Massimo Durante

E-democracy as the Frame of Networked Public Discourse – Information, Consensus and Complexity
Abstract: The quest for democracy and the political reflection about its future are to be understood nowadays in the horizon of the networked information revolution. Hence, it seems difficult to speak of democracy without speaking of e-democracy, the key issue of which is the re-configuration of models of information production and concentration of attention, which are to be investigated both from a political and an epistemological standpoint. In this perspective, our paper aims at analyzing the multi-agent dimension of networked public discourse, by envisaging two competing models of structuring this discourse (those of dialogue and of claim) and by suggesting to endorse the epistemic idea of complementarity as a guidance principle for elaborating a form of partnership between traditional and electronic media.

Keywords: democracy, information, public discourse, public sphere, complexity, complementarity

I. Democracy, complexity and space

Today, democracy has to be rethought against the backdrop of the evolution of the communication and information technologies (ICTs) in terms of an electronic democracy (e-democracy) that grows out of the complex networked society of information.\(^1\) Out of several legitimate and important meanings of e-democracy (e-government; e-voting, etc.), I believe that e-democracy is strongly concerned with how ICTs redesign the public sphere, conceived as a category of space, in which political-public discourse and public opinion are produced on the basis of available relevant and reliable information. In this perspective, we will have three key concepts to deal with, namely, those of complexity, information and space. These issues define the conceptual perimeter of our study.

The complex networked society is defined by the fact that, in such a society, “inhabiting” (i.e. living in a space that defines the place of our identity and citizenship) is progressively being substituted by “being connected”. In this sense, what is conceptually at stake is to understand and to articulate the passage from a merely physical conception of space to a networked conception of space made of informational flows and relations. The physical space

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is conceived starting from the relations and the properties of objects, whereas the digital space is conceived starting from the relations and the properties of digital objects that are made of bits and the space of information is thought of starting from the relations and the properties of informational objects, that is, objects that can be described in terms of information at the proper level of abstraction or can accomplish four elementary operations: receiving, producing, storing and treating information. In the complex networked society of information subjects are subjects of relations that establish, along the informational fluxes, throughout their networked connections and interactions. The complexity of society is expressed by the fact that the outcome of interconnected subjects’ interactions is not foreseeable in deterministic terms.

This last consideration requires us to endorse a non-deterministic conception of the impact technology displays in society. To endorse a non-deterministic conception from a socio-technological point of view does not amount however to lessening the importance of such an impact. On the contrary, technology is understood as a set of constraining affordances, that is, a set of both constraints and affordances (technologies that bring along constraints as well as possibilities) that gives shape to the environment in which we are engaged, namely, in which we are called upon to decide, act and interact. Our decisions and behaviours can thus be interpreted as responses – active and creative, and thus not-deterministically biased – to the constraining affordances that shape our own environment (this approach conceived in terms of constraining affordances and active responses defeats both techno-determinism and cyber-optimism). This way of understanding technology is particularly consistent with the conception of epistemology we endorse, as we will make it clear in the next paragraph.

The technological constraining affordances relative to information and communication give shape to the democratic space where we are engaged in forming not only our opinions and beliefs (that our political decisions and actions are meant to be based on) but, first and

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5 See Taylor (note 1).
foremost, our own political subjectivity. In relation to the evolution of technology and notably to the evolution of ICTs, the question is to rethink how the technological constraints and affordances redesign the space in which the political subjectivities and the public opinion are formed.

This already implies implicitly, that the publicness of the digital space of information and communication cannot be intended, according to the reflection of Jürgen Habermas for instance, exclusively as the place where relevant information is gathered and selected, public opinions are formed and expressed, and rational arguments guiding collective decisions are proposed and, reflexively, criticized and refined. In the backdrop of the complex networked society of information, the publicness of the digital space of information and communication is also the dimension in which new actors (notably emerging from civil society) can engage in mutual communication, merge their desires and democratic expectations and, thereby, claim to be recognized as political subjects.7

Our hypothesis consists at saying that the evolution of ICTs is democratic in that it enlarges the class of what counts as relevant political information, whilst broadening as well the class of those who count as political subjects. However, this enlargement can have consequences not only from a political point of view but first and foremost from an epistemological point of view concerned with the construction of meaning by means of the political public discourse. As we will see in the third paragraph, the political public discourse may be structured according to different models of communication, those of “dialogue” and of “claim”, meant to influence the crucial issue of the quality of information in e-democracy.

At present, we have to insist upon the last topic, that is, the relation between e-democracy, politics and the complex society. As remarked above, the evolution of ICTs has characterized the complex society in terms of a networked society of information in which space is no longer conceived solely as a place to live in and to occupy (with all the political and legal metaphors and concepts that go along with such representation of space). Rather, space is conceived as a place where we are connected and we interact with one another and with the environment. We have to add to this picture that the current information revolution shapes these connections and interactions out of a rigid anthropocentric perspective and this happens in two different ways.

On the one hand, it is possible to conceive, according to the philosophy of information of Luciano Floridi, the space of information as an “infosphere”8, a neologism that was coined

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7 See also, in this perspective, Antonio Tursi, Politica 2.0. Blog, Facebook, Wikileaks: ripensare la sfera pubblica, Mimesis, Milano, 2011.
8 Floridi (note 3), On the Intrinsic Value.
after the idea of biosphere meaning that the whole environment is made up by informational objects and by their relations. According to this idea, every entity can be described and experienced by an epistemic agent at the informational level of abstraction as a set of information. The informational representation of being proposed by Luciano Floridi has important and direct consequences for an epistemology and an ethics of information as well as influence over a political and legal philosophy: the first and most striking consequence of such an approach consists in abandoning a philosophically and morally rigid anthropocentric perspective by treating human beings as informational objects as all the other entities of the universe. The second consequence affects more directly the present topic and it consists in saying that the space of information conceived in terms of the infosphere includes both the analogue and the digital space: this means that we are confronted with the need to account epistemologically for an integrated space of information and communication.

On the other hand, according to a pancomputationalist theory of information that has been recently investigated in philosophical terms by Michel Serres, it is possible to overlook the dichotomy subject/object, that grounds our entire epistemological and moral representation of the universe in modern times, since every entity is no longer conceived either as a subject or as an object but, rather, as an informational system capable of accomplishing four basic operations, i.e. to receive, produce, store and treat information. In both these perspectives, space is understood on the basis of the properties and the relations of objects conceived as interconnected entities that interact thanks to their capacity to constantly exchange and share information going beyond a rigid anthropocentric perspective.

This new conception of space is likely to modify, in the long run (even if this process already seems to have started), the very conception of politics, in which the idea of space was fundamental in the modern age. Throughout modernity, space has been the very horizon of the constitution of politics as the condition of human coexistence: this condition has been conceived by political power in terms of control over a territory. The current evolution of ICTs is likely to alter this conception of politics: some processes, like that of globalization or the crossing of political, legal, and cultural boundaries, are already at work. In the long run,
politics will no longer be conceived in terms of control over a territory but, rather, as the management over the whole life-cycle of information (creation, elaboration, distribution, storage, protection, usage and possible destruction of information\textsuperscript{12}), since information will constitute both the basic good exchanged and the very fabric of reality. This brings about two main consequences.

The first one has been well captured by Jannis Kallinikos, stating that the current computational rendition of reality has “far-reaching implications in the sense of recapturing a growing proportion of the physical and cognitive landscape of contemporary life into the medium of permutable and recombinable information”\textsuperscript{13}. This challenges our tendency to think about reality in terms of stable and enduring structures and institutions\textsuperscript{14}. This consideration will be illustrated in the fourth paragraph when dealing with the phenomenon of virtualization of content that is an emergent property of democracies based on media power.

The second consequence has been well expressed by Manuel Castells, stating that contemporary construction of politics occurs through media power\textsuperscript{15}. The communication (the mainstream political-public discourse) through which are selected, formed, and legitimized the “ends of politics” is structured within the life-cycle of information. In this perspective, e-democracy is called upon to be the “frame” of the mainstream political-public discourse through which politics form, select and legitimate its ends. This implies, as pointed out by Jürgen Habermas\textsuperscript{16}, that democracy may have an epistemic foundation as far as the formation of the political-public discourse, through which meaning and consensus are constructed, can be subjected to criticism. This requires us to focus on what epistemology and models of communication ground political-public discourse in the renewed public sphere made up by the interplay between traditional and electronic media.

In this perspective, the “e-democratic frame” is a matter of information and communication. In fact, information is the basis on which beliefs are formed and decisions are taken: in this sense, information is a primary instrument for governing. As it has been pointed out\textsuperscript{17}, the governance of society is no longer centered upon hard power (i.e. military force, means of coercion, sanctions, etc.) but, rather, upon soft power (i.e. the ability to influence

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\textsuperscript{13} Kallinikos (note 2) at 6.
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\textsuperscript{14} See again Kallinikos (note 2).
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behavior through the construction of meaning on the basis of discourses through which social actors guide their action\textsuperscript{18}).

Five main features characterize the construction of meaning accomplished in the political-public discourse in the complex networked society of information:

1) the construction of meaning is distributed, namely, it is accomplished by a multiplicity of interconnected actors throughout networks that can be represented as radically distributed or as moderately decentralized\textsuperscript{19};
2) the role of each actor in the construction of meaning depends on the role that each actor plays as the node of a network and on the attitude of that network to collaborate or to compete with other networks;
3) the construction of meaning depends, more generally, on the properties of the information exchanged and shared throughout the networks (which define the epistemological constraining affordance as informational resources\textsuperscript{20}) and on the properties of the architecture of networks (which define the structural constraining affordances as they give shape to the environment in which social and political actors are engaged);
4) the construction of meaning provides political power with its legitimization as far as it raises consensus on (a) the “ends” and (b) the “scale” of the political action;
5) in a complex networked society of information consensus is cognitively based on perceived trust more than on experienced trust: this means that, in media democracy, it is not only a question of relational trust, expressed with regards to specific political actors, but it is matter of systemic trust, expressed in relation to the system those actors are part of.

The last point is crucial, since consensus is not mainly formulated and manifested by means of “real” attribution of trust directed towards specific political actors. On the contrary, it is formulated and manifested by means of a “virtual” attribution of trust, which is indirectly expressed in relation to some constituent issues of the system that these actors are part of. Direct and real consensus is substituted or, at least, prepared by indirect and virtual allegiance. This aspect becomes one of the central features of media power that deserves

\textsuperscript{18} Castells (note 15).
\textsuperscript{20} See Floridi (note 6) at 77.
special attention, because the place of (legitimization of) power (through the fiduciary construction of consensus) is then rather “virtual” than empty: we are thus confronted with a phenomenon that we could define in terms of a “virtualization of consensus”. This virtual consensus, allegiance or commitment, is indirectly manifested, as we will see in the third paragraph, towards what is meant to be put “at risk” in the system: this explains why “risks” are fabricated by traditional media and “fear” has become the key issue of the political-public discourse.

We will come back to this point. At present, we should focus our attention on the claim that democracy has an epistemic foundation. This requires us, first, to endorse a conception of epistemology that would be consistent with the technological evolution of ICTs and, secondly, to envisage, on this epistemological basis, what the models of communication are according to which political-public discourse is meant to be structured out of the interplay between traditional and electronic media.

II. Constraints and affordances: the epistemological principle of complementarity

We have been speaking so far of “constraints” and “affordances” in technical terms: we have now to elucidate these concepts from an epistemological point of view, in order to introduce the principle of complementarity as the epistemic backdrop of e-democracy. In order to do so, we will take advantage of Mauro Ceruti’s\textsuperscript{21} epistemological reflections on these points.

To start with, we have to remark that the process of “decentralization” that has been brought about by the technological architecture of the net and, more generally, by the complexity of networks – which has facilitated users’ access to information and participation in the generation of content – has also been underlined and explained in epistemological terms. As Ceruti puts it\textsuperscript{22}:

Contemporary epistemological reflection instead refers the concept of decentralization to two equally fundamental facts: the \textit{proliferation} of the real in objects, levels, spheres of reality, and the awareness that such proliferation is always translated in the language and in the communication of \textit{an observer} \textsuperscript{our transl.}.

This process of decentralization has been stressed also by Luciano Floridi\textsuperscript{23} and formulated in informational terms, through a cluster of concepts (i.e. proliferation or flourishing of

\textsuperscript{21} Mauro Ceruti, Il vincolo e la possibilità, Raffaello Cortina Editore, Milano, 2009.
\textsuperscript{22} Ceruti (note 21) at 5.
\textsuperscript{23} Floridi (note 6).
informational objects, the levels of abstraction, the semantic role of the informee, etc.), which we cannot develop in the present context. It suffices to notice that, according to Floridi, decentralization endorses an universalistic approach based on the notion of informational object: namely, any entity can be described and experienced by an epistemic agent as a sum of well-formed information. Let us come back to our main question.

The process of “decentralization of the image of the cosmos” comes together and is coupled with an analogue process of “decentralization of our ways of thinking that cosmos”\(^\text{24}\). Such processes (i.e. the role of the observer and a new interpretation of the laws of nature) have brought about an epistemological switch from a “science of necessity” to a “science of game”\(^\text{25}\):

To talk of game, in order to describe the evolutionary and historical processes of social and natural systems, is to hint to a deeper understanding of the mechanisms guiding the *history of nature*. […] Evolutionary processes always depend upon insoluble interaction among general mechanisms which operate as constraints – “laws” – and the variety, the individuality, the spatial-temporal singularity of the events. Nature and history all the time play interesting games: i.e. games that do not necessarily have a winning strategy elaborated from the start. The course of the game always occurs within and though the interaction between rules posed as constraints and as constituents of the game, chance, and the contingency of particular events and of particular choices, and the strategies of the players in utilizing the rules and chance so as to construct new scenarios and new possibilities [our transl.].\(^\text{26}\)

Constraints limit the sphere of possibilities not in the sense of being a cause of a determined, necessary effect, but, rather, in the sense that, by delimiting the sphere of possibilities, they afford new opportunities. This point has been accurately articulated by Ilya Prigogine and Isabelle Stengers:

A constraint […] does not merely delimit the possibilities; it is also opportunity. It is not simply imposed from the outside onto a pre-existing reality, but participates in the construction of an integrated structure and determines in the light of a particular occasion an entire spectrum of intelligible new consequences.\(^\text{27}\)

\(^{24}\) Ceruti (note 21) at 5.
\(^{25}\) Ceruti (note 21) at 10.
\(^{26}\) Ceruti (note 21) at 10.
From this outlook, we are allowed to say that our understanding of technologies in terms of constraining affordances is consistent with the epistemological construction of the notions of constraints and affordances (or possibilities or opportunities) suggested by Ceruti\textsuperscript{28} citing Prigogine and Stengers (as well as it is consistent with the semantic interpretation of informational resources in terms of constraining affordances formulated by Luciano Floridi\textsuperscript{29}).

The idea of science as a “game” is thus based on the abandon of the image of science as an asymptotic process of approximation towards a unique and fundamental place of observation and explanation. On the contrary, the game consists precisely in the reintroduction of the observer within the system of observation and explanation.\textsuperscript{30} The categorical universe of science ceases to appear as something unitary, homogeneous and fixed once for all; on the contrary, it appears as characterized by an irreducible plurality of observers’ viewpoints. This brings about a main epistemological consequence that is decisive for the purpose of our paper and the correct understanding of the epistemic foundation of e-democracy:

The irreducibility of the observers’ points of view \textit{hic et nunc}, their presence in every description, in every strategy, indeed, in every matter of heuristics, sparks off an image of the development and structure of knowledge according to which the \textit{possible universes of discourse are never defined exhaustively, but are constructed and depend on the network of concrete relations of antagonism, complementarity and cooperation between the multiple viewpoints at play [our transl.]}\textsuperscript{31}.

What does it imply? This epistemological approach not only endorses a necessary pluralism of observers’ viewpoints but it asserts that the epistemic question is no longer that of reconciling different points of view; rather, the question is to understand how different points of view produce themselves reciprocally\textsuperscript{32}:

The real reversal in perspective consists in the recognition of the irreducibility of the points of view or, what is more, in the recognition of their proliferation in different directions and at different levels. There is a plurality of points of view belonging to concrete subjects like those adopting different systems of categorical references to judge the same evidence. There is also a plurality of points of

\textsuperscript{28} Ceruti (note 21) at 40.
\textsuperscript{29} Floridi (note 6).
\textsuperscript{30} Ceruti (note 21) at 39-40.
\textsuperscript{31} Ceruti (note 21) at 43.
\textsuperscript{32} Ceruti (note 21) at 44.
view within the same subject endorsing, with regard to some problems and ends, different systems of categorical references, logics and forms of thinking [our transl.].\textsuperscript{33}

This understanding of knowledge is thus no longer characterized by the need to establish a synthesis between these different viewpoints (that can overrule some points of view in favor of some others). On the contrary, it is characterized by the image of antagonism, cooperation and complementarity between different systems of categorical references: in this perspective, the epistemic attention is rather focused on the conceptual matrices that make these systems or viewpoints antagonist, concurrent or cooperative. According to this approach, the unity of knowledge is not expressed by synthesis but, rather, by complementarity and epistemology can be said to be inspired by a principle of complementarity that is an “essential precondition for every epistemological inquiry”.\textsuperscript{34}

Different points of view as well as different forms of discourse should not be conceived as mutually alternative but rather as antagonist, concurrent or cooperative, according to the differences between conceptual matrices that make them differ from one another. Each one can participate in the construction of knowledge within the constraining affordances that characterize their respective conceptual matrix: this perspective requires us to move from a conception of epistemology based on representation to a conception of epistemology based on construction.\textsuperscript{35}

This brings about a profound consequence that is decisive for us. The irreducible pluralism of viewpoints displayed by the principle of complementarity does not only imply that antagonist or cooperative discourses concur in the construction of knowledge according to the interplay between their conceptual matrices (the set of their constraining affordances): it implies more. Precisely, it implies that the whole cognitive universe is constituted as a polisystemic subject\textsuperscript{36} that appears to be the sphere of antagonism and cooperation between systems that are characterized by different logics, hierarchies, subjects and viewpoints:

This image of the subject as being composed by multiple systems constitutes a mode of thought which decisively orient many of the most interesting contemporary studies into the nature of the subject at whatever level they are placed [our transl.].\textsuperscript{37}

\textsuperscript{33} Cerutì (note 21) at 96.
\textsuperscript{34} Cerutì (note 21) at 97-98.
\textsuperscript{35} Cerutì (note 21) at 103.
\textsuperscript{36} Cerutì (note 21) at 111.
\textsuperscript{37} Cerutì (note 21) at 111.
Such an epistemological perspective is therefore crucial in order to account for what we could call as the subject or the system of communication in our e-democracies. In fact, it is important to conceive the epistemic foundation of e-democracy on the basis of the requirements displayed by the principle of complementarity, according to which the subject or the system of communication may be understood as an ‘integrated public sphere’ where do occur antagonism and cooperation between systems that are characterized by different logics, hierarchies, subjects and viewpoints. This requires that different models of communication (i.e. models that are formed on the basis of different conceptual matrices) can compete or cooperate not only in (a) the construction of an heterogeneous basis of information, but also in (b) the process of subjectivation.

In other words, differences between outlets of communication should be traced back to differences between conceptual matrices (i.e. sets of constraining affordances), since the framework of complementarity is based both on the refusal of a unique fundamental point of observation and explanation and on the “recognition of the multiplicity of places of observations and explanations”. So, the question is to describe not only a model of communication that sets the conditions of dialogue between different subjects and viewpoints but also a model of communication that sets the conditions of the recognition of new observers (i.e. subjects, interlocutors, or sub-systems of communication).

III. Models of communication of political-public discourse

If understood as the frame of political-public discourse, democracy can be represented through two models of communication: i.e. the model of “dialogue” and the model of “claim”. According to the principle of complementarity, these models can characterize different stages of democracy but can also coexist within the same stage of democracy; they can characterize different outlets of communication (traditional or electronic) but can also coexist in the interplay between traditional and electronic media, as we will point out later in the paper. These two models differ from one another with regard to: (a) the relation between political actors and communication; and (b) the aim of communication itself.

1. The model of dialogue

The model of dialogue is characterized by the fact that interlocutors precede the communication and they structure it through their communicative interaction. In a sense, it is possible to affirm that they precede “the word” and they constitute it as the horizon of their

38 Ceruti (note 21) at 120.
intersubjective agreement. Non-metaphorically speaking, this means that interlocutors, i.e. the political actors, interact communicatively on the basis of a political subjectivity already formed and recognized, which is thus fully developed in communication.

According to this model, the aim of communication is to provide foundation, through confrontation of opinions, refinement of arguments and subjection to criticism, to a rational agreement and thus to political consensus. Such a form of consensus legitimizes the decisions that guide political action. In other words, through the public use of reason, democracy is provided, in the sphere of reflexivity, an epistemic foundation: public opinion is not only a matter of “opinions and beliefs” but, more and more, a question concerning the conceptual matrix and the informational foundation of such opinions and beliefs. The fact that democracy has an epistemic foundation seems to be a key achievement of political thought for a deeper understanding of the complex networked society of information. And this is true even if, according to a mature theory of information\(^\text{39}\), the question of information is not totally coextensive with the question of truth.

In fact, on the one hand, the content of a false statement can be more informative than the content of a true statement, since the former may be pragmatically less distant from truth than the latter\(^\text{40}\) (consider the following case: there are eight people in a room. The sentence “there are seven people in the room” is false. The sentence “there are some people in the room” is true. The former is more informative than the latter since it is less distant from truth).

On the other, the overload of information has made lying useless in the information society, since framing and selection of information are more viable ways to misrepresent reality than disinformation and misinformation.\(^\text{41}\) Consider the case of homicides for the construction of “social alarm”: homicides accomplished by acquaintances (i.e. friends, relatives, lovers, etc.) are more numerous than homicides accomplished by strangers but they are framed and represented as “private events”, whereas homicides accomplished by strangers are framed and represented as “social events”. However, to state that strangers have accomplished a high number of homicides or crimes in relation to the number of strangers (present in Italy) is not false. In other words, we have enough instances and information to construct both the homicides by acquaintances and the homicides by strangers as factors of social alarm: what type of social alarm we represent is a matter of political decision, even if such a representation is often conducted, strictly speaking, within the perimeter of truth. The

\(^{39}\) Floridi (note 6).

\(^{40}\) See again Floridi (note 6).

potential *truth-tracking* attitude of information should be analyzed from a wider cognitive perspective.

The more the complex networked society uses ICTs and politics turns into an articulated form of management and control over the life-cycle of information, the more political power will be based on that sum of information (beliefs and opinions) capable of generating a certain level of trust and thus of consensus (trust being a sort of precondition for consensus). In this sense, the political power will be legitimized by an epistemic trust (i.e. trust *that* reality is as it appears in the public sphere) that constitutes the general frame within which both the relational trust (i.e. trust *into* political actors) and the systemic trust (i.e. trust *in* the political system as a whole) are attributed.

In the perspective of the model of dialogue, an aspect deserves special attention, since it often causes a recurrent misunderstanding. According to this model, interlocutors are already defined in their political subjectivity: they are political actors recognized in the system (politicians, experts, professional journalists, intellectuals, etc.) and therefore they enjoy a certain level of trust in the formation of the public opinion, that is to say, salience and credibility in informational terms. In other words, they are recognized as capable to produce and/or select politically relevant and reliable information. However, this implies that, at closer examination, their communicative interaction cannot be rigorously defined as an intersubjective relation if, by intersubjective relation, we do not refer tautologically to a relation between (already constituted) subjects. An intersubjective relation is, in our opinion, more correctly understood and defined as the relation that is constitutive of subjectivity. In the case considered here, the communicative relation between political subjectivities already structured in their prerogatives should be, therefore, defined as an (epistemic) “interobjective relation”, namely, as a relation that is meant to constitute or give shape to the objective conditions of the political-public discourse (i.e. the conditions making that discourse a shared and rational discourse).

In this perspective, it is necessary to clarify what are the objective conditions aimed to assure democratic communication. Furthermore, such conditions are not to be intended in our model only with regards to the “paradigm of communication” but first and foremost in relation to the “paradigm of information”42. The interobjective relation has, therefore, to accomplish the following objective conditions:

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42 For a comparison between those two notions of paradigm see Ugo Pagallo, *Teoria giuridica della complessità*, Giappichelli, Torino, 2006.
1) the integration in the system of communication of a plurality of informational channels (as to the logic of production and selection of information);
2) the formation of the basis of accessible information;
3) the formation of public opinion on the basis of produced and selected information;
4) the critical confrontation between public opinions and arguments.

These four basic conditions define the life-cycle of political-public information (which is described here in relation to communication in democratic societies but could be described also, more generally, in the terms of the theory of information laid down by Luciano Floridi⁴³: creation, elaboration, distribution, storage, protection, usage and possible destruction of information). In the complex networked society of information, the life-cycle of information is the space where political conflict for the acquisition and legitimization of power takes place. These conditions that frame political-public discourse are susceptible to be redesigned by the evolution of ICTs and the emergence of a networked public sphere⁴⁴. We will focus our attention on this crucial point later on in the paper; for the moment, we have to deal with two common criticisms that are made against the hypothesis itself of an emerging networked public sphere.

Firstly, it is often stated that networked communication is unable to produce relevant and reliable information: this criticism concerns the quality of information. This criticism has been rebutted empirically, by reference to several examples⁴⁵ showing that networked communication (including online journalism) has been capable to produce relevant and reliable political information (that has given rise to political consequences in real life). The diverse “quality” of networked information has to be traced back to the diverse conceptual matrix that govern online communication. In the previous paragraph, we have discussed this point from an epistemological perspective, by stating that the epistemological principle that governs networked communication should be intended as a principle of complementarity⁴⁶ that is consistent with the interpretation of informational resources and networking technologies as constraining affordances.

Secondly, it is also often stated that networked communication does not give rise to real intersubjective interactions based on face-to-face relations as in real life. This criticism (which

⁴³ Floridi (note 12).
⁴⁴ Benkler (note 1) and Castells (note 15).
⁴⁵ See again Benkler (note 1) and Castells (note 15).
⁴⁶ Ceruti (note 21).
has also been referred to traditional media) can be briefly discussed here and it can be refuted in two ways.

The first one consists in saying that there are online intersubjective interactions – regardless to the strict requirement of face-to-face relations – which are not displayed according to the model of dialogue but according to the model of claim, as we will see in a moment.

The second one is even more incisive and it is based on what we have already remarked: the communicative interaction displayed (offline or online) according to the model of dialogue does not give rise to an intersubjective but to an “interobjective” relation, aimed to accomplish the epistemic objective conditions at which the political-public discourse may be perceived as shared and rationale discourse. In this perspective, online communication does not differ from offline communication based on the model of dialogue. Time has come to turn our attention to the second communicative model: that of claim.

2. The model of claim

The model of claim is characterized by the fact that “the word” precedes the interlocutors and establishes the communication. The discourse does not primarily carry a message but a claim: it requests the attention of the interlocutor. Through the discourse, each interlocutor is invited to acknowledge the other in her subjectivity. The word – the order of discourse – does not constitute here the space where the interobjective relation takes place but the way through which the process of political subjectivation may start. According to the model of claim, interlocutors are not pre-constituted in their (political) subjectivity; on the contrary, they constitute it through their communicative interaction.

Whether in the model of dialogue the accent is placed on the idea of communication (as the horizon of the interobjective relation), in the model of claim the emphasis is on the idea of attention (as the horizon of the intersubjective relation). This consideration is backed by the evolution of ICTs and of the complex networked society of information: where information is scarce, communication is fundamental as a way of sharing information; where we face information overload, attention becomes crucial as a way of selecting relevant and reliable information. What is brought to attention is not so much the topic of discussion but the request of recognition (which entails the process of subjectivation). In that case, the question is not to define the objective but the subjective conditions of communication: that is, the

extent of the concept of political interlocutor (i.e. the range of participants, in the networked public sphere, in the formation of political-public discourse).

According to the model of claim, the aim of communication is the process of subjectivation that defines the perimeter of those enabled to assert their claims (interests, desires, expectations, requests, etc.) as a political instance or a critical judgement addressed to the political regime. This model does not belong only to the achieved democracies but, first and foremost, to the developing or potential democracies. An appealing example can be drawn by the recent “wave of upheavals in the Mediterranean countries”, which is explicitly concerned with the use of ICTs in the formation of public opinion.

In order to illustrate such an example, we will refer to what has been stated by the European Commission: “The use of electronic communications technologies – on top of satellite broadcasting – greatly facilitated the wave of upheavals in the Mediterranean countries. The widespread use of mobile phones combined with social networking via internet showed the importance of information society tools and technologies to the circulation of information. In countries where the circulation of information is partially restricted such tools can greatly contribute to the democratization of societies and the creation of public opinion through the promotion of freedom of expression”\(^{48}\). In line with this reasoning, the European Commission has also significantly stated: “Moreover, ensuring the security, stability and resilience of the Internet and of other electronic communication technologies is a fundamental building block in democracy. It is necessary to avoid arbitrarily depriving or disrupting citizen’s access to them. Given the trans-border and interconnected nature of electronic communications technologies, including the Internet, any unilateral domestic intervention can have severe effects on other parts of the world. The Commission will develop tools to allow the EU, in appropriate cases, to assist civil society organizations or individual citizens to circumvent such arbitrary disruptions”\(^{49}\).

Three aspects of the European Commission’s communication are here to be stressed (which appear to be in line with what we have argued so far):

1) The European Commission recognizes and underlines the need to ensure the *security, stability and resilience* no longer of traditional political institutions but of the Internet and

\(^{48}\) EC Communication, A Partnership for Democracy and Shared Prosperity with the Southern Mediterranean, *Joint communication to the European Council, the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*, Brussels (8.3.2011), COM. 200 final, 2011, 10.

\(^{49}\) EC Communication (note 48) at 11.
of other electronic communication technologies as a “fundamental building block of democracy”;

2) The European Commission overtly acknowledges civil society organizations and individual citizens as crucial “political actors” in the upheavals of Mediterranean countries: in this case, the recognition of political subjectivity stems from the technological capability of networked communication users to link individual desires, represent political expectations and claim public attention;

3) Networked communication enables both “the creation of public opinion through the promotion of freedom of expression” and a likewise crucial practice of “concentration of attention”\(^50\) over selected political issues and claims: this means, according to our model, that the creation of public opinion and the shared request of public attention, enabled and fostered by the Internet and the other communication technologies, not only brings into the general notice what is politically relevant (from an informational point of view) but, more importantly, also entails a process of political subjectivation that enlarges the class of those who are recognized as sources of relevant political information.

This case shows that the model of dialogue does not suffice by itself to explain how the public sphere is structured in the e-democratic frame of the complex networked society of information. The model of claim is a necessary integration of the communicative model of dialogue, and it will enable us to better account for the way ICTs might redesign the subjective and objective conditions of political-public discourse.

3. The subjective and objective conditions of political-public discourse

As observed from the start, the first and most significant way ICTs evolution has an impact over the subjective and objective conditions of political-public discourse is by redesigning the networked space of information in digital terms.

The networked digital space of information is, from a philosophical point of view, ideal and relative. Ideal in the sense of Kant’s notion of space and relative in the sense of Leibniz’s notions of space\(^{51}\). Let me briefly explain these references. It is ideal, in Kantian terms, since it does not exist independently from the human mind, since the meaning of informational objects is not independent from the human mind (i.e. from the knower [the subject of knowledge] that is here the informee [the subject of information], according to Floridi’s theory of semantic information\(^{52}\)). It is relative, in the sense of Leibniz, since it does not exist independently of the informational objects. This means that space cannot be thought of independently from the properties and relations of informational objects (namely, independently from the relations of differences that are constitutive of data\(^{53}\)). From an epistemic point of view, informational object are resources conceived as “constraining affordances”\(^{54}\). This amounts to saying that the relativity of the networked digital space of information is conceivable as the ensemble of the properties and the relations between the informational objects, that is to say, as the tension between the constraints and the affordances of the informational resources.

This requires us to precise what the properties of bits and the relations of informational objects redesigning the networked digital space of information are. We will just consider, here, their main characteristics. According to Danah Boyd\(^{55}\), the constraining affordances of online communication based on the properties of bits are the following:

1) **Persistence**: online expressions are automatically recorded and archived.
2) **Replicability**: content made out of bits can be duplicated.
3) **Scalability**: the potential visibility of content in networked outlets is great.
4) **Searchability**: content in networked outlets can accessed through search.


\(^{52}\) Floridi (note 6).


\(^{54}\) Floridi (note 6).

\(^{55}\) Boyd (note 2).
According to Jannis Kallinikos\(^{56}\), we could add the following characteristics:

5) **De-contextuability**: content made out of bits can be de-contextualized and granted new meaning.

6) **Recombinability**: content can be easily recombined through networked outlets to form new computational objects.

According to Luciano Floridi\(^{57}\), the space of information (that includes both the analogue and the digital space) owns the following characteristics:

7) **Contraction**: the acceleration of every interaction (notably of informational fluxes) has contracted the physical space where we are engaged to make decisions, to act and interact.

8) **Expansion**: ICTs have expanded the virtual networked space where we can e-live.

9) **Porosity**: ICTs have increased (quantitatively) the communication between the analogue and the digital space.

10) **Hybridization**: ICTs re-ontologize (qualitatively) the space we live in since they progressively remove the idea of computer as an “interface” between the analogue and the digital reality in favor of a unique space of information (i.e. infosphere).

11) **Synchronization**: the widespread integration and concatenation of informational fluxes determine more and more the contingent (i.e. complex) synchronization of practices and tendencies that otherwise would be chaotic and unrelated.

12) **Correlation**: the networked dimension of informational relations is so much interconnected that each informational object that “falls in the net” is susceptible to propagate its waves across the net outside the distinction between local and remote.

If we consider the aforementioned structural constraining affordances of the information space along with the architectural\(^{58}\) and economic\(^{59}\) constraining affordances of the net, we

\(^{56}\) Kallinikos (note 2).

\(^{57}\) Floridi (note 12).

\(^{58}\) Tim Berners-Lee, Weaving the Web. The Original Design and Ultimate Destiny of the World Wide Web by
may better understand how ICTs have redesigned the subjective and objective conditions of networked political-public discourse. Hereafter we resume the main consequences of ICTs’ evolution for the formation of online public opinion (according to the interplay between the two communicative models of dialogue and claim) from the two points of view of informational inputs and outputs that concern both the subjective and the objective conditions of the public-political discourse:

1) **Informational inputs:**

   1.1. A wider class of interlocutors (i.e. political actors) are enclosed among those who can produce and selected the relevant and reliable political information: this entails a greater pluralism of informational sources [subjective condition];

   1.2. A wider class of informational objects (i.e. news, opinions, beliefs, etc.) is gathered and enclosed among what counts as a relevant and reliable political information, produced independently from the commercial and proprietary logic and organization of traditional media: this entails a greater pluralism of informational resources [objective condition];

   1.3. A wider class of informational claims (i.e. interests, expectations, desires, requests, etc.) is produced online as a result of the contraction, expansion, porosity, hybridization, correlation and synchronization of the information space [subjective condition].

   1.4. A wider class of informational relations (i.e. informational flows) is made possible online as a result of the replicability, scalability, searchability, recombinability and de-contextuability of content made out of bits [objective condition].

2) **Informational outputs:**

   2.1. A wider class of interlocutors (i.e. political actors) are enclosed among those who can “check” the facts and the opinions produced both online and offline: extension of public power of control and criticism [subjective condition];
2.2. A wider class of interlocutors can bring into the “general notice” the facts and the opinions produced both online and offline: extension of the sphere of public accountability [subjective condition];

2.3. Attenuation of the balkanization of opinion (i.e. the effect of “the room of echo”) as a result of the de-contextuability and recombinability of the content made out of bits [objective condition];

2.4. Increase of the “gestalt switch” in the formation of public opinions as a result of the enlargement of the basis of information available and accessible made possible by the replicability, scalability and searchability of content made out of bits [objective condition].

We have focused our analysis on the epistemic constraining affordances that enable, in our opinion, the emergence of a real and relevant sphere of networked public opinion. Of course, these epistemic conditions are also backed by the architectural and economic constraining affordances of the net.\(^6^0\)

Time has come to consider more closely a relevant phenomenon for democracy that seems to delineate the traditional media from the networked outlets of communication and concentration of attention: the phenomenon of virtualization of consensus.

IV. The phenomenon of virtualization of consensus

Some scholars have remarked that democracy is both a word and a thing.\(^6^1\) In a sense, the “word democracy” is, nowadays, irrefutable and uncontested: nobody would realistically and successfully try to achieve the sovereign power or to legitimate their political action, while asserting to do so in a non democratic way or that such action could be performed outside a democratic framework. For anyone who wants to obtain sovereign power and to legitimate a political project, the reference to democracy seems to be obliged. Nevertheless, the “thing democracy” is still far from being pacifically and unquestionably envisaged and established. The word democracy is full of promises and always accompanied by principles, rights and values, whereas the thing democracy is still plenty of disillusions, shadows and troubles that oblige us to constantly watch over its “healthiness”: i.e. its effectiveness or substance.

The landscape and life of democracy are thus always unquiet, shaken and perturbed, and this is all the more true as different political regimes are confronting each other in the current process of globalization. Today, in our globalised world, the quest for democracy proceeds at

\(^{60}\) Benkler (note 1) and Castells (note 15).

different pace and is subject to a peculiar contradiction. On the one hand, democracy is potentially subjected to derives: we are said to have moved from a representative democracy to an electoral democracy; from an electoral democracy to a plebiscitarian democracy; from a plebiscitarian democracy to a democracy founded on media power. On the other, “democracy” is passionately sought after as it has been showed by the above-mentioned political wave of upheavals in the Mediterranean countries, where the networked circulation of information has contributed “to the democratization of societies and the creation of public opinion through the promotion of freedom of expression”, as remarked with maybe too much emphasis by the EC.

Let us take the first case concerning western societies: that of democracy founded on traditional media power. In this case, the spaces of participation and of deliberation have been reduced: information and consensus have become the poles of attraction of democracy, and the construction of meaning, as already remarked, has become the way political power is obtained and legitimized. Against this backdrop, we have to remark a paradoxical phenomenon: traditional media have fostered in real life a phenomenon of virtualization of consensus, which has been contrasted in the virtual reality by means of the communication displayed through the electronic media. In a previous essay consecrated to the relevance of fear in the construction of political-public discourse, I have analyzed this phenomenon in full details that I would like to sum up briefly.

The argument is the following: “fear” has become the most recurrent and important topic of political-public discourse constructed by traditional media. More than this, it has also become the general frame through which the whole political reality is represented, interpreted and given meaning. This fabrication of meaning plays a crucial role: through the reference to what we fear, political-public discourse represents what we want to protect. In this way, the map of our interests, expectations, common goods, and desires, which are no longer made subject of our explicit claims, is publicly traced. In this sense, we are supposed to express consensus to the politics that are concerned with the promised protection of what is meant to be the content of “our own fears”, which are fabricated by the political-public discourse. The fabricated fears become the information (i.e. the input) that the political system processes in order to produce consensus (i.e. the output).

In this perspective, consensus becomes virtual: this means that consensus is no longer directly manifested in relation to possible political choices but it is indirectly manifested in relation to what is assumed to be at risk in society. The manifestation of consensus is

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62 Castells (note 15).
63 Durante (note 41).
substituted or, to be more precise, is prepared by the representation of what we fear to lose. The political-public discourse elaborated by means of traditional media tends to treat audiences as a permanently “sick social body” in two senses: firstly, in the sense that the social body is not confronted with how to improve its wellness but with how to protect itself from further sufferings, diseases and losses (i.e. the virtual evil); secondly, that sickness is not measured in relation to an empirical body but in relation to a statistical construction of the social body (i.e. the virtual body). This gives rise to a crucial political phenomenon of “virtualization of consensus”, which is manifested by a virtual social body in relation to virtual evils. This process of virtualization goes to the point that the place of the legitimization and the justification of political power becomes “virtual”: consensus is no longer manifested but inferred by what is represented as socially perceived risk. 

In this sense, through the fabrication of fears and risks elaborated by traditional media, real life public opinion in may be said to appear, more “virtual” than the networked public opinion in the virtual reality. On the contrary, as we have remarked by quoting the EC communication, the creation of online public opinion can produce and display consequences that are appreciated in real life: not only in terms of freedom of expression but also in terms of political subjectivation, according to the model of claim.

Let us briefly come back to this example, in order to explain one of the salient aspects of the social and political impact of ICTs on democracy. The following consideration is also intended to clarify in what sense technology gives shape to the environment we are engaged in throughout the establishing of constraining affordances.

Technology creates new possibilities: these possibilities can be understood as affordances. People are enabled by new technologies to do what they could not do before: this does not guarantee for sure that they will do it. As suggested by Benkler, technology makes it easier (or more difficult) to perform some actions and have some human interactions. Ceteris paribus, Benkler says, the easiest things to do are more likely to be done, whilst the most difficult ones are less likely to be done. However, other variables never remain constant. This is the reason why strict technological determinism – according to which, if provided with a technology t, we can expect the emergence of the social relation or structure s – is false.

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64 Ulrich Beck, La società (mondiale) del rischio e le insicurezze fabbricate, Iride, (2008) 55, 511-520.
65 See again Wellman et al. (note 6) and Kallinikos (note 6).
66 Benkler (note 1).
67 Benkler (note 1).
Let us reformulate this argument from another point of view by introducing the idea of power. As said, technology provides us with new possibilities. However, not all of them are implemented and imbedded in society. When this occurs, that is, when technologies become part of our activities, such possibilities may turn into powers that users avail themselves of. Technology not only creates new possibilities: it creates new powers. In this sense, the (social and political) impact of technology consists in what its implementation alters the distribution of powers that exist in a democracy. This is the reason why, most of the times, political-public discourse directed against, or in favor of, a given technology is, in reality, concerned and troubled with the redistribution of powers that such technology has enabled. 

Therefore, the implementation, development and social acceptance of a technology is not only politically guided by the representation of determined ends to pursue or needs to meet. They are also explained and backed by the existing competitions between interests and powers that run across and affect a society. In its turn, the endorsed technology is able to spur new competitions or even conflicts as a result of the rearrangement of powers it enables. For that reason, the issue at stake is not so much what social structure a new technology determines; it is rather who are the social groups or individuals that such a technology has been able to empower. Furthermore, such empowerment is notably related to the structure of desires that characterizes a social group or individuals.

Desire is crucial to politics since it is the measure of our perceived inequalities. According to the theory of mimetic desire, our desires do not stem from scratch: we do not simply desire to be this or that or to have this or that. On the contrary, we desire what others own: in this sense, our desires are the expression of the inequalities that exist in a society among persons that perceive each other as similar (i.e. comparable). Hence, to be more precise, we desire to have what the others similar to us own.

This means that social groups or individuals are likely to harness the technological affordances that enable them to meet their desires and thus to reduce the inequalities that exist within a society or between societies: in this sense, technological evolution may have a democratizing effect in society, if equality is meant to be the virtue of democracy. This has been the case in the wave of upheavals in the Mediterranean countries, where “electronic communication technologies” did not only enable people to communicate, to form public

opinion and to express their freedom; they also enabled people to perceive themselves, at the same time, as similar to western digital natives by making use of ICTs, and different to them as regards to the development and granting of democracy in their societies. In this sense, electronic communication technologies have been decisive to make people (and youth in particular) to desire to have what other people similar to them already enjoy.

Needless to say that a technology could be endorsed and implemented for the very opposite reason, that is, in order to deepen the inequalities that exist between individuals, social groups or even societies at large. In that case, it is harder to speak of a democratizing effect of technology, which however can turn into an economic, political or social improvement of some individuals, social groups or societies. In sum, as far as technological possibilities are implemented and transformed into power, technology is able to lessen or deepen the inequalities existing in a society or between them. In this sense, once again, technological affordances do not dictate people’s behaviors, but they do configure the environment in a way that shapes their engagement in lessening or deepening existing inequalities.

In the next and last paragraph, we will stress this basic idea from the epistemological standpoint we have started with: e-democracy as the frame of the networked public discourse, that is, how electronic communication technologies give shape to the whole informational environment (which in the long term will erase the distinction between analogue and digital space) in the epistemic terms of constraints and affordances. As already remarked, democracy as well as e-democracy have an epistemic foundation, whose epistemology should be understood according to a principle of complementarity71.

V. The integrated public sphere: complementarity between traditional and electronic media

In a world based on a realistic, traditional ontology (where our beliefs and opinions are ultimately based on the existence of material objects) traditional media used to play the role of instruments of information, disinformation and misinformation, which all presuppose a confrontation between the content of information and the world. In a world ever more based on a digital, virtual ontology (where our beliefs and opinions are mainly based on the consistence of information: we do assist to a certain liquefaction of the world, in favor of biographies, that are the privileged subject of media narration), traditional media tend to play the role of instruments of pressure and concentration of attention.

71 Ceruti (note 21).
This tendency is backed by the role of electronic media to such an extent that they cooperate in the virtual rendition of the world. However, it is also contrasted by electronic media to such an extent that their conceptual matrix (the set of their constraining affordances) differs from that of traditional media: this has entailed, as already pointed out, both an extension of what counts as relevant political information and an extension of the class of those who count as political interlocutors (individuals, bloggers, online journalists, wikileakers, etc.).

We are thus confronted with a multi-system construction of the networked public sphere, where actors tend to be respondent and accountable for the formation of public opinion within the limits set by the constraining affordances characterizing the conceptual matrix of the information space and the model of communication they belong to. It is important to remind that the protection of free press and, more generally, of public opinion formation is correlative firstly to public interest and secondly to responsibility.

It is apparent that professional journalists are sensitive to public interest and responsibility in a way that is different from that of online journalists. This difference, as we have tried to argue so far, does not only depend on the organizational structure to which (either professional or online) journalists belong but also on the constraining affordances of the conceptual matrix to which they are respondent. Furthermore, we have also to mention that diverse outlets of communication (traditional or electronic) are exposed in a different way and to a different extent to political attacks or pressures, to social or economical conditionings (which are often unreviewable by a Court, since brought about by actors who are not themselves subject to constitutional constraints\textsuperscript{72}): new media seem to be more vulnerable to attacks, than traditional media, to the extent to which they are subject to the action of an extralegal public-private partnership that challenges the robustness and resilience of the networked information space. Hence, new media have to be protected by including them more and more within the e-democratic frame of the (legitimated) formation of political-public discourse.

In this perspective, which has to be understood according to the principle of complementarity, it is systematically in society’s interest to protect “the integrity of the newsgathering process, and in ensuring the free flow of information to the public”\textsuperscript{73}. This systemic interest grows out of the recognition that the public sphere is now constructed by an assorted set of actors and requires us to recognize that e-democracy needs “multiple layers of

\textsuperscript{72} Benkler (note 50) at 12.

\textsuperscript{73} Benkler (note 50) at 39, quoting the In re Madden doctrine.
checks and balances”\textsuperscript{74} and “a new model of cooperation”\textsuperscript{75} between traditional and electronic media. A mutual interaction between different types of media (that is, between different observer’s viewpoints) can make us to better understand how different viewpoints produce themselves reciprocally and it can make different types of media to better deal with the limits (constraints) and the opportunities (affordances) of their conceptual matrix.

In this perspective, Yochai Benkler, dealing with the question of Wikileaks\textsuperscript{76}, seems to endorse the epistemic idea of complementarity as a guidance principle for elaborating a model of partnership (that encompasses cooperation, concurrence and also antagonism) between traditional and electronic media. According to Benkler, on the one hand, traditional media, that are at present increasingly challenged in their identity and role, can harness electronic outlets of communication: (a) by integrating distributed informational inputs in their own model; (b) by extending their platform through the use of networked channels of communication. On the other hand, electronic media, which are at present increasingly confronted with the issue of the quality of information (i.e. relevance and reliability) and of the responsibility for public disclosure, can harness traditional media, in order: (a) to better ensure responsible disclosure and private confidentiality; (b) to better achieve salience and attention from the networked publics\textsuperscript{77}.

In conclusion, a principle of complementarity should be endorsed as the epistemological foundation of e-democracy conceived as the frame of the political-public discourse, if we really want to avoid the crucial risk that Yochai Benkler well summarizes as follows:

The risk is that the government will support its preferred media models, and that the incumbent mass media players will, in turn, vilify and denigrate the newer models in ways that make them more vulnerable to attack and shore up the privileged position of those incumbents in their role as a more reliable ally-watchdog. This threat is particularly worrisome because it comes as the economics of incumbent media force us to look for new and creative networked structures to fill the vacuum left by the industrial decline of midtwentieth century media models.\textsuperscript{78}

Address: Massimo Durante
Dipartimento di Giurisprudenza
Università di Torino
via S. Ottavio 54

\textsuperscript{74} Benkler (note 50) at 63.
\textsuperscript{75} Benkler (note 50) at 66, citing the \textit{Guardian}.
\textsuperscript{76} Benkler (note 50) at 63-64.
\textsuperscript{77} Benkler (note 50) at 63.
\textsuperscript{78} Benkler (note 50) at 63.
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