they were used by evil people, especially during the 20th century, to destroy and oppress many others, not belonging to their elite.

4. Reason and logic are universally valid, ie their laws are the same or apply equally to any thinker and any domain of knowledge. For the postmoderns, however, even reason and logic are merely conceptual constructs and are therefore valid only within the particular traditions and intellectual categories in which they are used.

5. There is a particular domain, defined as "human nature", which includes psycho-physical faculties, attitudes or dispositions that are, in a sense, present in human beings already at birth, and do not need to be learned or instilled through social forces. Alternatively, postmodernists insist that all, or nearly all, aspects of human psychology are fully malleable and socially determined.

6. Language refers to an external reality (with respect to the human being) that it represents, and to which it is connected. According to postmodernists, however, language is not a "mirror of nature", but is semantically autonomous or self-referential: the meaning of a word is not a static image that remains in the world nor an idea that is learned in its entirely and it persists immutable in the mind, but rather a range of contrasts and differences with the meanings of other words. Since meanings are in this sense functions of other meanings - which in turn are functions of other meanings and so on - they are never completely "present" in the mind of the speaker or listener but distance themselves from it considerably. The result is the self-referentiality of language, which characterizes not only the simplest and most natural expressions but also the more specialized "discourses", typical of particular communities or traditions. Such discourses are incorporated into social practices, they only reflect the conceptual schemes of the particular moral and intellectual values of the community or tradition in which they are used and do not lend themselves to being generalized, adapting them to other contexts.

7. Human beings can acquire knowledge of natural reality, and this knowledge can be justified on the basis of evidence or principles that are, or can be, known immediately, intuitively, or otherwise with certainty. Postmodernists reject this principle, which dates back to the seventeenth-century French philosopher René Descartes that, from their point of view, there is no foundation of certainty on which to build the empirical and scientific knowledge.

8. It is possible, at least in principle, to formulate general theories that explain many aspects of the natural or social world within a given domain of knowledge, for example a general theory of human history, such as dialectical materialism. Furthermore, it should be a goal of scientific and historical research to build such theories, even if they are never perfectly realizable in practice. Postmodernists reject this notion as an impossible dream and indeed as the symptomatic expression of an unhealthy tendency, typical of Enlightenment discourses, which aims to adopt "totalizing" systems of thought. According to postmodernists, these theories are pernicious not only because they are false, but also because they force other perspectives and theories to conform to them, oppressing those who utter them, marginalizing them or silencing them. From totalizing thought, according to postmodernists, totalitarianism would therefore originate.

The analysis of the previous points, summarized by Duignan (2022), shows that modernism supports the rational thought and the use of science and reason for the progress of man, while postmodernism believes in the irrationality of things. Furthermore, the modernists admit the existence of universal truths, which are completely rejected by the postmodernists. On the other hand, it cannot be denied that there are also principles of general application, which postmodernists accept without reservation. This is the case of a well-known statement by the German philosopher Nietzsche: "There are no facts but only interpretations" (Lorusso 2018, pp. 59-61). It is a powerful and promising principle, which offers postmodernists the illusion of being able to always be right, in any circumstance, regardless of any denial originating from history, experience or science.

Richard Rorty, an American progressive thinker, has proposed saying goodbye to the modernist cult of truth (Rorty, 1979) and renouncing the peremptory nature of each statement, maintaining an ironic detachment from the presumed universal laws, since the meaning of human existence does not lie in the search for an objective truth that is always valid and in any case, or in some scientific fanaticism, but in what he defines the "solidarity friendly". In other words, what today is exemplified by the social, linguistic, and cultural attitude of "Politically Correct".

However, a bitter truth has emerged: the overcoming of the myth of objectivity and the becoming a fairy tale of the real world, as hoped for by the postmodernists, have been accomplished but have not had the emancipatory results prophesied. In this regard, one can think about what would happen in hospitals or courts if the insiders and the entire community became convinced of the irrelevance of the truth.

Another practical example, real and recent, can be found in the assault on the United States Capitol, which took place on January 6, 2021, which saw the supporters of the outgoing president, Donald Trump, organize an attack on the emblem of American democracy by refusing to the first time, in the history of this form of government, the outcome of the presidential elections. Vice President Mike Pence and Congress were therefore asked to retract Joe Biden's new proclamation at the White House, thus showing that a democracy separated from truth and dominated by personal opinion is not a step forward in the liberation of consciences, but two steps back.

The aforementioned crisis of legitimacy, unprecedented and long debated in the media, which translates into a preference for styles of government closer to authoritarian regimes than to democracy, is certainly due, in large part, to an unprecedented delegitimization of the single source of authority developed by the West as an alternative to the imperium: knowledge of facts as they are and not as someone would like them to be (Prior, 2006). The importance of knowledge,

however, as seen in various points in the Duignan (2020) synthesis cited above, has been completely denied by the postmodernists.

In this horizon, as Ferraris (2011a) observed, postmodernism has manifested its worst anti-Enlightenment characteristics: knowledge (i.e. knowledge of reality based on facts) has been ousted and has lost its autonomous auxiliary value, supporting of thoughtful human decisions not dependent on the impulses and pressures of the moment. Hence, the alleged liberalization from the truth based on knowledge of the facts, considered by postmodernists that are too monolithic, compact and peremptory, has shown its most authentic meaning, resulting in a result in which the reason of the strongest is always the best and whoever proves to be stronger than competitors, politically, economically or in the media use, can aim to impose their own ideas, causing many to support them.

As Anna Maria Lorusso points out in "Postverità" (2018), the long wave of ideological discredit of the truth that culminates in postmodernism manifests itself without fractures or surprises as a violent and overturned utopianism or "realityism" as Maurizio Ferraris suggests to call it (Ferraris, 2011b), and the causes of this perverse realization, assuming that they are easily identifiable in such a complex social phenomenon, are to be found not so much in the Web, in social networks or in populism, but in that discursive practice full of strong fabulous and dramatic elements that dear good old television, from the eighties onwards, it blew up.

Lorusso (2018, p. 20) further specifies: «It is television that has accustomed us to confusing truth and fiction. It is she who has given the scepter of the microphone to ordinary people without special skills. She is the one who entered our private room and authorized it to dominate the scenes ".

In the next chapter, discussing the turning point in the media role of television, which from the Eighties onwards began to entertain, bringing reality into its show space, we will see how this change has inexorably marked the relationship of the audience with the screen, from that of television to that of the

computer to the pocket screen of the smartphone. The boundary between the two sides that a screen separates, or should separate, has thus been attenuated: that of representation, fiction, simulation, illusion for entertainment purposes, on the one hand, and that of events, reality, truth and real events, on the other side.

Chapter 2: From the remote control to the mobile phone

2.1 The reality mediated by television

At the end of the last century, Wolfgang Welsch (1997) observed that, at that time, an evident predominance of aesthetic images and models was affirming, of increasing importance not only in the formation of reality, but also in its "mediation", or in its transposition and interpretation in the media. All this, according to Welsch, affected the basic understanding of reality. In particular, the iconic impact of television had acquired the power not only to guide the public in selectively determining what could be considered newsworthy and thoughtful news, but it had also obscured the presentation of news outside of television. In particular, print news, the use of which appeared to be in decline, had suffered as a result.

But there was more, that is, there was a rampant change in the approach to the definition of reality and its understanding. In the past, to be considered real, something had to be based on objective and measurable evidence, which was not at all questionable. Later, however, a new criterion of reality was imposed: it was enough for the object in question to be aesthetically presentable. Aesthetics had therefore become the new currency of exchange in reality trading. It was the dawn of a new and disturbing phenomenon: the derealization of reality. Welsch (1997) explains that this depended (and still depends today) on the fact that reality, as transmitted by electronic media, is profoundly influenced by this type of mediation, due to the aesthetic peculiarities of these communication channels which, generally, favor in the spectators the perception of freedom of movement and the absence of gravity of bodies and images. Everything is subject to possible electronic manipulation. In particular, anything that enters the realm of television

enters the domain of transformability, rather than that of constancy and endurance. If you can define a "lightness of being" that borders on inconsistency, then this is at its peak in the electronic dimension. Consequently, the media themselves (and in particular television), also because they are subject to the development of the most advanced technologies, increasingly present their images in virtual and playful ways. It is a short step from the reality of the media to the daily reality of their users, because what happens in everyday life is increasingly reduced, presented and perceived according to the most successful models in the entertainment landscape. Television is the prime example of this. Derealization leaves its mark everywhere: the real tends to lose consistency, intensity and gravity; it seems to be getting lighter, more complacent and less overwhelming. It follows that the media presentation of reality, even of the apparently crudest one, no longer creates dismay and affliction in the spectators but, on the contrary, it generates addiction and indifference (Welsch, 1997).

Anna Maria Lorusso (2018, p. 22) is fully aware of this trend, where she points out that: «It is television that has accustomed us to confusing truth and fiction. It is she who has given the scepter of the microphone to ordinary people without special skills. She is the one who entered our private room and authorized him to dominate the scenes».

After identifying in television one of the main causes that favored the overlap and confusion between the imaginary and the real, Lorusso traces the main stages of this evolutionary phenomenon in the Italian context, identifying its origins in the 1980s, together with the "TV truth" (Lorusso, 2018). That was, in fact, the era in which television no longer limited itself to acting as a repeater, on the small screen, of films and theatrical staging - a context in which truth retained its own delimited space, which distinguished it from fiction - or as a pedagogical chair for the lessons of Alberto Manzi, who helped an immense audience of students to obtain the elementary school certificate. The TV, in fact, began to probe in detail the life of every day, framing the desires and problems of ordinary people.

Thus, it was that reality began to lose its connotations of intrinsic, proven and objective truth, to slip into entertainment programs with an important component of the participation of TV users, and therefore subjective, fueled by live phone calls. The subjectivity of the interventions of the viewers, duly encouraged by the organizers and presenters of the shows and surveys, aimed at increasing their audience, favored the transition from the objective vision of reality to its interpretation through the intimate and personal feelings and points of view of the users, emphasized and amplified.

Lorusso (2018) effectively describes this transition from the objective to the subjective, highlighting that the "reality" that emerged from the "small screen" was highlighted by broadcasts that relied on a large participation of the remote users, framing it in a context of investigative journalism and also, often, ludic and parody entertainment. Lorusso carefully analyzes the reality of the aforementioned transmissions (Lorusso, 2018, pp. 24-25), observing that: «the reality that was returned here was that of indiscreet disclosure, the truth that can be seen from the keyhole or that emerges from confidences and gossip. Small private truths that became public domain (and sanction - a not insignificant element)». The author herself does not fail to highlight some characteristics of "TV truth" that have marked its development, at an increasing pace, from the end of the last century to the present era. In the first place there is the technological factor: it has been seen that television, in many cases, has taken over from cinema projections, sanctioning the transition from the big to the small screen. This trend towards reducing size and adapting to individual needs continued with the arrival of television programs on computer screens and then on smartphones. In this way, pocket TV has been achieved, which can accompany the user everywhere, even in his private spaces such as the bedroom and bathroom, or on walks outdoors.

Secondly, criteria for verifying information based on concepts of authenticity and reliability have been established individually, for the use and consumption of remote users. First of all, it must be said that the truth of what is transmitted

emerges not so much from reflections or speculations on a logical or intellectual level, but transpires from events, facts and circumstances captured directly and transparently, at the moment in which they occur. An iconic dimension that gives the television user the illusion of being there and of becoming a direct witness of what is happening or has just happened. It is a testimony acquired in first person or, at least, through the evaluations and comments of other people framed on television screens, which the viewer perceives as similar to himself and with whom he shares opinions and tastes. In this sense, the participation of ordinary people, in large numbers, in which most of the spectators can recognize themselves, is of fundamental importance. The growing weight assumed by ordinary people has led to the transition from aspects of a public and collective nature to those of private importance, based on genuine experiences of individual protagonists, without background or screens, so that the audience can recognize them as their own because they have already experienced or wish to acquire them in first person.

In the aforementioned contexts, the sympathy emanating from the spokespersons and the television protagonists acquires a fundamental importance. The affable and pleasant person, with whom one can identify himself, becomes more authoritative than the expert who expresses the knowledge acquired through years of study and comparisons with other experts in his discipline. What really happened - to those with whom one recognizes an affinity and a commonality of opinions and ideas - becomes "true" and reflects the truth. These are situations taken to the extreme in reality TV, such as "Big Brother" or "Island of the Famous", for which we can speak of post-truth or, as Lorusso does (2018, p. 31), of "reality in vitro. In these cases, television does not function so much as a window on the world but as a deformed mirror of the world». What emerges is the transition from the indisputable truth, because it is proven by facts, to the (post-) truth that emanates from feelings and emotions, which involves and is considered reliable because it is reflected by credible characters, in which one can identify himself.

The analysis of television post-truth can take advantage of the study of the motives, that is, of the objectives set by the architects of this distortion of truth implemented through the creation of artificial realities. In other words, the phenomenon can be better understood if the objective is shifted from "how" to "why". In this regard, Denis McQuail (2016, p. 378) observed that the entire study of mass communication is based on the premise that the media have significant effects on the audience. These effects are widely researched and produced in the advertising field. Rudy et al. (2011) add that the wide media exposure often leads audience members to adopt the reality proposed by the media as their own, and these altered conceptions of reality can in turn influence the behavior of those who assimilate them. Therefore, knowing the structure and purposes of these visual representations - conveyed, in particular, by television channels, and understanding the impressions that viewers derive from them - is important for predicting the trend of consumer markets. All of this represents a key to success in selling products and services.

On the other hand, the distorting effects of artificial reality can manifest themselves not only in the commercial sphere but also in the political arena, which is in turn influenced by the media. In this regard, Markus Prior (2006), in a study relating to the American political reality, highlighted that, when it comes to expressing one's preference for a party or a single candidate, what people learn and decide depends on the informative environment to which they are exposed, by deliberate choice or, often, inadvertently. The combined effect of the information stored individually - of their own and others' opinions - and of the learning abilities of each voter, will determine their opinions and consequent political choices. The Prior study (2006) shows that the growth of television in the US has contributed to the re-election of candidates already in office (incumbents), compared to their challengers, especially in the 1960s. This happened because the less educated voters were better informed, than in previous decades, about the political programs of the candidates already in office, and were also more exposed to the propaganda of the majority parties and therefore more likely to

vote for their representatives in the provided districts. In general, the advantage of the incumbents has proved to be all the more conspicuous and decisive, compared to their opponents, in proportion to the number of active television broadcasters in their districts of residence (Prior, 2006). Therefore, the first distorting effects of the television media began to manifest, because the candidates already in office were regularly favored over their opponents, being able to secure the support of a greater number of broadcasters in most of the USA. Regardless of the effects of normal propaganda, the conviction of truth, regarding political programs and the personal merits of incumbents, was therefore decisively strengthened in the audience, by a greater number of television broadcasters who consolidated it, proclaiming the merits of candidates who already held the position.

2.2 Weak and strong documents

In the previous paragraph, television was analyzed, in its effects on the audience, as an electronic media and a mass communication channel. However, it is important to note that, according to Ferraris (2014), a statement recorded on TV can have an importance that goes beyond mere opinion, being equivalent to an inscription in a public document, with social significance. The author states (Ferraris 2014, p. 307), in fact, that «the term "registration" applies to any form of recording of corporate deeds, that is, such as to concern at least two people. In this sense, a promise made on television, a handshake or a wink are registrations, at least in this technical sense, and not all-pervasive». Therefore, television can be understood as a source of documents, being the depository of corporate documents. This means that in the television programs there has been a fusion between the original format of documents, present at all levels in the social world, and the information disseminated by the media. Consequently, the contemporary era is characterized by an extensive formation of documents, facilitated by technical advances in Web management (Ferraris, 2014).

As we have seen, the advent of post-truth is a substantially new phenomenon, which affects the relationship between the real world and the ability to freely interpret its events. The novelty consists, on the one hand, in the technological evolution that has taken place on the Web and, on the other hand, in the role of opinions and personal emotions, which guide media users in choosing the information to be privileged and disseminated. This occurs, according to Ferraris (2014 and 2017a), in the form of corporate documents registered on the Web by subjective choice and having informative relevance.

Now we will move on to clarify the difference between weak documents and strong documents and, to do so, a brief introduction on the concept of ontology - and its most current variations - is useful. A simple Google search helps to understand that the term "ontology" today clearly refers not to concepts enunciated by Plato or Heidegger, but rather to a multitude of classification systems and vocabularies created to facilitate data processing by means of computers. One example is, among others, the "Handbook on Ontologies", dedicated to computer engineering specialists (Staab and Studer, 2009). The work of contemporary ontologists in this area can be seen as a response to the fact that all the numerous industrial, governmental and scientific organizations, whose operations rely largely on the use of computers and electronic archives, face increasing difficulties. deriving from the need to combine huge amounts of data concerning relevant realities (from financial transactions to social analyzes or on microbial genomes) deriving from multiple heterogeneous sources (Sanfilippo, 2015). In this regard, ontologies are consensus frameworks, and are designed to allow such data to be collected and then integrated together with other similar data, taken from distinct collection points but linked to the same phenomenon. Among the most important users of this type of ontology are defense and intelligence agencies, as well as financial organizations and research departments of pharmaceutical companies. There are various university centers for ontological research, and it is interesting to note that Italy has earned

a place among the world leaders in this field, with renowned ontology centers based in Turin, Trento and Rome.

In the IT field, the link between ontology and documentation is very close, precisely because a document is something that can last over time, without undergoing degradation or variations. It can be signed and countersigned, even electronically, filed, recorded, inspected, transmitted, copied and ratified (Biagetti, 2010). However, if necessary or in unforeseen circumstances, the document can also be canceled, stamped, counterfeited, hidden, encrypted or even lost and destroyed.

Plurality of documents can be concatenated and combined in various ways to form new document complexes, whose structures reflect the underlying human relationships, for example from debtor to creditor, from manager to shareholder, from customer to supplier, from plaintiff to judge, from doctor to patient and so on. The documents thus make possible new types of ongoing social relations and give rise to new types of enduring social entities, allowing the combined evolution of whole new categories and dimensions of socioeconomic reality. A prosthetic effect is highlighted, whereby the traces of individual memory, inside the human brain, are increased by the information accessible in databases of freely accessible external documents managed with various document technologies. (Mazzotta e Giovagnoli, 2010).

The new documentary practices, favored by information systems, also involve changes in social relations and in legal and economic systems. New social artifacts are put in place, such as receipts, money, identity documents, criminal records certificates, as well as signatures, document templates to be filled in, boxes to be ticked online, official stamps, bank accounts, contracts, stocks and bonds, mortgages, liens, insurance policies, credit cards and so on. It has been observed that the development of such artifacts, of the networks of social behavior and of the obligations and demands to which they are associated, is similar in some respects to the processes of biological evolution (Zamboni, 2008).

The Peruvian economist Hernando De Soto, in his "Mystery of Capital" (De Soto, 2000), was the first to recognize the central role of documents in the social reality of the market economy. Later, based on the work of De Soto, Barry Smith and Leo Zaibert (2001 and 2007) proposed a theory of documentary records supplemented by an account of the ways in which, working with documents made of paper and ink or processed by the processor of a computer, you can change the world. In fact, new types of ownership, legal liability and business organization relationships arise, as well as other creatures of modern economies, including mortgages, debt securities, insurance policies and financial derivatives.

The formalization of an innovative approach to social ontology is due to Maurizio Ferraris (2014), which starts from the recognition of the important role played by documents in social objects of various kinds, such as money, marriages, divorces, joint custody agreements, judicial convictions, tax codes, economic crises, research projects, certificates, scientific diplomas and more. The objects just mentioned determine today the relationships and interpersonal performances in the social environment, no less than do the stones, trees and other elements of the environment and indeed have a greater significance, also because a large part of the world depends on them including human well-being and malaise.

The presence of documentation, in paper or electronic form, is now so normal and innate in everyday life that it is not always given much attention to that. In fact, if you are not among the "insiders" who work in computing centers, it is rare to ask yourself how the computer programs (or mobile phone apps) - which are an important part of daily business - work or what they are made of. In fact, it often happens that more attention is paid to these procedures when, for some reason, they stop working, or after the loss of the passport or credit card, for which one is forced to search, pay, call, write, mail and queuing in various types of offices. In this regard, Ferraris proposes a complete theory of documentality (Ferraris, 2014), based on understanding the special role of paper and digital documents as a key to understanding the entire social reality. His

theory therefore implies the need to identify and formulate appropriate definitions of the characteristics which, in various situations, are necessary and sufficient requirements for something to be defined as a social object. For this purpose, the author (Ferraris, 2014) takes inspiration from questions such as: what is a document? and in what ways (using what types of technologies) are documents disseminated in a company backed by registration documents? And, even more importantly: how is adherence to the legislation (including legal regulations) to be understood on which the world of documentality is based, which today is rapidly expanding. Ferraris believes that to understand the structure of social reality it is necessary to set in motion different fields of philosophy, and therefore develops a systematic reflection whose foundations rest on the eleven theses of Documentality proposed by Andina (2016, p. 90). Among them, as regards the distinction between "weak documents" and "strong documents", the following theses are of particular importance (Ferraris 2014, pp. 412-418):

"Thesis 6: Nothing social exists outside the text" (Ferraris 2014, p. 414). This thesis is based on the concept of enrollment, which qualifies the position of Ferraris. According to him, in fact, a necessary condition for the existence of a social object is not only the birth of a particular type of action, but also the fact that this action produces a trace in the form of an inscription. Unlike the case of natural objects, whose existence does not depend on anything other than the material consistency of the objects, social objects exist only if there is a trace that, in some way, is produced by the act that placed them outstanding. The trace, in turn, proves a representative act that documents the existence of social objects.

«Thesis 9: Documents" in the strong sense "are inscriptions of acts. From the point of view of a theory of society, the ontology of social objects presents itself as documentality, that is, as the doctrine of documents that represent the highest form of social objects, which are divided into documents in a strong sense, such as inscriptions of acts, and in documents in a weak sense, such as records of facts. " (Ferraris 2014,

p. 415) It is noted that this ninth thesis presents a real theory of documents. Indeed, Ferraris develops a phenomenology of the document and distinguishes between documents in the strong sense, that is, records of acts that generate consequences for the registered subjects, and documents in a weak sense that are simple records or historical reports of events that have occurred.

A further example, which helps to understand the distinction between weak and strong documents, is based on agreements (or agreements: Andina 2016, pp. 84-85). The agreement, in fact, can be "weak", because it implies conventions attested by commonly accepted customs and traditions, or "strong", because it implies rules of conduct to which the parties simultaneously agree to adapt. Weak stipulation is a type of agreement that refers to commonly found agreements in ordinary situations.

An example of such conventions is the rule according to which the young person must greet first, or the use of the appellative "sir" or "lady" in formal approaches. Such practices are often based on habit and common sense and aim to simplify behaviors. However, it can happen that people forget both established practices and common sense, so that carelessness prevails. These are the cases in which the legislator can intervene to replace the weak convention, no longer sufficient, with a stronger binding character (Andina, 2016). For example, the behavior whereby young people give way to elderly or pregnant women on public transport is a weak form of convention. This is demonstrated by the fact that this practice is not always respected, both for the reluctance of young people to recognize the needs of the elderly (or pregnant women), and for the vagueness of the concepts of "young" and "elderly". In cases like these, the weak stipulation gives way to a rule, that is, it turns into a strong stipulation. This is what happens, for example, when signs appear on public transport that reserve seats for the elderly, pregnant women and disabled people. In these situations, people who do not belong to the

categories just mentioned have the obligation to give up their place, because a rule has been rigorously introduced, with a strong document.

2.3 Documediality: redundancy of true and false documents on the Web

A definition of "documediality", formulated by Maurizio Ferraris, was proposed in these terms (Ferraris and Martino 2018, p. 25): it is a proliferation (in quantity and usability) of documents entrusted to the web, typical of the time of post-truth. Such documents possess the following characteristics: virality, persistence, mystification, fragmentation and opacity.

In this regard, Ferraris mentions the advent of a real documediality revolution (Ferraris, 2018), which highlights technological, social and anthropological aspects. The aforementioned characteristic of virality of the documents in question, and their connection with the media, meant that a very large number of people were involved in a completely unpredictable way. It is a phenomenon that can be defined anthropological, because it is relevant to human beings and modifies their lifestyle in various ways; at the same time, it has social and technological characteristics, which favor its development on the web. However, its manifestation does not coincide temporally with the invention of the web and the spread of smartphones, but essentially rests on two elements:

- The first is that the documents are no longer deliberate or rare. Previously, in fact, it was necessary to distinguish between two distinct types: strong documents and weak documents. Currently, after the documediality revolution, this distinction has changed substantially, in the sense that typically written documents (strong documents) are also possible regardless of the subject who produced the text. In fact, surfing the web generates a large amount of data (big data), so that each trace created in this way is already a strong document, partly written and partly encoded independently by its author. In other words, the

production of documents no longer necessarily shows a conscious or deliberate character. Another feature has to do with the rarity of documents, which in the past was a problem related to the great difficulties inherent in their production, but which is no longer a problem today. On the web, in fact, documents are produced in large numbers and in a completely automatic way (Ferraris, 2018).

- The second element that identifies the documediality revolution is the change in the relationship between media managers and users, which depends on the changes that have occurred in the media themselves, that is, on the difference between old and new media (Ferraris, 2018). In the past, and for a long time, the relationship existed from one to many: only one spoke and all the others listened. Today, however, the new media provide for a two-way relationship between communicator and receiver: each participant is the producer of one or more messages but, at the same time, receives numerous other messages caused or not by his own. This creates a very complex network of relationships. If in the past we could talk about a few media managers and many users (i.e. those who accessed the media managed by others and used their products passively), currently it is noted that individuals are no longer simple users. Rather, they represent nodes of the network, each connected to all the other nodes and therefore to a large number of other individuals. In this sense, the web strengthens the subjects who access it, transforming them into monads aware of their individuality and the possibilities of active communication, each with its own window on the world.

We can ask ourselves what characteristics documents - produced after the documentary revolution – have presently. In this regard, it should be borne in mind that today's world is productive of documents, which are social objects (Ferraris, 2018). On the other hand, each corporate object is an inscription on any physical medium, from marble to neurons, paper and electronic circuits. This inscription takes place through the registration of acts involving at least two people. In this sense, a gigantic mass of social objects circulates on the net, understood as an enormous proliferation of documents, registrations and

inscriptions of the most diverse objects (Ferraris 2020, p. 109). The web works as a support and guarantees the storage and circulation of information. In this context, any news can become viral: whether true or false, it is amplified and disseminated throughout the network, sometimes even independently and in different countries. The network contributes to this propagation, both through the speed of reproduction and through the exponential multiplication of sources. In fact, anyone who receives information becomes a potential source. The persistence of the news is favored by their being disconnected from a precise publication date: the news floats on the web out of time, causing time loops that give the impression of a reappearance of the news due to its continuous recurrence.

The web, therefore, makes it very easy to mystify news, allowing in many cases it to be propagated through pseudonyms and anonymity. All this favors the fragmentation and the opacity of the news: the first aspect is due to the quantity of sources, in combination with the partial interests of users, who often only partially recycle what has reached them from others. On the other hand, opacity is the result of the type of relationships and exchanges of information that develop on the web. In fact, they help to degrade the attributes of authority and responsibility of the sources, transforming the web into the world of "it is said". Thus, as Ferraris rightly points out, documediality proceeds towards the absolute (in the etymological sense of ab-solutus, that is, free from any constraint), epistemological, ontological and technological of this era (Ferraris, 2020). It is associated with absolute knowledge, power and duty. The web, in fact, knows everything about the world and the individuals who visit it, keeping track of their habits, the sites they usually consult, the terms they use to compose their phrases and the music they prefer.

Ferraris adds that, to better understand the normativity properties of the documediality age, it is appropriate to evaluate it in its context, especially since it undoubtedly represents an important change that has modified various pre-existing aspects (Ferraris, 2020). In this regard, it is appropriate to identify three

distinct successive historical phases, which can be called as follows: production, communication and registration. Three successive eras correspond to them, marked by the prevalence of distinct characteristics such as capitalism, media and, later, documediality. In turn, these characteristics are interpreted by Ferraris as different manifestations of documentality, which the author evaluates as the foundation of all three (Ferraris, 2020). In this sense, therefore, documentality is a necessary and sufficient condition of modern society, which could not exist without documents. On the other hand, the opposite is also true: a document has no relevance outside of a company in which it is interpreted as such and in which the role of corporate object is attributed to it. On the other hand, it should be borne in mind that documediality does not sanction the end of documentality but rather represents its extreme and most current evolution.

Therefore, in the era of documediality, the fundamental rules of documentality still apply, but their application is different. The three aforementioned characteristics (capitalism, media and documediality) are distinguished by the different way of manifesting themselves: capitalism is characterized by manufacturing production, media is at the origin of communication, and documediality is based on the registration in the Web of documents and related information (Ferraris, 2020). Registration, therefore, intervenes to memorize objects and to encode them in order to make them transmissible, it is the key element of documediality and, consequently, plays a central role.

By means of registration, every published research, message or image becomes a document, that is, a written and memorized act and thus the work itself, in any context, is transformed into the production of documents. This also entailed a change in the distinction between working time and free time. On the one hand, technological devices allow you to dedicate time to your private life even while working, but on the other hand they make every individual always reachable and mobilized, being required to answer calls (from the boss,

colleagues, via e-mail or WhatsApp, etc.) even in the free moments in which, however, the devices are not turned off.

In this regard, Ferraris observes that the normativity of documediality is expressed through the mobilization that the web and technological devices, in general, impose on those who use it (Ferraris 2020, p. 111 et seq.). According to Ferraris, what the aforementioned mobilization reveals is that human beings inherently need to use technology. Therefore, the mobilization of those who are active on the web, with related behaviors such as posting videos or selfies, does not represent a degeneration of society but rather highlights some characteristics of the human being, which only technological means and their diffusion can bring out. Many people, in fact, are constantly looking for technological innovations functional to their goal of a life oriented towards self-affirmation and the need for recognition. Ferraris also argues that those who suffer or willingly accept the mobilization mentioned above do not do so to obtain personal advantages, but because the documediality is intrinsically normative, it has a function that empowers, generates intentionality and even moral anxiety and therefore binds users. Who is called on the web is invited to "respond" to an appeal that, through the network, is addressed only to him and therefore he cannot ignore.

While the work of the capitalist era had the essential purpose of sustenance and the consumerism fueled by media aimed at compensating for various deficiencies, including psychological ones, in the case of the mobilization of documediality what is sought is the recognition and self-affirmation that are obtained at cost of an activity that occupies a not negligible part of the time available.

Ferraris adds that this self-affirmation should not be confused with the distractions and fun associated with the old media (Ferraris 2020, p. 113 et seq.). In the era of documediality, users act on the web individually in the role of monads: individuals who affirm themselves online by producing a continuous flow of documents (Ferraris 2020, p. 118 et seq.).

2.4 Deepfakes

In the previous chapter, on the subject of post-truth, it was highlighted that the intentional falsification of a message or news on the web is quite easy and is not a rare event. Furthermore, the deceiver can easily hide behind an "avatar", acting incognito. Deepfakes, the subject of this paragraph, represent a perverse technological evolution that is even more insidious than fake news. These, as we have seen, are not always intentionally disseminated, because they are favored by the fragmentation of news and the huge number of sources. Fake news, in fact, can depend on only partial publications of what is received and then retransmitted, since those who disseminate them focus, in a reductive way, on the parts of the press releases that interest their managers most or that the audience likes best.

In the case of deepfakes, on the other hand, the falsification process is carefully planned and technologically advanced: the manipulation, which makes use of AI (Artificial Intelligence) techniques, extends to images and audio and video files, which can be made different from the originals or generated from scratch. When these sophisticated technologies are used maliciously, for disinformation purposes, they generate "deepfakes" (GPDP, 2020). Their use allows cyber-criminals to appropriate the identity of a given character to make him say, or do, what is most functional to the authors' purposes. The web greatly facilitates these operations, as it keeps track of the images, voices and habits of all those who visit it and this constitutes the raw material, essential for the production of forged files.

Deepfake production was initiated and developed by operators active in the graphics processing industry. Nvidia, a market leader in the production of graphics processing units (GPUs), has been at the forefront of developing "deep learning", a type of machine learning that uses algorithms called "neural networks" to sort visual data. for the purpose of making predictions (Huang,

2016). In particular, deep learning has so far been used mainly in the following sectors: weather forecasting, cancer diagnosis, automatic driving systems for cars and aircraft (Markman, 2016). As far as the appropriation of the identity of others is concerned, the malicious deepfakes, as you can see from the examples given in the next paragraph, realize it in the most complete way, or create new fictitious identities, using non-existent characters as protagonists of films that can be misleading the spectators. Therefore, if you can no longer trust even the videos, as certificates of the reality of a certain event or the existence of a given character, it is legitimate to wonder what role proofs of truth can play nowadays, being captured, for example, via security cameras.

The first widely documented examples of amateur videos, manipulated with artificial intelligence for the purpose of exchanging faces, date back to December 2017, when a Reddit user uploaded a series of videos with the faces of famous actresses, including Gal Gadot and Scarlett Johansson, grafted into the bodies of other performers, protagonists of pornographic films (Ionos, 2020). Since then, the media (and therefore the general public) have begun to use the term "deepfake" to refer to this type of film that uses some form of "deep" machine learning to hybridize or generate human bodies and faces and simulating their behaviors. Deepfakes, however, are only one component of a larger field of audiovisual manipulation (AV) for purposes other than purely aesthetic. AV manipulation includes any technical means useful for influencing media interpretation and uses both cutting-edge deepfake techniques, based on artificial intelligence, and so-called "economic fakes" that use conventional technologies, including those that make use of speeding up or slowing down images, trimming, re-enacting or re-contextualizing movies.

It is questionable how deepfakes will complicate the broad scope of audiovisual manipulation. Some authors who deal with deepfake have called them the preview of an imminent "information apocalypse" (Warzel, 2018; Foer, 2018). Journalists, politicians and commentators have argued for the ability of deepfakes to destroy democracy, tampering with the results of political elections

or referendums, compromising national security or fomenting manifestations of widespread violence (Finney Boylan, 2018; Funke, 2018).

From the above arguments it can be deduced that the producers of deepfake, especially if malicious, are lurking to destroy the alleged truth of the videos, even the apparently more serious ones, permanently blurring the boundary between evidentiary and entertainment videos. In this regard, however, referring to the topics covered in the first chapter of this thesis, it should be emphasized that deepfakes are only the last link (and not even the strongest) in the chain of delegitimations of knowledge and of the authenticity of the facts that characterizes the era of post-truth. What is fun and entertaining, catching the eye, has taken the first place in the opinions of many web users, compared to what is true, objectively ascertained and established without a shadow of a doubt.

Deepfakes acquire credibility (and are therefore particularly insidious) also because they rest on a by now sedimented background: the truth, as illustrated in the previous paragraphs, has been discredited and subordinated to the interpretation of the truth itself. Technological innovations such as AI and deep learning thrive more easily in fertile ground, where truth and fiction go hand in hand. When the former limps, the latter comes to her aid, with her fabulous and dramatic contributions, which appeal to less savvy web users, always looking for news that creates a sensation, to be propagated with viral effects. It is therefore necessary to take into account the fact that the explanation of the deepfake phenomenon is easier if we consider that, today, the alleged truth is socially, politically and culturally conditioned. And so, when experts are able to manipulate the truth with deepfakes, what in the past could have been unambiguously defined as actual or potential delinquency can now take on the more reassuring features of a technology-assisted art form, applied to the interpretation of the reality of the facts, which does not cause disapproval but can lead to emulation (Lorusso, 2018).

It can be seen that today file manipulations of any type and size (including deepfakes) can be transmitted at the speed and format most useful for the

platforms in use today. This facilitates increased sharing and poses a challenge to traditional methods of combating manipulation, making it more difficult for website moderators to control and review content. Furthermore, in some applications such as WhatsApp, encrypted messages are circulated via private connections, obtaining a sort of hidden virality so that forged videos can spread to a large audience of users, avoiding any form of control or moderation of content. It therefore happens that technologists, politicians, journalists and even private users react to deepfakes by invoking technical and legal closures, such as regulations, characteristics of the format and more stringent editorial standards which, at least in theory, could limit the use of related technologies. Investors, technologists and entrepreneurs have also called for the introduction of new forms of limitation, ranging from the automated identification of fakes to the mandatory registration of content creators, who can thus be traced (García Martínez, 2018; Lyu, 2018). However, these strategies do not address the thorniest and most important issues, typical of the current social, cultural and historical context. In this regard, there is a risk that these technical and legal closures will end up being managed by those who already hold the preponderant economic and political power, in such a way as to strengthen their dominance over the less advantaged social classes.

The problems caused by audiovisual manipulation are many and difficult to solve. In this scenario, it becomes essential to ask who should be trusted and on what basis, also because deepfakes are created every day with increasing frequency, as a result of the improvement of technologies and application software. So far, news coverage and public discussion have paid close attention to cases involving imitations - through virtual performances, face swapping or speech synthesis - of celebrities, politicians and prominent public figures. However, in parallel with the increasing diffusion of these techniques, an increase in the risk of damage to simple private individuals is foreseeable, especially those who are politically, socially or economically vulnerable, even in the event of possible blackmail by criminal organizations interested in identity theft.

The possible technological approaches, to solve or at least mitigate the problem, focus on the automatic detection of fakes and on the wide diffusion of verification technologies, useful for controlling all online and offline interactions. Note that the strongest signals in favor of the adoption of automated systems to detect manipulations generated with artificial intelligence algorithms came from Facebook (which will be discussed in the next chapter) (Woodford, 2018).

On the other hand, it is fair to point out that the technology that presides over the generation of deepfakes can also have positive implications, because it proves useful in many sectors, including cinema, educational media, digital communication, games, entertainment, fashion and e-commerce (Taulli, 2019), just to name a few, allowing to obtain not a counterfeit and misleading reality, but a sort of "augmented reality". The film industry, for example, can take advantage of deepfake technology in a number of ways: one can create digital voices - for actors who have lost theirs to an indisposition - or you can update footage of films in the works, instead of having to shoot them from scratch (Marr, 2019; Dickson, 2018). Filmmakers are also able to recreate classic (non-existent) atmospheres in films in production, shooting new scenes with long-dead actors and using special effects and advanced editing of the characters' faces in post-production, improving home videos and elevating them to levels of professional quality (Schwartz, 2018). Deepfake technology also enables automatic and realistic voice dubbing of films in any language, thus allowing a diverse audience to enjoy more of the reproduced scenes and educational media (Kan, 2019).

It may be added that the underlying technology of deepfakes allows participation in many multiplayer games and real-time chat with the telepresence of "intelligent", natural-looking, voiced virtual assistants (Solsman, 2019). All of this helps develop better human relationships and more useful online interactions (Evans, 2018; Baron, 2019). Likewise, technology can have useful applications in the social and medical fields. For example, deepfakes can help people better cope with the loss of loved ones by digitally bringing a recently deceased friend

back to life and then potentially helping one take leave of the deceased loved one gradually (Dickson, 2018).

In the clothing sector, deepfakes allow super-personal content that transforms consumers themselves into models; in particular, the technology allows virtual fitting to preview, to a potential buyer, how a dress might look good before purchase and can generate targeted fashion ads that vary according to the hour, the time and the viewer (Baron, 2019). An obvious potential benefit is the ability to quickly try on clothes online; technology not only allows people to create digital clones of themselves and have these personal avatars travel to stores, but also to try on, for example, a wedding dress in a digital version, and then virtually experience it in a viable wedding location via web (Baron, 2019).

After citing some examples of the advantages possible with the use of deepfake technology, it is right to also return to the significant risks, already mentioned, deriving from the fraudulent use of the same tools. Deepfakes artfully created to prove false, in fact, pose a serious threat to civil society, the political system and the business world, as they are able to (Andrews, 2019):

1) exert strong pressure on journalists, who must always be alert to filter real news from invented ones;

2) threaten the security of states by spreading misleading political messages and interfering in political elections;

3) hinder citizens' trust in the information disseminated by the authorities;

4) raise cyber security issues for people and organizations.

Overall, the journalism industry is very likely to face growing audience trust issues due to deepfakes. These, in fact, constitute a worse threat than "traditional" fake news, being increasingly difficult to identify and being able to leverage large numbers of people inclined to believe that everything they see is true (O'Brien, 2018).

Intelligence specialists fear that deepfakes are being used to threaten the security of democratic states, spreading misleading political propaganda and falsifying election campaigns (Solsman, 2019). Putting false statements in the

mouth of some political exponent, in the scenes of a video that goes viral, is a powerful weapon in today's disinformation campaigns, since the videos thus altered can easily distort the opinion of a large number of voters, a little time before the vote (Molina, 2019).

Deepfakes are likely to hinder digital literacy and citizens' trust in information provided by their authorities, as fake videos showing government officials claiming things that never happened (and never, really, they said) cast doubt on their honesty and undermine credibility (Carbone, 2019). Indeed, many web users today are increasingly involved in artificial intelligence-generated spam and fake news based on unverified hypotheses, fake videos and a plethora of conspiracy theories (Hern, 2019). However, the most damaging aspect of deepfakes may not be the misinformation per se, but rather the way in which constant contact with manipulated news and data leads people to think that a lot of information, including videos, simply cannot be trusted, thus determining a phenomenon defined as "information apocalypse" or "apathy of reality" (Schwartz, 2018).

Cybersecurity problems are another threat inherent in deepfakes. The world of business and investors has already expressed an interest in protecting themselves from viral fraud, as forged videos could be used to alter the market and fraudulently manipulate securities. For example, footage of a CEO uttering racist or misogynistic slurs, announcing a false business merger or making inaccurate claims of non-existent financial losses or bankruptcies, whether his own or others, could go viral (O'Sullivan, 2019; Taulli, 2019).

On the other hand, deepfake technology enables real-time digital representation of an executive, which could be used for criminal purposes, for example to ask an employee to make an urgent transfer of money to people not otherwise authorized to receive it, or to disclose strictly confidential information (Murphy, 2019; Horowitz, 2019). As such technology can create a fraudulent identity and, in live streaming videos, can convert an adult face into that of a much younger person or child, concerns also arise about the use of these tools by underage predators (Farid, 2019).

2.4.1 Some notable examples of deepfake

A prominent example of deepfake dates back to 2019, when two graphic arts artists, Bill Posters and Daniel Howe, posted a fake Mark Zuckerberg video on Instagram announcing new transparency measures in FaceBook, to protect the proper conduct of political elections (Posters and Howe, 2019).

Figure 1: Mark Zuckerberg's deepfake uttering sentences that were never actually said

Source: https://twitter.com/Reuters/status/1139140360012161025

To create the counterfeit video, Posters and Howe used software created by Canny (an Israeli advertising firm). The vision of the video reveals a false but likely Mark Zuckerberg intent to expose, in a credible way and with the utmost conviction, the plans for the acquisition of power and control of public opinion by an organization called Specter, to which he declares his gratitude for helping him understand that those in control of data can control the future of the world. The video was created using a suite of deep learning and artificial intelligence techniques, which enable sophisticated manipulation of visual data, particularly the movement of bodies. The voice could not be reconstructed as reliably, but it

is the result of an overlay made by a Zuckerberg imitator. While some have been fascinated by the expressive possibilities of these technologies, well highlighted by the deepfake in question, others have predicted dire consequences related to the ability to put words and actions in the mouth and body of other people, for fraudulent purposes (Cole, 2019; Reuters, 2019).

The war between Russia and Ukraine, still ongoing, is being fought on the battlefields but also and above all online. The information war obviously takes place via the Internet, and the contenders issue press releases, images and videos that are not always fully reliable, but functional to win the support of a public opinion that has no borders (Lanza, 2022). It is a war in which the contenders take advantage of the most advanced computing resources, and deepfakes are no exception. An example is the video (functional to Russian propaganda) that appeared online in the third week of the armed conflict, in which the Ukrainian President, Volodymyr Zelensky, presented himself dressed in a dark green shirt, speaking slowly and deliberately while standing behind a white presidential podium, with his country's coat of arms prominently displayed (Metz, 2022).

Except for his head, Zelensky's body was almost motionless as his speech was delivered. In a distorted and somewhat hoarse voice, the false President sent the Ukrainians a message inviting them to surrender to Russia. The main contents of the short speech (delivered in Ukrainian and quickly identified as a deepfake) were: "I ask you to lay down your arms and return to your families. This war is not worth dying for. I suggest that you continue to live, and I'll do the same."

A second example, also linked to the disinformation campaign in progress, in parallel with the armed conflict in Ukraine, highlights how Russian propaganda has also used the faces of non-existent characters, created with artificial intelligence methods, to give life to fictitious identities useful for spreading fake news on the net (Meo, 2022). Two virtual characters have been created, with fake profiles:

- Vladimir Bondarenko is a former aeronautical engineer and blogger from Kyiv, who posts decidedly unfavorable comments against the Ukrainian government on the media Ukraine Today.

- The website's chief editor is Irina Kerimova, who teaches guitar in Kharkiv, the second most populous center in the country and is also a very committed anti-Ukraine propagandist.

The following two figures show details of the technique for creating the two deepfakes and then the final result (Meo, 2022).

Figure 2: Intermediate phase of the creation of the two deepfake characters

Source: T. Meo, 2022

The two bogus editors were used to spread an image of Ukraine equivalent to a failed nation, giving credence to the reasons for the invasion put forward by Russian President Vladimir Putin.

Figure 3: The final version of the two faces

Source: T. Meo, 2022

2.5 Mockumentality

It is known that in English the verb "to mock" means "to deceive" or also "to make fun of". The neologism "mockumentary" was derived from this, used to define a film or a television program of fantasy, a parody of reality made in the style and with the appearance of a documentary in fact. On this basis, it is easier to understand the use of the related term "mockumentality", also present in the online Treccani Vocabulary. Pietro Conte associates that with the production, obtained with updated technologies, of "hyperfaces", that is of faces (but also of other parts of the human body) that do not exist in reality, but which represent a parody of the physical appearance of characters more or less known to the public (Conte, 2019). In this regard, the author explains that the part of the body that should, with its uniqueness, guarantee individual identity, is replaced by a digital image that can, by its nature, be modified at will. This particular property, of course, generates mistrust regarding the reliability of replicas, even those that, at

least in appearance, might seem faithful reproductions of what actually exists. In this regard, Conte specifies that, although deepfakes are the result of modern methods in step with the most advanced technology, they are, however, the most current stage of a millenary tradition of faces and masks, of which they constitute a modern evolution (Conte 2019, p. 11).

The mask superimposed on the face of the actor, in fact, symbolizes the fiction that mixes with reality. The ancient masks, through which the voice of the actors resounded (personae), were also used to "load" some features of their face in order to make them more adherent to the features of the characters represented. Today they have turned into what Conte defines as "hyperfaces" (Conte, 2019). Even in this modern version, we are dealing with hyper-realistic representations, sometimes slightly caricatured or "improved" if compared to the original, which correspond to the purpose of replicating, in the most reliable and recognizable way, the physiognomy and features of the characters thus represented, to the point to be confused with their real aspect.

Therefore, as Conte (2019) points out, we have entered the era of mockumentality, a neologism aimed at describing the progressive loosening of the link between artificial replications, obtained with appropriate technologies, and objective truth.

It follows that the ease of creating a body image, which can be obtained from a suitably programmed computer with a few clicks, is accompanied by a growing mistrust in the alleged correspondence between the physical object that acts as a model and its digital representation, easily editable. Artificial intelligence, which is the foundation of these reproduction and retouching techniques, marks a new technological frontier that arouses in users, and in observers, a mixture of hope and apprehension. In fact, it follows a great ease of synthesis of human forms but in parallel, as we have seen, the opportunities for creating deepfakes multiply and are aimed at replacing truth with falsehood and creating disinformation, for the benefit of elites circumscribed and to the detriment of the unwary (Conte, 2019).

Chapter 3: Fake news in social media. The Facebook case

3.1 The role of large multinationals

Figure 4: The top 20 multinationals globally in 2022, by their capitalization level

Rank	Company Name	Location	Sector	Rank +/- (vs 2021)
				31 March 2022
1	APPLE INC	United States	Technology	0
2	MICROSOFT CORP	United States	Technology	1
3	SAUDI ARABIAN OI	Saudi Arabia	Energy	-1
4	ALPHABET INC	United States	Technology	1
5	AMAZON.COM INC	United States	Consumer Discretionary	-1
6	TESLA INC	United States	Consumer Discretionary	2
7	BERKSHIRE HATHAWAY	United States	Financials	3
8	NVIDIA CORP	United States	Technology	16
9	META PLATFORMS	United States	Technology	-3
10	TSMC	Taiwan	Technology	1
11	VISA INC	United States	Industrials	1
12	UNITEDHEALTH GRP	United States	Health Care	7
13	JOHNSON&JOHNSON	United States	Health Care	1
14	TENCENT	Mainland China	Technology	-7
15	WALMART INC	United States	Consumer Discretionary	2
16	JPMORGAN CHASE	United States	Financials	-3
17	NESTLE SA	Switzerland	Consumer Staples	9
18	PROCTER & GAMBLE	United States	Consumer Staples	5
19	LVMH MOET HENNESSY	France	Consumer Discretionary	1
20	EXXON MOBIL CORP	United States	Energy	15

Fonte: PWC Global (2022)

The table above, published by PWC Global (2022) and based on data from Bloomberg Finance, illustrates the situation of the global market updated as of March 31, 2022. Multinationals are classified according to their level of capitalization, compared to that of 2021.

Multinational web companies can be seen in the first five lines of the table (excluding the Company that sells Saudi oil), because they have been able to

adequately exploit, in the past and even today, the enormous potential of the network and digitization.

It is noted that Facebook Inc. (now Meta Platforms) still dominates the social network sector; Amazon leads the E-Commerce Industry; Google (controlled by Alphabet) is the most important search engine in the world, and dominates the information and advertising field. Apple is the company that dominates the entertainment and software and hardware development market. Figure 4 also highlights the remarkable progress of Nvidia Corp., in the field of technology and graphics processing, which climbed 16 places in the ranking, between 2021 and 2022.

The Over the Top (OTT) included in the top 20 (Figure 4) hold various monopolies in the world market of information technology and are therefore obligatory points of reference for those who want to participate in the business. This concentration of power in a few multinational companies actually achieves the almost complete monopolization of the Web. Consequently, the sharing of information on the network no longer occurs in a completely free and unconstrained way, as it did in the early days of the Web. Internet in fact, it was born as a network of information sharing, built as a system centerless, in order not to be dominated by anyone, while today it is subject to the laws and regulations introduced by a few huge multinationals, with significant consequences for users. In particular, media giants such as Google and Facebook can tangibly and permanently influence the construction of public opinion. This reality led, as early as 2010, Berners-Lee, one of the creators of the World Wide Web, to express some well-founded concerns in the Guardian (Halliday, 2010) about Facebook. According to Berners-Lee, in fact, the dimension that the above social media could have reached could have favored the creation of a monopoly, to the detriment of innovation.

It can be added that search engines, including Google, have the function of organizing and managing a huge number of information and news, putting them in order, indexing them and making them easily available to interested parties. In

this way, the connections between those who generate information and those who want to use it are introduced and nurtured. Even social media have, in many respects, the same function as search engines, making available to their users the organized information available on social networks, formed by the users themselves interacting with other subscribers of the same media. It follows that anyone can benefit from the richness of the contents of the network, with its texts and audio and video files, but exclusively by specialized intermediaries such as Google and Facebook and after signing up for any accounts.

Today, given the great economic and commercial value inherent in web pages and digital content, companies exploit all possible means to bring the greatest number of clicks to their site, in the form of likes and comments to their posts, in order to obtain popularity and good indexing. Thus, we are witnessing the almost endless multiplication of paid advertisements, news with "click-catching" headlines, or even fake profiles intended to interact with content on social media: a real army of cyber- troops. Users therefore - due to profiling and the social bubbles in which they are closed by categorization algorithms, or following incorrect indexing that exchanges popularity with reliability - put their trust in deceptive web intermediaries, becoming more easily vulnerable to fake news.

In addition, intentional fake news, in the aforementioned web scenario, must be disseminated in communities accustomed to digital practice (called smart mobs), or designed for certain social targets, to better grip users and spread more easily. Therefore, they must possess the following characteristics:

▪ be credible: have at least some truth to be difficult for users to question.

▪ Taking hold of emotions: hitting people's feelings, affecting their fears, anger and disdain.

▪ They must reflect the principles and ideals of the target and of the community they want to reach, spreading news in accordance with their way of seeing things and their ideals and prejudices and thus having sufficient resonance (Quattrociocchi and Vicini, 2016).

▪ They can exploit suitable graphics to create fake credibility: use an impactful headline, copy the same headline as a well-known newspaper, cite false but plausible sources and use the contribution of well-known influencers. All this can create, in users, the illusion of being in trustworthy sites. These and other features make it even more difficult, even for the most experienced users, not to fall into the trap of fake news (and sometimes even deepfakes), in which sooner or later everyone, including journalists, risks being wrecked, damaging their reputation.

3.2 Occurrence and diffusion of fake news on Facebook

The phenomenon of fake news in social media took hold in 2014. At that time in fact social platforms, including Facebook, began to be flooded with disinformation on any topic. Misleading news were often originated from websites that tried to attract traffic and increase the audience and number of subscribers to increase advertising revenue or to achieve some kind of political goal (Chiusi, 2014). In any case, the triumph of truth was not at the top of their goals. All of this was a serious problem for Facebook, whose success depended on the growing number of users who regularly used the platform. Therefore, this meant that millions of people were potentially exposed to falsehoods regarding whatever topic was circulating on the social network. It was therefore necessary to counteract the phenomenon of fake news in some way.

In January 2015, Facebook introduced a new feature that allowed users to mark an article as "fake news". If this had happened often enough, a note visible to all users would have been added, indicating that the article had been marked as false, while the algorithm of data processing and dissemination would also have taken into account the reports. This attempt did not have significant results (Trewinnard, 2016) and then the platform proceeded to further qualify the opinions of users who, coming into contact with information of any kind, could register their reactions, adding impressions of "love" to the post in question:

"hate", "haha", "disgust", "sad" or "wow". This allowed for a more in-depth assessment of the quality of the news and information shared on the platform (Stinson, 2016).

Then, in May 2015, a new initiative was launched: instant articles (Constine, 2015). This meant that their authors could post original versions of their articles, which would be hosted directly on the platform. The loading speed was drastically reduced, while publishers could get revenue through advertising. Obviously, this rapid sharing of original content was intended to reduce the chances of reproducing and tampering with the original versions, introducing errors and fake news into counterfeit copies.

In July 2015, an interesting statistic was published: about half of Internet users in the world used Facebook: the platform was in fact used by 1.49 billion people. In the same month, a study by the Pew Research Center highlighted the potential weight of fake news on Facebook: it was found, in fact, that 63% of American users received information from the platform. This made Facebook an ideal springboard for the seeding and dissemination of disinformation (Shearer et al., 2015).

In 2016, while the problem of fake news was worsening further, Facebook announced that it had 1.5 billion users and 3 million advertisers and had made profits of 3.69 billion dollars in the previous year (2015).

Facebook's progress in terms of monthly user growth over the decade 2008-2018 is illustrated by the graph in Figure 5:

Figure 5: Facebook worldwide growth from 2008 to 2018
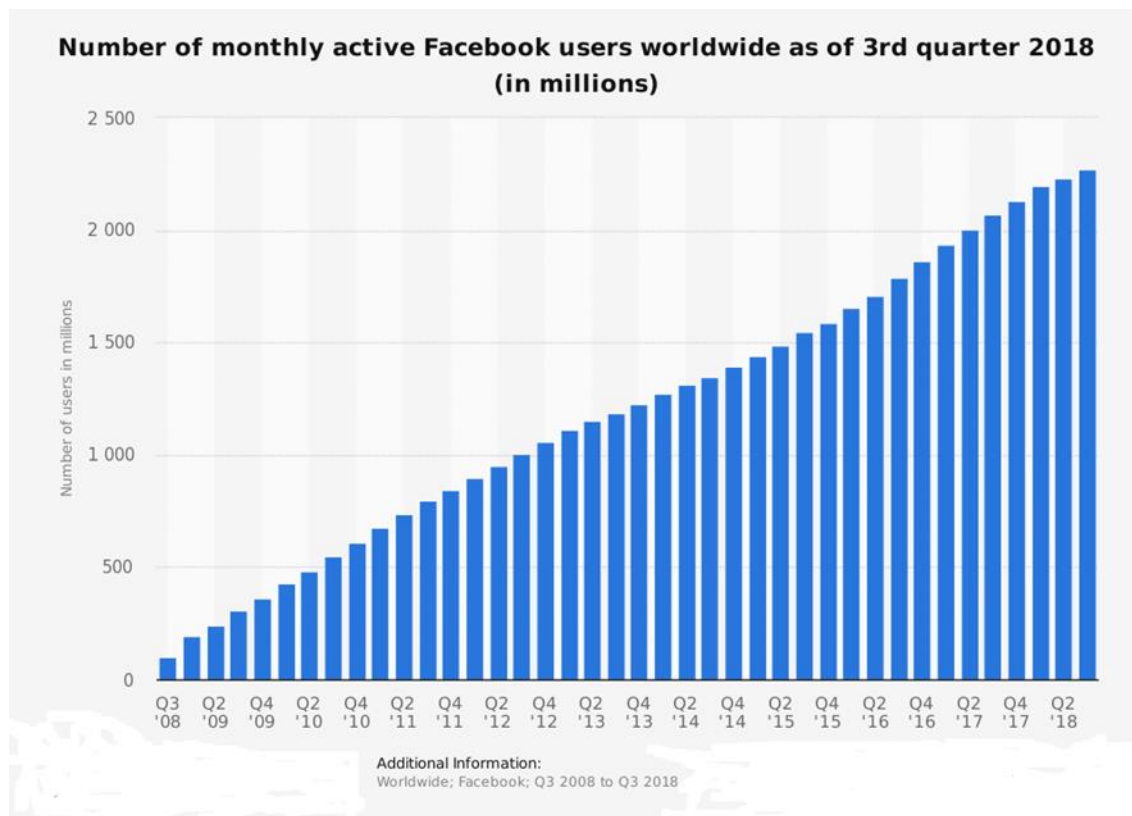
Source: Osman (2021).

Then, in September, a credibility crisis was triggered, when it became known that Facebook had published misleading metrics of its user data (Lunden, 2016). On that occasion, the fake news came from the very top of society! Facebook was therefore forced to officially apologize for miscalculating the number of views of the videos and the amount of time users spent watching them. Thus, it was that Facebook had to transform itself from victim to author of disinformation.

At the end of 2016, fake news dominated much of the conversations on Facebook. Concurrent with the presidential elections in the United States, there was a continuous succession of posts announcing (or exposing) "fake news", with the clarification that many of them originated from Facebook. Many web users

claimed that disinformation had spread precisely because of platforms such as Facebook and Twitter, and had the result of influencing the elections in favor of Trump, while increasing the polarization among the voters and the political differences between the different factions. in the United States and elsewhere (Madrigal, 2017) Zuckerberg himself was induced to comment on the situation, going so far as to deny the idea that Facebook could have influenced the elections. Be that as it may, it was undoubted that the fake news had gotten much greater engagement among social media users than traditional media users, as far as the 2016 presidential election is concerned.

The arguments just exposed show that Facebook is a social media that is particularly exposed to the risks of fake news and deepfake. It is therefore not surprising that the strongest signals have come from Facebook in favor of the adoption of automated systems, capable of detecting manipulations generated with artificial intelligence algorithms (Woodford, 2018).

According to Facebook managers, to combat the phenomenon of fake news it is not enough to eliminate misleading content. In fact, given the speed of sharing news, at the time of a simple removal operation they would have already reached millions of people. Therefore, the solution should consist of an approach based on three pillars: removal, reduction and information (Meta, 2020). Removal is certainly indicated for illegal content and that does not respect community rules, while for content that falls within social media standards but is judged to be fake by private fact-checking agencies, Facebook aims to reduce the visibility of the 80%, informing users at the same time that such contents are considered false by at least one independent fact-checker (Meta, 2020). In this way, those who have read the suspicious contents before the above evaluation will have the opportunity to understand a posteriori that they have shared something false (certainly or most likely) and that their beliefs are to be reviewed, while whoever reads to that content after the evaluation of the social media, definitely won't take it too seriously. Furthermore, in this way, Facebook delegates the responsibility

of deciding on the truthfulness of news to others, avoiding any suspicion of inadequacy or partiality of its judgments.

Thus was born the collaboration of the world's largest social media with 60 fact-checking organizations, all with certification issued by the International Fact-Checking Network (IFCN), which guarantees a code of shared principles, applicable in a regime of independence and autonomy. It should be noted that in the month of March 2020 alone, at the beginning of the pandemic in Italy, 50 million posts received the label of false information, based on approximately 7,500 analysis articles made by various fact-checkers (Meta, 2020). Another method adopted by Facebook to reduce the spread of false news consists in informing users as much as possible, making available to them a large number of heterogeneous news, even in conflict with each other, to help readers evaluate the context for more points of view, developing critical thinking. The insertion of tags that invite the reader to learn more about the topic covered in the post equally contributes to the aforementioned objective.

Note that, similar to Facebook, Twitter has also taken a stand against disinformation, deleting misleading tweets and blocking accounts that continue to post fake news. Similar to Facebook, Twitter also allows users to report harmful content, distinguishing them into categories. Furthermore, this social network uses labels to report tweets that contain content deemed misleading or harmful. At the same time, users are advised not to share content that does not respect the rules of the community and links to verified information from official sources are also reported. The aforementioned measures were also applied to the outgoing president Donald Trump, who had reached the end of his mandate, when he repeatedly stated, without giving any evidence, that the opposing political party had committed electoral fraud against him. For this reason, Trump's tweets have been repeatedly censored or deleted, including the last ones published during the assault on the Capitol on January 6, 2021, with which "The Donald" invited his supporters - which he called "great patriots" because they opposed the s.c. theft of the presidential election - to leave the Congress building.

In addition, Trump had shown himself to be very understanding towards the attackers, as evidenced by messages such as "You are special, we love you" (Il Post, 2021). Following these latest messages, Twitter also suspended Trump's private account for 12 hours, demanding the removal of the tweets indicted for inciting violence. After that, the social network returned the account to Trump, but warned him of a permanent removal if he once again broke the rules of the community: what happened a few days later.

The US multinational Google published, in 2019, a document in which it illustrates its strategy to combat disinformation (Camera dei Deputati, 2019). Google explains, specifically, that its platforms (Google Search, Google News and YouTube) aim to reduce the presence of fake news by implementing the following three strategies:

- give more importance to quality;

- fight against the bad guys;

- better illustrate the context to users.

As regards the first point, in the aforementioned platforms ranking algorithms are used "to give greater importance to authoritative and high-quality information" and more in-depth quality controls are in place for searches in which users pay particular attention. Regarding the second point, measures are guaranteed to counter attempts to circumvent the ranking algorithms and their rules. Finally (third point), Google aims to provide users with tools to access the "diversity of points of view necessary to create their opinion". In detail, also in this case, the use of labels has been envisaged that emphasize the in-depth study of the topics and tags that report news defined as unreliable by the fact-checkers (similar to what happens in Facebook). This last point is very significant to counteract the closure of users in filter bubbles, to the point that the company clearly explains that, up to now "in the Google Search results the level of personalization based on the inferred interests of the users or to their search history prior to the current session". Furthermore, the difference between two outgoing results from the same query does not depend on the user per se, but on

his language, where he is and on the distribution of updates to the search index for the chosen topic.

On February 22, 2021, large companies such as Adobe, Arm, Bbc, Intel, Microsoft and Truepic launched a project called "Coalition for Content Provenance and Authenticity" (C2pa), which aims to create a standardized solution to counter disinformation and online content fraud (Microsoft, 2021). This shows that the phenomenon of disinformation, especially in recent years, has become a global problem, to be solved urgently and thanks to the collaboration of all the competent bodies.

The topics just discussed show that the individual user, to avoid falling into the trap of disinformation, should update himself on the functioning of the digital world in which he spends most of his time. In Italy, according to the report published by the European Commission (2020), only 42% of the population has basic digital skills, while 22% have digital skills slightly above the norm. It is therefore clear that most Italians do not have sufficient skills to carry out activities on the network in a safe and conscious way, essentially for the following reasons:

- they are not capable of discriminating against illegal activities or profiling sensitive data;

- even more serious: they are not aware of the activities carried out by the providers to make them increasingly dependent, because it may happen that the contents that surround them are studied on their personality (to facilitate their consent or adhesion to commercial proposals) based on paths they followed on the web, and are not equivalent to the entire body of information available on the web. Hence the need to identify various intervention strategies - both at an institutional and educational, technological and editorial level - will be the topic of the next chapter.

Chapter 4: The role of truth

4.1 Many tailor-made truths

In the post-truth era, it is common notion that rumors, opinions, disinformation, fake news and deep fakes form a huge mass of junk data, stored in the digital dimension in an integral and unfiltered way and which tend to increase exponentially.

There are organizations that create their own bespoke truths for profit. Others propagate dogmas that aim to prove the correctness of their political ideologies. Search engine algorithms filter and separate the population of web users into distinct "bubbles", each of them being the custodian of its own truths. In such a jumble of opinions, the world flounders and sometimes seems to drown in a sea of subjective truths (MediaVSReality, 2019). Furthermore, another aspect contributes to reinforcing some pretended truths: repetition makes things seem more plausible. It is an effect that works because, when most people try to evaluate the truth, they rely mainly on two factors: the concordance of the new information with their background of beliefs and the familiarity of what they are evaluating, which may depend on from the total or partial repetition of previously acquired concepts (Dreyfuss, 2017). The first condition is logical: people compare new information with what they already believe to be true and attribute credibility to sources that agree to it.

However, researchers have found that familiarity can override rationality, to the point where repeatedly hearing about a certain fact, although inherently wrong according to logic, can have a paradoxical effect: it becomes so familiar that it begins to seem true (Dreyfuss , 2017).

4.2 Bring out the truth

The contributions of the authors cited in this thesis suggest the need for a strategy to combat false information, based on the combined effect of some types of interventions, to be implemented simultaneously, in the following areas: education and training of users on a large scale; legislation and regulation; company policies; anti-deepfake technology (which includes the prevention and detection of such fakes and the authentication of original content).

On the editorial level, to combat disinformation various initiatives have been launched at national and international level, with the aim of educating people to inform themselves better than they normally do:

- New Integrity Initiative of the City University of New York, dating back to 2017, funded by Facebook, Mozilla and 7 other partners, with the aim of improving citizens' digital skills and obtaining more effective and quality public debates (CUNY, 2017).

- The (free) instruction book "A Field Guide to Fake News and Other Information Disorders" (Public Data Lab and First Draft, 2018), designed to help the user to be wary of fake news, born from the collaboration of First Draft (international group of publishers and technology companies) with the Public Data Lab (European network of researchers, journalists, developers and institutions).

- The Italian digital education project "The dark side of the web" (https://www.latoscurodelweb.it/) which includes education courses for children, parents and school teachers.

- There are also suggestions disclosed by the fact-checking organization BUTAC (https://www.butac.it/fake-news/) detailed in their Fake News section. Michelangelo Coltelli (founder of BUTAC) together with Noemi Urso (Coltelli and Urso, 2019), explains what it is and how false news can be recognized, following some warnings (a summary of which is reported below):

- Pay attention to the title of the news: an excessive graphic dimension together with the sensational tone of the message, aimed at causing a sensation, mostly indicate that the author only wants to create a large audience, multiplying clicks and likes.

- Take into consideration the web address: an address is sometimes used that differs only for a few letters from those of much more important and reliable newspapers, in order to induce the user to trust the post or article..

- Pay attention to the sources, if they are reported: often non-existent contributions are cited in support of the proposed content or which, if read carefully, affirm the exact opposite of what the article in question claims. There may also be references to well-known experts in the field who, however, are not authors of the content attributed to them.

- The advertisements associated with the content can also play an important role: if there are numerous banners or advertising inserts, which present extraordinary products, amazing testimonials and prodigious experiences, this indicates the evident vocation for e-commerce of a site designed for the main purpose to achieve economic profits.

- Conspiracy theories should not be misleading: posts often appear claiming to know unique and exclusive truths, drawn from the secret archives of governments or powerful elites who operate against the citizens of their own state or other nations. In these cases, invitations such as "Share before this message is censored!" are often used, in order to give the contents viral characteristics, making them circulate faster to a greater number of web users.

Regarding the anti-deepfake rules, it does not appear that disinformation is currently specifically opposed by civil or criminal laws, although some legal experts have suggested adapting existing rules to include (or more severely repress) crimes such as defamation, identity fraud or the dissemination of videos impersonated by public officials represented by deepfake (Waters, 2019; Harwell, 2019). In this regard, it should be noted that the companies that manage social

media currently enjoy wide legal immunities for the content that users post on their platforms. A legislative option could consist in the cancellation, in whole or in part, of these immunities, thus making not only users but also the platforms more responsible for the published material (Solsman, 2019b).

However, the legislation has so far had little effect on malevolent actors such as foreign states and terrorist organizations, capable of conducting massive disinformation campaigns against other states or governments on social media platforms. Politicians can provide more effective tools against deepfakes: for example, political party candidates can pledge not to use unfair digital tactics and not to spread disinformation through manipulated videos during their election campaigns (Wang, 2019). On the other hand, the rise of hate speech, fake news and digital platforms that foment disinformation, has led some web companies to take corrective actions, including suspending the accounts of implicated users and investments in more effective fake detection technologies (Yurieff, 2019; O'Brien, 2018).

Anti-deepfake technology has a rather diverse set of tools to detect fake videos, authenticate genuine video content, and prevent such content from being used to produce fake videos. There is, however, a serious problem: there are far more research resources available and experts working on developing technologies to create deepfakes, than there are resources and tech people to detect them (Riechmann, 2018). Therefore, it can be hypothesized that, in the long run, it will be almost impossible to distinguish between true and false images (Galston, 2020).

Education and training are key tools to combat deepfakes. Despite the considerable media coverage and concerns voiced by prominent figures, it appears that the threat of fakes has not yet been taken seriously by the general public (Leetaru, 2019). In general, there is a need to raise public awareness of the potential misuse of AI and it is recommended that critical thinking and digital literacy be taught in schools, as this training can contribute to the ability of the very young to detect fake news and to interact with each other in a more

respectful way online. However, according to Hunt (2019) and Farid (2019), the same skills should also be promoted among the older, less tech-savvy population. The reason is that people of all ages should be able to critically assess the authenticity and social context of a video being offered to them, as well as the reliability of the source (i.e., who shared the video and what about it says the author, as well as the comments of any other users), to understand the true intent of the movie. It is also important to clarify that the quality of a movie is not a valid indicator of its authenticity (Carbone, 2019; Marr, 2019).

Discussing the properties and potentials of information and fostering digital literacy, in a multicultural perspective, is important because it can link scientific knowledge and social issues, creating a bridge between information, science, culture and philosophy. The theme of truth has always been closely linked to information and knowledge in the course of human history. However, in this era, the relationship between the aforementioned concepts has acquired greater importance given the technological innovations, which allow everyone to easily access a large amount of information in a fraction of a second. With this in mind, a fundamental question arises concerning the best possible use of this ever-increasing mass of information. In fact, there is a need for a new and in-depth understanding of the role of information and its impact on individual and social life, since it has reached the point that everything can be plausible and questionable, or perhaps true and false at least in part, depending on the person who says it or the social context in which the message originated. In fact, information is a process made up of social and cultural elements (people, places, knowledge, education, ideology, etc.).

It follows that having the ability to understand and evaluate information, to recognize what is true and to what extent, depending on the author and the context of the message, is of fundamental importance (Dalkir and Katz 2020, pp. 140 - 151).

It can be observed that the theme of truth is always connected with cultural elements, which shape and are shaped by the ways in which individuals use their

knowledge and develop their media literacy (Dalkir and Katz 2020, p. 152). It has been made clear, in the chapters of this thesis, that the concept of post-truth emerged in the context of the discussions of modern and contemporary philosophers and thinkers, who have debated the meaning of truth. The concept then gained new momentum in 2016, when the Oxford English Dictionary named the post-truth "Word of the Year" in an attempt to explain more in depth the events of the world landscape (Oxford Dictionaries, 2021).

Many recent political upheavals can be linked to social theories and the choices of Western governments. It has been seen that post-truth is a condition whereby people's opinion is not based on objective and incontrovertible facts, rigorous analysis or critical reflections, but is based on personal convictions (Dalkir and Katz 2020, p. 152).

In the 21st century, personal beliefs represent the main component of the concept of truth. Not surprisingly, Zygmunt Bauman introduced the concept of "liquid modernity", which goes beyond the dimension of postmodernism and captures the essence of the contemporary world: the reality in which the life of most people is essentially based on what is transitory and flowing (i.e. liquid) rather than permanent, favoring the immediate rather than the long-term vision. In this context, utility comes first over any other value (Palese, 2013). When the personalities of individuals are not shaped by the reflective capacity, the inclination to believe that one's position is always true prevails, which prevents people from being self-critical. Today, given the large amount of information that is produced and consumed, analyzing it becomes onerous and one tends not to do it. Many people are reluctant to accept things that differ from their beliefs. It seems much easier to keep the opinions one has than to change his core values, as this requires effort and a certain intellectual maturity. On the other hand, a dogmatic and uncritical position can lead people to justify cruel and inhumane actions. The concept of post-truth has often been confused, rightly, with lying and it happens that uncritical users (Dalkir and Katz 2020, p. 152) consider much of what is available online true a priori.

From the arguments just introduced it emerges that one of the areas of information science in which the philosophical tradition of critical thinking could have more possibilities of application is media literacy. Information competence is able to transform each user into a more ethical, autonomous and critical consumer of information, better able to recognize fake news. Critical thinkers understand the importance of fighting fake news and evaluating the real weight of information and the impact of sharing it. It should be added that the recognition of human rights should be an important part of media literacy, inducing individuals to respect differences of opinion and customs between people and communities and the rights of minorities. In a post-truth world, fake news and information manipulation are immanent threats to society. In the past, critical thinking and questions of truth have traditionally been part of the philosophical debate. For this reason, the concepts of computer and media literacy could be based even today on information science and philosophy, in a common multidisciplinary path aimed at compensating for the emptiness that transpires from post-truth.

Conclusions

In the chapters of this thesis various issues have been explored, which allow for greater awareness of the ways, not always clear, in which the World Wide Web presides over communication and its dynamics, as well as the phenomenon of disinformation. The Internet and social networks have changed the way web users socialize and communicate. The network has eliminated all boundaries, it has put in contact people who could not physically meet or who had not seen each other for a long time: think of those parents who today can talk to their children in Erasmus through video calls, or conversations between former classmates of school decades after the last meeting in person. Furthermore, the web has changed the way individuals inform themselves, study and understand the world they live in. In the past, to deepen a topic it was necessary to leaf through a book, an encyclopedia or read a newspaper and, in many cases, it was necessary to access some library or archive, in search of texts or documents. Today, however, the same things can be done from home, via an Internet connection.

Therefore, it can be said that culture today is really within everyone's reach, but only those with sufficient digital skills to surf the net can benefit from the enormous amount of information available. Conversely, those who do not possess these skills can become the victim of algorithms and persuasion techniques, can be deceived repeatedly by bad information, clickbaiting and phishing, or become social addicted.

Another phenomenon closely linked to the development of the Internet is the gathering of a large number of users in virtual communities, the so-called smart mobs, in which they have the opportunity to share important or trivial ideals, feelings and information. In this way, social aggregations are strengthened and can influence public opinion with their own initiatives. This is a huge potential, but

it can be dangerous if placed in the wrong hands or managed for fraudulent purposes.

Taking advantage of the free circulation of ideas is a right of citizens, but it is also a right to have truthful and correct information and not to be misled by deceptive and persuasive contents, which lead to wrong and dangerous choices. Democracy is perfected if each individual is free to choose on the basis of true contents, which do not alter the perception of reality. In this historical period, humanity is undergoing a double attack by two invisible enemies: the virus and disinformation. The first has created a pandemic that, at times, seemed unstoppable, while the second tries to take advantage of the emotions and unpreparedness of web users, to deceive and allow a few to take advantage of the ignorance of many.

The purpose of this thesis is, precisely, to make a contribution so that this circumvention of the weakest does not happen, or happens in the least possible number of occasions. I have therefore chosen to investigate some aspects of great current importance, including the nature of truth and post-truth and the role of the media and power relations in the manipulation of what is objective and reflects the facts. The starting point was classical philosophical thinking on the contents of truth, whose evolution I traced up to the contributions of various modern and contemporary authors and to the affirmation of the concepts of computer and media literacy, which currently assume great importance. It is desirable, in fact, that the philosophical tradition of critical thinking, adapted to contingent reality, can help individuals even today to take a coherent position towards information, in a society that suffers the attacks of post-truth.

It is undeniable that, in the information age, an increasing number of people connect to the web and spend a lot of time online, devoting several hours of their day to this activity. While information and communication technology has indisputable advantages, in allowing all users to access enormous sources of knowledge and data, it also provides attackers with access to an unprecedented assortment of manipulation tools and contacts with a huge target of potential

victims. To help provide a better understanding of this complex issue, I have tried to provide sufficient detail on the online deception landscape, highlighting the various factors and actors involved, as well as the most common attacks and possible countermeasures, also clarifying the dual role of artificial intelligence, in a positive and negative sense.

While technology-based approaches are efficient in detecting and preventing deception (as well as provoking it), I have tried to make it clear that a purely technical solution to the problem of lies and misleading information online is not enough. My research shows, in fact, that there is a felt need to support users of all ages in the development of computer and media literacy skills. Wanting to proceed step by step, the first target of these educational initiatives could be constituted by information professionals, since it is presumed that, if properly trained, they will be able to favor a similar progress of all other web users in the direct path to neutralize the most perverse effects of post-truth.

An overview of online deception cannot be considered complete without considering the dual role of AI (Artificial Intelligence). It should be clear, from the topics covered in the third chapter of this thesis, that artificial intelligence and machine learning techniques are the tools most used in the generation, as well as in the prevention and detection, of online deception. With deepfake technology, computers, not humans, do the hard work of generating the most reliable interpreters and oral texts possible, and technology is evolving very rapidly. In fact, while a few years ago a lot of data was needed to create a deepfake, today it is possible to transfer behavior data (including the position and rotation of the head, as well as facial expressions) from a source actor to a video-portrait of a character. target, creating a plausible deepfake with little information. Similarly, deepfakes producers can now simply edit the text transcript of an actual video to synthesize a very compelling new artifact video of a speaking person, or even generate speaking deepfakes from a single image. With these techniques, which are becoming more sophisticated, accessible and easier to use even with simple mobile apps, it is not surprising that we are starting to see complicated

and successful attacks by hackers who manipulate the voice and behavior, as they please, of fictitious copies of well-known characters, or 100% fictional characters, sometimes misleading even the savviest spectators.

On the other hand, shifting the focus to web users, there are researches that reveal phenomena such as ignorance by choice, the avoidance of information or their distorted interpretation. These are post-truth phenomena whereby individuals deliberately choose not to know, or to rely on erroneous beliefs deduced from their emotions and not from concrete facts. Consequently, while technological countermeasures can reduce the spread of online deception, they cannot fully address the problem alone and, therefore, an approach that also privileges ethical and philosophical as well as legal aspects is more desirable.

In essence, it is necessary to save the Internet from itself, by establishing rules and guidelines for an ethical and transparent use of the web and also by educating users. It is an effort that should unite governments, businesses, civil society and web users, with the aim of charting a roadmap for building a web that is a public good that is beneficial to all. In this context, it appears very important that governments implement educational policies aimed at ensuring adequate computer and media literacy for the majority of network users, aged 10 and over. In this way, many tele-users may be able to detect a large part of the deceptions online for themselves. Furthermore, even web-based businesses should develop effective user interfaces (capable of recognizing and resolving the most common deception techniques), developing and adopting technologies that increase the security of their users. Even common people, however, have some responsibilities, the exercise of which would help reduce online deception. These include respect for the rights of others and human dignity, the adoption of suitable measures to protect one's own privacy and security and those of others, as well as the commitment to contribute to the awareness and education of one's peers, without ever letting one's guard down.

The topics covered in this thesis, especially in the first chapter and in the final part, allow us to recognize that the philosophical approach of critical thinking

is by no means an outdated concept and detached from current reality but could very positively influence even very up-to-date branches of knowledge, including computer and media literacy.

Education in critical thinking could favor the appearance of a new generation of web users, of any age, who could make use of the information disseminated on the net in a more autonomous and useful way for themselves and for others, recognizing many falsified data and avoiding spreading them. The ethical foundations of critical thinking, in fact, help users understand the risks of fake news and the damage that can result from them, not excluding a devaluation of the web as a whole. Furthermore, web users could benefit from a more widespread knowledge of Human Rights, which would help them avoid the frequent media altercations with exchanges of offenses, malicious innuendo and frequent lapses of style.

Therefore, I am convinced that a new and updated recourse to the philosophical method, in the matter of literacy of web users, could be of valid help in remedying some of the most evident failures produced by post-truth.

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