A new decade for social changes
Challenges for deliberative democracy in the digital era

Silviu-Petru Grecu
University “Al.I.Cuza”, Iași, Faculty of Philosophy and Social- Political Sciences, Department of Political Sciences, International Relations and European Studies/ Ph.D. Associate Professor
silviu.grecu@uaic.ro

Horia Costin Chiriac
University “Al.I.Cuza”, Iași, Faculty of Philosophy and Social- Political Sciences, Department of Communication Sciences/ Ph.D. Lecturer
costinhoriachiriac@gmail.com

Abstract. The aim of this paper is to create a deep radiography of the evolution of deliberative democracy in the digital era. The increased number of on-line media, social dynamics and economic variables could be seen as several structural challenges for the quality of the deliberative democracy. Starting from these premises the study has several research objectives as: i. to analyse the impact of deliberative democracy in EU countries; ii. to estimate the magnitude of the statistical association between deliberative component of the democracy and on-line media; iii. the impact of economic development on the evolution of deliberative democracy and on-line communication. The main research questions are: “how could on line media determine the decreasing level of deliberative democracy?” and “is political polarization the effect of the on-line media fractionalization?” Empirical findings present the image of the EU political systems in terms of “flawed democracy” with the mean of Democracy Index= 7.34. At the inferential level we have determined several linear and non-linear equations of regression as: deliberative democracy and on-line media fractionalization, a negative relation with \( R^2 = 0.673, p=0.01 \). Also, the main predictor of the quality of the democracy in conditions of the increased number of on-line media is represented by the social and political polarization. Economic determinants are statistically significant for the dynamics of the deliberative democracy (\( R^2=0.465, p<0.001 \)).

Keywords. Deliberative Democracy, Political polarization, On-Line Media, Economic Growth, EU political systems

1. Introduction

Contemporary society is characterized not only by the accelerated development of cyberspace, but also by the rise of social networks, two processes with an important and complex influence upon the manner in which large categories of public interact. In the same time, one of the tendencies that marked lately the majority of Western societies refers to the crisis of democracy. At first glance, the superposition of these aspects seems quite paradoxical, especially if one takes into account the fact that, on one hand, the development of cyberspace
The processes that link the development of social networks to the crisis of deliberative democracies are complex and intriguing ones. One key factor in this respect is the polarization of the large public [1], which could be related to the way in which cyberspace is organized. People are able to cluster one another in this cyberspace around specific topics. Consequently, they form virtual communities articulated around a common set of values and beliefs we could call thematic communities. The collision among such clusters favors the polarization of the public, a phenomenon that makes, on its turn, the process of attaining constructive compromises at the social level more and more difficult. The development of social networks raises new identity challenges for the new generations. First of all, in cyberspace the geographical relief of the world is replaced by a new kind of relief, one we could call thematic relief. In this thematic relief, users are clustered around common subjects of interest, around common sets of principles and common groups of values. Due to this situation, the communicative interactions among them are more violent, giving the fact that in digital communication the feed-back is a mediated one.

The interactions among them are also influenced by the fact that each user is seeing a different set of images selected by manipulator algorithms that exploit him commercially and persuade him to consider that specific set of images as being the reality itself or being a relevant selection of information about reality, at least. As far as deliberative democracy is concerned, its regulatory mechanisms are based on collective decision-making abilities, as Corrado Hübner Mendes pointed out in a very inspired manner: "Democratic theory has recently revived deliberation as a valuable component of collective decision-making. Deliberation features no less than a respectful and inclusive practice of reasoning together while continuously seeking solutions for decisional demands, of forming your position through the give-and-take of reasons in the search of, but not necessarily reaching, consensus about the common good. Thus, participants of deliberation, before counting votes, are open to transform their preferences in the light of well-articulated and persuasive arguments. Despite a range of variations, both conceptual and terminological, within the literature of deliberative democracy, this can plausibly be regarded as its minimal common denominator" [2]. Giving the fact that each user receives a specific list of suggestions devised by an algorithm which responds to the commercial purposes of a certain social network, the cyberspace becomes more and more a place in which communication abilities as those mentioned above cannot be trained on a daily basis. Furthermore, the lack of an axiological common ground prevents the users from experiencing a common debating space characterized by an ethic of consensus. Thus, the link between the rise of information technologies, especially social media [3] and the crisis of deliberative democracy becomes obvious.

2. Data and Research Methods

This section presents the methodological framework and the main empirical tendencies for underling the relation between deliberative democracy, on-line communication, political polarization and economic development. The aim of the article is to emphasize the fact that online media is involved in increasing political polarization. This fact is reflected in low rates of deliberative democracy in most part of the EU political systems. In this respect, the main research objectives are: i. to analyse the impact of deliberative democracy in EU countries; ii. to estimate the magnitude of the statistical association between deliberative component of the democracy and on-line media; iii. the impact of economic development on the evolution of
deliberative democracy and on-line communication. The main research questions are: “how could on line media determine the decreasing level of deliberative democracy?” and “is political polarization the effect of the on-line media fractionalization?”

The research hypothesis is that $h_1$: The increasing level of the on-line media is strongly associated to a low level of deliberative democracy. For testing this research hypothesis we use several data from secondary sources:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1- On-line media existence/ On line media fractionalization</td>
<td>V-Dem- Varieties of Democracy</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.v-dem.net/en/analysis/CountryGraph/">https://www.v-dem.net/en/analysis/CountryGraph/</a></td>
</tr>
<tr>
<td>X2- Democracy Index</td>
<td>V-Dem- Varieties of Democracy</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.v-dem.net/en/analysis/CountryGraph">https://www.v-dem.net/en/analysis/CountryGraph</a></td>
</tr>
<tr>
<td>Y - Deliberative Democracy Index</td>
<td>V-Dem- Varieties of Democracy</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.v-dem.net/en/analysis/CountryGraph">https://www.v-dem.net/en/analysis/CountryGraph</a></td>
</tr>
<tr>
<td>X3- GDP/ capita</td>
<td>World Bank</td>
</tr>
<tr>
<td></td>
<td><a href="https://data.worldbank.org/indicator">https://data.worldbank.org/indicator</a></td>
</tr>
<tr>
<td>X4- Social and Political Polarization</td>
<td><a href="https://www.v-dem.net/en/analysis/CountryGraph">https://www.v-dem.net/en/analysis/CountryGraph</a></td>
</tr>
</tbody>
</table>

Starting from these quantitative data we use as analytical model both a linear correlation and multi-linear equations of regressions as:

$$Y = a + b_1 x_1 + b_2 x_2 + \ldots + b_n x_n + u_{ij},$$

where $Y$= dependent variable, $X_{1,n}$= independent variables and $u_{ij}$= coefficient of residuals.

The research sample is based on 28 countries of the EU for the period 1992-2019 and 27 countries after the BREXIT in 2020. The data are analyzed in a temporal statistical series beginning to the formal building of the EU through Treaty on European Union (Maastricht, 7 February 1992). Data are analyzed through 1992 and 2020, including data related to the current COVID19 crises. Moreover we use comparative case studies for underlying several geographical differences in the distribution of the deliberative democracy index in Western and Eastern European political systems. Several differences could be explained through historical heritage and cultural patterns.

### 3. Statistical Results

This section presents the main empirical findings related to the impact of the on-line media fractionalization on the dynamics of the deliberative democracy. The main goal of deliberative democracy consists in “consensus” in the decision-making process [4]. This kind of consensus refers to collaboration between individuals for optimizing the political process in a stable democracy. The essence of deliberation consists in persuasion [5]. In this meaning, the general perspective of democracy in UE countries presents the Index of Democracy in terms of “flawed” democracy. Thus, the average value of Democratic Index is 7.34 on a scale between 1 and 10. The significance of this indicator is related to several values: 1-4- authoritarian political regimes; 4.01-6.00- hybrid political regimes; 6.01-8.00- flawed democracy; 8.01-10- full democracy. In the case of EU, the median value is 7.67 with standard deviation= 0.86. The confidence level with p=0.01 for democratic index is [6.89;7.77]. One of the main component
of the Democratic Index developed by V-Democracy Institute is represented by deliberative democracy. At the descriptive level, deliberative democracy has the average 7.30 with a standard deviation= 1.12. The confidence level with p=0.01 is represented by the following statistical values: [6.70; 7.89] with negative Skewness= -1.23. This statistical perspective reflects the image of the flawed democracy with several tendencies for hybrid political regime regarding the deliberative component.

**Figure 1. Democracy Index and Deliberative Democracy in EU countries**

The most important values for Democratic Index are registered in Scandinavia, with 8.39- Sweden, 8.49- Denmark, 7.96- Finland. Also in Q3 we can integrate Germany with 8.22 and Belgium with 7.91. In opposition, lowest values are incident in Eastern Europe: Romania- 4.91, Bulgaria- 5.75 and Hungary -6.41. This results confirms the sociological and historical cleavage between post-communist countries and Western democracies. The image of democracy in Eastern Europe is strongly associated with the post-authoritarian rule [6,7]. Beyond historical past, cultural variables could be a good predictor for explaining the evolution of democracy [8]. We agree the idea that democratic order should be strongly associated to way of agreement in public management [9].

In correlation with the Democracy Index we have to emphasize the role played by deliberative democracy in configuring stable and consolidated political systems. The deliberative component of democracy refers to the role played by citizens and civil society in generating an optimal formula for governance and cohabitation. Social capital and civil society are the main vectors for consolidate the democratic regimes [10,11]. Regarding the distribution of the deliberative democracy across EU we can observe that Scandinavian countries and Western Europe have the highest values for deliberation. Thus, in Q3 we can integrate several countries like: Sweden-8.74, Germany- 8.69, Denmark-8.68, Finland-8.2, Luxemburg -8.14, France-8.09 and Belgium-7.99. In contrast, all the countries from Balkans and Eastern Europe have smallest values regarding the deliberative component of the democracy: Romania-4.15, Croatia-4.84, Bulgaria-5.9 and Hungary- 5.56. The hybrid cultural model based on parochial and subject culture explain the current political and societal tendencies in this part of the EU.

Regarding the geographical distribution of the deliberative democracy the map below reflects the historical cleavage between democracy and post-communist order. The statistical distribution of Moran Index related to the first neighborhood is 0.8, which reflects a tendency for grouping cases and variables. Thus, we can identify three main clusters related to deliberative democracy’ geographical distribution: 1. the cluster based on Scandinavian
countries and Western democracies, with high values to democracy and deliberation; 2. the cluster related to Central Europe - with middle scores on both democracy index and deliberative democracy and 3. the cluster based on post-communist political regimes from Eastern Europe and Balkans. In this meaning we can underline the idea of an EU based on “three deliberative models”, explained by political past, historical heritage, political culture and economic development: a. participative and deliberative model, specific for full democracies; b. hybrid models based on participation and incremental evolution of the civil society, specific for Central Europe and c. an inertial model of deliberation, specific for post-authoritarian political regimes as Romania, Bulgaria and Hungary.

Figure 2. The map of Deliberative Democracy in EU countries

Related to the second research objective, this article explain the association between deliberative democracy and on-line media fragmentation. The statistical association between deliberative democracy and on-line media is negative with middle intensity ($R^2= 0.508$, $p=0.02$). This result confirms the fact that an increasing on-line media could determine low statistical rates/ scores for deliberative democracy. The association could be explained through a quadratic model like:

$$\text{Deliberative Democracy} = -2.038 \times \text{Online Media}^2 + 2.395 \times \text{Online Media} - 0.513$$

This quadratic model reflect that there is no direct causality between the increasing level of on line media and on line fragmentation and deliberative democracy. There are several catalysts in this model as political polarization and social polarization. The high level of social polarization through on-line media could be a good predictor for explaining the decreased level of deliberation and consensus. Social and political polarization, specific for post-authoritarian rule create the image of an atomistic society, with low rates of social interaction and high level
of symbolical or social divergence or conflict. Creating divergent opinions, digital media could interfere negatively with the main core of the democracy: dialogue, cooperation and social consensus.

**Figure 3. The correlation between on-line media and deliberative democracy**

The partial correlation between on-line media and social and political polarization is significant positive. In conditions of the on-line fractionalization, social and political polarization could determine the model of “flawed democracy” \( R^2 = 0.673, p=0.01 \).

**Figure 4. Vector Space of the Variables: Deliberative Democracy, On-Line Media and Social and Political Polarization**

In figure no.4 we present the vector space between deliberative democracy, on-line media fractionalization and social and political polarization. In this case we could observe that middle values of the on-line media are related with low values of the deliberative democracy and middle level of social and political polarization. This analytical method presents the nearest neighborhood between variables and reflect a middle impact of the on-line media fractionalization under the consistency of the social cohesion and the quality of the political
dialogue and deliberation. It is no surprise that identity issues of the participants in the public debate can trigger veritable pathologies of deliberation that could have a negative influence upon the very process of deliberative democracy. The polarization induced by social media can be regarded as a potentially dangerous factor in this respect [12].

Regarding the third research objective, this article presents the impact of the economic factor under the evolution of deliberative democracy in EU countries. Economic factor is a key-concept and variable for understanding democratic order. Although there is no deterministic relation between economy and democracy, scholars demonstrated that high economic growth rates are strongly associated with consolidated democracy [13,14,15].

Figure 5. The correlation between GDP/ capita and Deliberative Democracy

The economic impact related to deliberative democracy is presented in the figure no.5. We have estimated a linear association between the economic variables and the quality of the deliberation in EU countries ($R^2=0.465$, $p<0.001$). There is a middle but significant correlation between the increasing level of GDP per capita and the dynamics of the deliberative democracy between 1992 and 2020. Economic conditions for free market and entrepreneurship could increase the citizens interest in politics and could reduce the impact of the social and political polarization, generated by both on-line channels and socio-economic structure.

Synthesizing, we argue that the quality of deliberative democracy in EU countries is an important issue for political decision-makers, social actors and citizens. It depends on traditional variables as economic growth and the positive dynamics of GDP and the quality of the social capital. But, beyond this traditional model, the increasing level of on-line media and media fractionalization negatively interferes with the quality of dialogue, consensus and tolerance in a democratic regime. Although, we cannot underline a causal relation between the quality of deliberation and on-line media, we should present the fact that on-line communication and fractionalization is involved in social and political polarization.

4. Conclusions
The main empirical finding of this article is that the quality of democracy in EU countries is related to the quality of social and political dialogue. In this meaning, the main research direction of the study presents the evolution of democracy between 1992-2020. The diagnosis related to the quality of democracy in EU is interpreted in terms of “flawed democracy”. In the
context of “flawed democracy” we were interested to analyze the dynamics of the deliberative component. Statistical results underlines the classical geographical and historical cleavage between Western democracies and Eastern post-communist political systems. In this context, the study presents the relation between the evolution of the deliberative democracy and the evolution of the on-line media and on-line media fractionalization. We observed and measured a negative but significant statistical correlation between the quality of the deliberative democracy and the increased level of on-line media. The main vector involved in this equation is represented by the social and political polarization. Generating social polarization., On-line media could interfere with the quality of dialogue, consensus and deliberation in a stable or consolidated democracy. In correlation with the digital media, the study emphasizes the role played by economic factors as economic growth and GDP dynamics in creating optimal premises for social, political and economic cohesion.

References