# Cyberdemocracy? Information and Communication Technologies in Civil Society Consultations for Sustainable Development

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Information and communication technologies (ICT) are increasingly used to engage civil society in intergovernmental negotiations on sustainable development. They have emerged as a potential remedy to the democratic legitimacy deficit that pervades traditional mechanisms for civil society representation and, ultimately, intergovernmental policymaking. However, many observers have contested the benefits of ICT for democratization on both theoretical and empirical grounds. This article contributes to this debate by evaluating the democratic legitimacy of ICT in civil society consultations in intergovernmental policy, taking the numerous online dialogues of the 2012 UN Conference on Sustainable Development (Rio+20 conference) as a case study. The article argues that, despite its promise, ICT reinforce rather than reverse embedded participatory inequalities in a global context, and fail to substantially increase transparency and accountability. This prevents, in turn, a meaningful participation of civil society in intergovernmental negotiations, thus indicating the limits of "cyberdemocracy." KEYWORDS: ICT, civil society, sustainable development.

ONE OF THE MAIN CHALLENGES FACING GLOBAL GOVERNANCE TODAY IS THE growing democratic deficit of the intergovernmental policymaking system.<sup>1</sup> The lack of responsiveness of intergovernmental norms and policies to collective concerns and preferences as well as the lack of accountability of intergovernmental organizations and institutions are generating a crisis of legitimacy.<sup>2</sup> Resolving this crisis requires, among other things, the development of institutional mechanisms that allow citizens to participate in a meaningful way in the creation and implementation of global norms and policies.<sup>3</sup>

One widely cited example of such novel institutional mechanisms for global participatory governance is the creation of nine overarching categories,<sup>4</sup> called "Major Groups," in the context of the 1992 UN Conference on Environment and Development (UNCED) held in Rio de Janeiro. Through these new categories, "all concerned citizens" were envisioned to be able to participate in the UN activities in the field of sustainable development.<sup>5</sup> The Major Groups are based on organizing partners who act as facilitators between their constituencies and intergovernmental processes. Twenty years after its in-

ception, however, the system of Major Groups raises doubts about its capacity to offer all concerned citizens direct access to global norm production.<sup>6</sup>

As a consequence, researchers and practitioners have provided numerous reform proposals for further democratizing intergovernmental policymaking outside the Major Groups system. While some proposals—such as the increasing use of qualified majority voting in the  $UN^7$ —are mainly state centered, others give a stronger institutionalized role to civil society (i.e., the organizations, movements, and citizens who are engaged in negotiations and debates about the character of the rules with governments and international organizations).<sup>8</sup>

In particular, a number of proposals advocate the establishment of separate decisionmaking or consultative bodies in intergovernmental institutions such as an international forum of civil society within the UN,<sup>9</sup> a UN parliamentary assembly,<sup>10</sup> or a deliberative global citizens' assembly,<sup>11</sup> However, it is unlikely that these proposals will materialize in the foreseeable future as they lack support, particularly from most larger countries, at present.<sup>12</sup>

In this context, information and communication technologies (ICT) may offer a promise to overcome these constraints by providing alternative ways of direct participation. The Internet, in particular, appears to be an ideal channel to provide civil society with direct access to intergovernmental policymaking, given its character as a low-cost horizontal means of communication that transcends barriers of space and time.

And yet it remains an open question as to whether the Internet can indeed contribute to improving the democratic character of intergovernmental policymaking through the development of inclusive, transparent, and accountable channels for civil society participation. The existing scholarly work on the use of the Internet at local, national, and regional levels of governance shows a mixed picture. On the one hand, "cyberoptimists" argue that this technology can facilitate and even broaden the public participation that was lacking in twentiethcentury representative democracies. Internet-based participation is supposed, in this view, to promote political knowledge, cultivate citizenship, and produce more equitable and impartial policy outcomes, which in turn deepen democracy.<sup>13</sup> On the other hand, "cyberrealists" doubt the relevance of the Internet in these domains, citing two main reasons for why the Internet falls short in realizing its democratic promise.<sup>14</sup> First, cyberrealists argue that the extent to which online participatory processes attract significant new numbers of citizens to policymaking is less than clear. Second, they maintain that these processes are rarely tied in any accountable way to actual intergovernmental policymaking.

What then is the prospect for *cyberdemocracy* at the global level (defined here as the democratization of decisionmaking processes through the use of ICT)? At a time when global online consultations are proliferating, the debate for cyberdemocracy gains in importance. We contribute in this article to this debate by a detailed empirical study on recent experiences with global online consultations. Consultations through Internet-based discussion and voting platforms are used by governments and international organizations to solicit public input with regard to global norm production.

In this article, we analyze in detail the extent to which the use of the Internet in such civil society consultations in fact addresses the participatory biases that are often found in the analysis of traditional face-to-face participation.<sup>15</sup> Will the increasing use of the Internet in such consultations reduce the democratic legitimacy deficit that pervades global governance, especially in the field of sustainable development?<sup>16</sup> To address this question, we conducted a detailed empirical study of the Rio Dialogues, the series of online consultations that were organized around the 2012 UN Conference on Sustainable Development (Rio+20 conference), held in Rio de Janeiro. We introduce these dialogues in more detail in the following section.

The article is organized as follows. First, we present an overview of the Rio Dialogues and our methods of analysis. The sections thereafter delineate in detail the key indicators of democratic legitimacy employed in this article and empirically evaluate them for the Rio Dialogues. Specifically, we examine the inclusiveness of the dialogues, then the issues of effective participation, transparency, and accountability. Finally, we conclude the analysis and reflect on the results.

#### The Rio Dialogues

The Rio Dialogues were organized in the framework of the Rio+20 conference by the government of Brazil with the support of the UN Development Programme (UNDP) and the office of the executive coordinators of the UN for Rio+20. The Rio+20 conference itself has arguably been the largest-ever global summit on environmental protection and sustainable development; some have even hailed it as a global expression of democracy.<sup>17</sup> The Rio Dialogues, which aimed to foster discussion on ten topics related to sustainable development and to engage civil society in the decisionmaking process related to the conference, consisted of three phases.

First, the dialogues were launched through a digital platform<sup>18</sup> to provide civil society with a space for discussion (Phase 1—16 April to 3 June 2012). After filling out a form, participants could enter this digital space and share their experiences, express opinions, and contribute ideas. A number of academic experts were then tasked with facilitating the online discussions, with the participants having the opportunity to formulate their own recommendations and upload them on the platform. Participants could also express their support of their preferred recommendation(s) on the basis of a "like" feature similar to that available on social media. The academic experts then identified the ten most supported recommendations for each theme. The online discussions resulted in a set of exactly 100 recommendations. These were then transferred to an open website<sup>19</sup> and submitted to the vote of a broader public for ten days (Phase 2—6 to 15 June 2012).

This vote resulted in ten recommendations (the most voted recommendation from each of the ten dialogues). This final top ten was presented by the facilitators of the online discussions to the participants in the onsite dialogues (Phase 3—16 to 19 June 2012). The results of the dialogues were eventually conveyed to governments in the high-level roundtables convening in parallel with the plenary meetings of Rio+20.

Overall, the discussions on the online platform engaged more than 10,000 participants, who submitted over 843 recommendations (Phase 1). Additionally, more than 55,000 people cast their vote to select their preferred recommendations among the initial set of 100 (Phase 2).

As this article aims to evaluate the democratic legitimacy of Internet-based civil society consultations, we concentrate on the online part of the Rio Dialogues (Phases 1 and 2). The parallel off-line part resembled more a traditional conference, consisting of onstage dialogues between ten expert panelists, with some question-and-answer time for an audience of about 1,300 people.

Building on the work of global democracy scholars, we use the dimensions of input and throughput legitimacy in evaluating the democratic legitimacy of the Rio Dialogues. *Input legitimacy* refers to the inclusiveness and effectiveness of participation within an online consultation.<sup>20</sup> *Throughput legitimacy* is satisfied when civil society consultations are transparent and accountable.<sup>21</sup> We operationalize these two defining elements of democratic legitimacy into the following four sets of indicators: inclusiveness, effective participation, transparency, and accountability. The precise operationalization of these indicators is discussed in detail in the relevant sections and further summarized in Table 1.

We assessed the democratic legitimacy of the online Rio Dialogues with both quantitative and qualitative empirical data.<sup>22</sup> To assess inclusiveness, we collected quantitative data from two main sources. First, we gathered sociodemographic data on the set of participants in the online discussion platform (Phase 1) through a self-designed anonymous web survey. Our survey questions aimed to gather information regarding the gender, age, country of origin, and level and field of education of the participants.<sup>23</sup> We e-mailed the survey to the 330 participants who registered on the web platform of the Rio Dialogues to partake in the discussion on "Sustainable Development as an Answer to the Economic and Financial Crises," which was facilitated by the Institute for Sustainable Development and International Relations (IDDRI). The evaluation of inclusiveness on the web platform of the Rio Dialogues is limited in its scope because we could not access the database of the participants who took part in the other nine online discussions. We therefore base our assessment of inclusiveness on a limited sample of participants. Twelve percent of the initial 330 participants responded to our survey.

Second, we collected sociodemographic information on the set of participants in the online vote (Phase 2). The data was provided by Seed Media Group<sup>24</sup> and disaggregated by gender, age, and country of the voters.

Criteria	Indicators	
Inclusiveness	Democratic inclusiveness	<ul> <li>Equal participation of women and men</li> <li>Equal participation of age categories</li> <li>Equal participation of Human Development Index (HDI) level group of countries</li> </ul>
	Substantive inclusiveness	• Equal representation of policy preferences
Effective Participation	Empowerment	<ul> <li>Codesign</li> <li>Interaction with governments</li> <li>Decisive power</li> <li>Collaborative learning</li> </ul>
Transparency	Substantive	<ul> <li>Number of reference documents available on the online platform</li> <li>Diversity of sources of reference documents</li> </ul>
	Procedural	<ul> <li>Number of procedural documents available on the online platform</li> </ul>
Accountability	Internal	<ul> <li>Feedback report from organizers to participants</li> <li>Feedback questionnaire from participants to organizers</li> </ul>

**Table 1: Operationalization of Democratic Legitimacy** 

Third, we collected qualitative information to assess effective participation, transparency, and accountability. Evidence comes, first, from a desk review of documents provided via Internet (either by e-mail or on the online platform) by the government of Brazil and UNDP to the participants and facilitators. These documents included the concept note of the Rio Dialogues, the thematic reference documents available on the online platform, and feedback reports on the outcomes of the dialogues. Evidence also comes from twenty-four semistructured interviews, conducted on the condition of confidentiality; interviewees are indicated only by a general title in the text (e.g., as "a civil society participant" or "a UN officer") and by number (e.g., "Interviewee 2" in the endnotes).

As IDDRI both facilitated and participated in the online dialogues, we initially identified interviewees within the IDDRI database based on their level of engagement in the dialogues. Then, we further targeted interviewees based on snowball sampling. Although this sampling method does not offer the representativeness of a random selection approach, it nonetheless allowed us to access a broad-enough range of participants. Specifically, we interviewed representatives from international and national nongovernmental organizations (NGOs) and social movements as well as organizers from the three entities coordinating the dialogues: the UNDP, members of the bureau of the executive coordinators for Rio+20, and the government of Brazil. We then systematically transcribed the interviews from which we identified the key qualitative data on the basis of our democratic legitimacy indicators. The interviewees made no distinction between the two phases of the online dialogues, and our results thus concern both Phase 1 and Phase 2.

## Inclusiveness

The criterion of inclusiveness posits that an online consultation is democratically legitimate once it includes a broad range of actors who are representative of global civil society. Such representativeness would require that the set of included participants matches the demographics of the global population, including the ratios of women to men, young people to other ages, and richer to poorer countries. We defined these categories in accordance with the Seed Media Group,<sup>25</sup> with age categories of  $\leq$  thirty-four years old, thirty-five to fifty-four,  $\geq$  fifty-five; and country categories based on the Human Development Index (HDI), with low HDI countries, medium HDI countries, high HDI countries, and very high HDI countries. The results of our survey of the participants in the online discussion on sustainable development as an answer to the economic and financial crises give a primary indication of the inclusiveness of the dialogues (Phase 1), which we then corroborated by the voting results on the 100 recommendations (Phase 2).

As for possible gender biases, we found that participation was fairly balanced across gender, both in the online discussions (Phase 1, with 58 percent of the participants who answered the online survey being men) and in the online vote (Phase 2, with 52 percent of the total 55,317 voters being women). The demographics of the set of participants in the online Rio Dialogues reflect to a certain extent the gender ratio of the world's population in 2012, where 50.4 percent were men and 49.6 percent were women.<sup>26</sup>

In terms of age representation, young adults ( $\leq$  thirty-four years old) participated less than other age categories. While young adults account for 60 percent of the world's population, their participation was much lower in the online discussions (Phase 1), with 34 percent, and even lower in the online vote (Phase 2), with 27 percent. Conversely, the group of thirty-five- to fiftyfour-year-old adults accounts only for 25 percent of world population but participated with 48 percent in the first phase and 36 percent in the second phase. The older generation, aged fifty-five years and older, makes up 15 percent of the world's population and also participated in rather equal shares in the dialogues, with 18 percent of participants in the first phase and even 37 percent in the second phase (Figure 1).<sup>27</sup> In sum, and maybe surprisingly, the youth those under the age of thirty-five years old—are significantly underrepresented in 'he online Rio Dialogues.

As for biases among the representativeness in terms of countries, we found, to start with, that 23 percent of the participants in the online dialogue

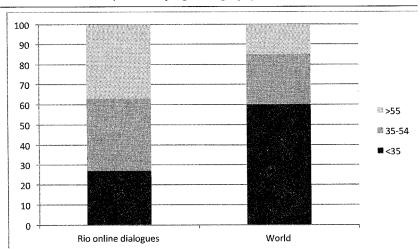


Figure 1 Distribution of the Participants in the Online Rio Dialogues (Phase 2) and the World Population by Age Category (percentage)

Source: UN Population Division database, 2012. https://esa.un.org/unpd/wpp/dataquery.

on sustainable development as an answer to the economic and financial crises (Phase 1) were from Brazil, the host country of the conference, hence, creating a strong pro-host bias that could be expected, though probably not to this degree. More importantly, however, is the generally large bias toward very high HDI countries. These were strongly overrepresented (with 57 percent) as compared with medium and low HDI countries, which accounted only for 10 percent and 5 percent, respectively, of all respondents to our survey (Figure 2). The results of the global vote on recommendations (Phase 2) show similar trends: although all 193 countries were represented by at least one voter, 76 percent came from a very high HDI country, even though these countries accounted in 2012 for only 17 percent of the world's population (Figure 2). On the other hand, people living in developing countries (low, medium, and high HDI levels) account for 83 percent of the world's population, but contributed merely 24 percent of the participants in the dialogues (Figure 2).<sup>28</sup>

Additionally, nearly 50 percent of the voters came from only four Englishspeaking countries—namely, the United Kingdom, the United States, Canada, and Australia—while these countries account for only 6.2 percent of the world's population. Conversely, while Chinese and Indians account for almost 40 percent of the world's population, they represented only 1.7 percent of the total participants in the second phase of the online Rio Dialogues (Figure 3).

Although the organizers of the consultation acknowledged that the voting results were not intended as a complete representation of the opinion of global

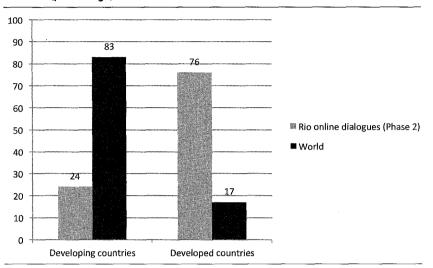


Figure 2 Distribution of the Participants in the Second Phase of the Rio Dialogues (left) and of the World Population (right) by Level of Development (percentage)

civil society, the overrepresentation of voters from very high HDI countries created a likely bias of the results of the global vote. Indeed, the recommendation that gathered most votes globally matched the preferred recommendation of the voters from very high HDI countries in nine dialogues out of ten, whereas it matched the preferred recommendation of the voters from low HDI countries in only five dialogues out of ten. In other words, the preferences of very high HDI voters were excluded in only one dialogue out of ten while the preferences of low HDI voters were not selected in five dialogues out of ten (Table 2).

The results of our online survey further indicate that civil society actors who participated in the online discussions all completed tertiary education, most of them holding a master's degree and some even a PhD, often in areas closely linked to the issues addressed in the dialogues such as environment and development studies, economics and finance, or political science. It was therefore difficult to engage civil society actors beyond those who already had the knowledge and skills to participate. Therefore, we can assume that participation from lay citizens and grassroots organizations, especially those representing indigenous communities, remained low, all the more since the discussions on the platform were held only in English. A civil society participant representing an NGO corroborated this assumption, stressing that "if you go to these online platforms, it means that you are already informed; if

Source: UN Development Programme, Human Development Index, 2012. http://hdr.undp.org /en/data.

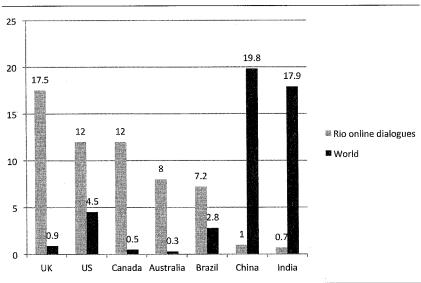


Figure 3 Distribution of the Rio Dialogues Voters (left) and World Population (right) by Selected Countries (percentage)

Source: Population Division database, 2012. https://esa.un.org/unpd/wpp/dataquery.

you have the motivation to contribute, it means that you are already involved in the process and that you are part of civil society networks. It's not for the general public."<sup>29</sup>

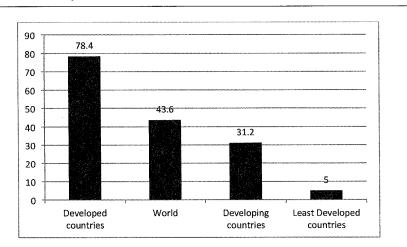
In sum, although the Internet reduces the cost of participation, our results indicate that, as far as the Rio Dialogues are concerned, the use of the Internet in global consultations does not increase inclusiveness. On the contrary, online consultations tend to reproduce participatory biases that favor the participation of Northern-based, well-resourced, and English-speaking civil society actors. Our results demonstrate that the Internet has a positive relation to inclusive-ness only as long as people have Internet access as well as the capacities and skills to use it. The digital divide, understood as the differences between and within countries in terms of their levels of ICT development, remains important. Globally, there are 4.3 billion people not yet using the Internet and more than 90 percent of them are from the developing world.<sup>30</sup> In 2014, 78 percent of households in developed countries had Internet access, compared with 31 percent in developing countries and 5 percent in least developed countries (Figure 4).<sup>31</sup>

Additionally, the quality of Internet access is unequal as differences in broadband speed persist between developed and developing countries. International bandwidth is a key indicator to gauge the quality and speed of Inter-

Dialogue	Top Recommendation from Voters from Countries with Very High HDI	Top Recommendation from Voters from Countries with Low HDI	
Sustainable Cities and Innovation	Promote the use of waste as a renewable energy source in urban environments		
Economics of Sustainable Development	Phase out harmful subsidies and develop green tax schemes	Promote a holistic approach to sustainable development, taking into account environmental, economic, political, and social aspects	
Sustainable Development as an Answer to the Economic and Financial Crisis	Promote tax reforms that encourage environmental protection and benefits the poor	Educate future leaders about sustainable development (PRME Initiative)	
Sustainable Energy	Take concrete steps to eliminate fossil fuel subsidies	Educate people about energy efficiency	
Unemployment and Migrations	Ensure all jobs and workplaces meet minimum safety and health standards	Put education in the core of the Sustainable Development Goals agenda	
Water	Secure water supply by protecting biodiversity, ecosystems, and water sources		
Food and Nutrition Security	Promote food systems that are sustainable and contribute to improvement of health		
Sustainable Development for Fighting Poverty	Promote global education to eradicate poverty and to achieve sustainable development	Promote grassroots innovations to fight poverty and achieve sustainable development	
Forests	Restore 150 million hectares of deforested and degraded lands by 2020	Governments should support agroforestry as a promising alternative to balance the need for food and fuel wood while reducing pressure on natural forests	
Oceans	Avoid ocean pollution by plastics through education and community collaboration		

#### Table 2: Divergences and Convergences Between Low HDI Voters' Top Recommendation, Very High HDI Voters' Top Recommedation, and Global Top Recommendation

*Note:* A recommendation in bold indicates that there is convergence with the global top recommendation. HDI, Human Development Index; PRME, Principles for Responsible Management Education.



#### Figure 4 Percentage of Households with Internet Access by Level of Development, 2014 (estimated)

*Source:* International Telecommunication Union, World Communication/Information and Communication Technologies Indicators database, 2014. http://www.itu.int/en/ITU-D/Statistics/Pages /publications/wtid.aspx.

net networks. Recent data show that there is almost five times as much international bandwidth per user available in developed countries compared to developing countries.<sup>32</sup> Finally, within developing countries, the rural-urban divide in terms of Internet access and use is pronounced. Access to the Internet is extremely low for rural households in developing countries, while rural households in developed countries enjoy access comparable to their urban counterparts. Considering that people living in rural areas in developing countries generally have a lower socioeconomic status compared with their urban counterparts, online consultations therefore fail to bring the voices of the most marginalized populations to intergovernmental policymaking.

#### **Effective Participation**

Secondly, we consider an online consultation to be democratically legitimate from an input legitimacy perspective if participants participate effectively. We define *effective participation* as the capacity of participants to monitor and influence the online consultation process and outcomes. Although caution should be raised since the effectiveness of participation depends on each actor's expectations and the goals they assign to the participatory process, it can nonetheless be measured by a number of qualitative and quantitative criteria.

## Codesign

First, to effectively take part in the online consultation, participants should have the opportunity to codesign the process, including setting the agenda and rules of the consultation and selecting the facilitators and panelists and the background information. This is important because it directly impacts issue framing; that is, how the sustainable development issue in question was conceptualized prior to or during the consultation. As such, codesign has been identified as one way that influences the process.<sup>33</sup>

In this respect, we found, however, that the organization of the Rio Dialogues was mainly top-down and led by the government of Brazil. The other two institutions involved played only a supportive role in providing their expertise on web-based discussion platforms<sup>34</sup> (UNDP) and in coordinating outreach activities (executive coordinators for Rio+20). The topics, format, and facilitators of the online dialogues were thus selected by the highest instances of the Brazilian government: for instance, President Dilma Rousseff's office decided on the ten topics of the dialogues.<sup>35</sup> While the government of Brazil incorporated a few demands from the Brazilian civil society, such as a tenth topic on forests,<sup>36</sup> overall civil society actors remained excluded from the design of the consultation. The Brazilian civil society initially saw the Rio Dialogues as a positive initiative for an honest and inclusive discussion on the issues to be addressed in the Rio+20 conference. However, as the organization moved forward, the dialogues lost legitimacy because the process was not participatory from the ground up.<sup>37</sup>

Although civil society actors did not have their say in setting the agenda, procedures, and output format of the dialogues, the academic experts in charge of facilitation were given some leeway to frame the online discussions according to what they themselves deemed most relevant. In each online discussion, the facilitators developed and selected respectively kick-started messages and reference documents aimed to engage civil society actors and to structure and stimulate the discussions. A UNDP facilitation support staff then reviewed and agreed on these messages and documents.<sup>38</sup> In the online discussion on food and nutrition security, for instance, one of the facilitators developed structural questions in such a way as to steer the discussion on food security away from agriculture issues, which, he argued, are often the only focus in mainstream debates on food security.<sup>39</sup> In addition, the government of Brazil invited facilitators to propose a first set of recommendations so as to "set the tone."<sup>40</sup>

In sum, our results indicate that the use of the Internet in global consultations does not allow for a higher ownership of the process by civil society actors. Instead, the design of the consultations mainly depends on the organizers' conception of the consultation and the extent to which its organization should be collaborative.

## Interaction with Governments

Second, effective participation requires that all civil society actors have the opportunity to engage in direct dialogue with international organizations and

governments. Interaction is important because it allows for identifying shared interests and developing relationships among themselves. Therefore, the more interaction with governments, the more chances civil society participants will have to influence their positions.

In the online Rio Dialogues, however, interaction with representatives from governments was low, simply because their participation in the dialogues was discouraged. The website of the Rio+20 conference indeed specified that "there [would] be no participation of governments or UN agencies."<sup>41</sup> Similarly, the concept note of the dialogues stipulated that they were a "space created for an open and innovative discussion amongst the representatives of civil society about ten priority issues in the international agenda relating to sustainable development."<sup>42</sup>

Such lack of direct dialogue with delegates created significant frustration among those civil society participants who considered the space as an opportunity to break down the barriers between governments and civil society. A civil society participant representing an international NGO bluntly stated that "you need to have governments in the discussions; civil society organizations talking among themselves is useful if we are doing it 10% of the time, otherwise it's just a waste of time; it's bad participation."<sup>43</sup>

Again, our results indicate that the degree of interaction between civil society actors and representatives of governments is not correlated with the use of online participatory methods, but rather depends on the decisions made by the organizers of the consultation.

#### **Decisive** Power

Third, effective participation would entail that participants in a global online consultation have decisive power; that is, the right to produce recommendations and decide on those either by vote or consensus. Such a decisionmaking role of participants is important because it provides participants with an opportunity to share authority and, eventually, increases their chances to influence negotiations.<sup>44</sup>

On the one hand, the innovative technical features developed in the online platform were empowering. Participants indeed had the opportunity to craft their own recommendations and support the recommendations they preferred. This last feature allowed participants to keep track of the support garnered by their input or recommendation. Similarly, the voting system allowed them to trace whether their input or recommendation ended up in the final top ten. Besides, such a system resulted in the prioritization and selection of ten recommendations for the future that civil society wants.<sup>45</sup> This clear and succinct output may eventually be more powerful and influential than a consultation report.<sup>46</sup>

Because the online dialogues were a pioneering exercise and therefore a learning process, their technical features may also have hampered effective participation. For instance, some participants claimed that there were too many participatory tools and their relative use lacked clarity. On the online platform, participants could indeed formulate recommendations, participate in discussions and blogs, upload articles, and comment on all of the above-mentioned features. A UN officer recognized that "most of the Dialogues looked like a forest of comment, blogs, articles, and discussions."<sup>47</sup> The lack of legibility and intuitiveness of the web platform may have overwhelmed those participants lacking skills and resources, and who were eventually less able to support their position. For instance, the most-voted recommendation from the dialogue on energy, "Take concrete steps to eliminate fossil fuel subsidies," received twice as much support as any other recommendation from any other dialogue. In fact, the international NGO Avaaz led an online campaign on its website to get its network to vote for this recommendation. Therefore, the civil society participants who were best able to get their preferences in the final top ten recommendations were the most organized, with significant financial and human resources and communication and social mobilization strategies.

Therefore, the Internet has a positive impact on the capacity of civil society participants to have a decisive role in the consultation only to the extent that (1) the organizers of the consultation are willing to share authority; (2) the participatory tools are simple and few in number; and (3) the civil society actors themselves have the capacity to participate and mobilize voters.

#### Collaborative Learning

Fourth, effective participation would require that an online consultation allows for collaborative learning and ultimately triggers mutual understanding among civil society participants, which depends on the degree of interaction among participants. This is important because, by sharing experiences, collaborative learning is thought to facilitate better decisions as both substantive and procedural knowledge is gained.<sup>48</sup> Besides, mutual understanding may foster the building of coalitions between civil society actors and strengthen their negotiating position and eventual influence.

On the online platform, however, interaction among civil society participants was low: according to facilitators, 15 percent of the participants came to the platform for continuous interaction while 85 percent came for one-time contributions.<sup>49</sup> Participants used the platform as a "drop box" to upload position papers and formulate recommendations rather than as a space for live discussion. Therefore, civil society participants did not enter the platform with a learning objective.

Moreover, some participants from civil society considered that the space provided on the online platform to craft their recommendations was too small to get into the subtleties of the issue considered, and thus to disseminate knowledge and trigger learning. The ideal format for the recommendations delineated by the government of Brazil was a title specifying what should be done and by whom, and an explanation of three to six lines going over pros and cons with examples.<sup>50</sup> Therefore, the online dialogues resulted in broad, simplified, and non-technical recommendations,<sup>51</sup> which might eventually have harmed the credibility of civil society and its influence on the Rio+20 conference.

Yet the space created through the web platform still was useful because it allowed identifying the issues that could garner consensus, and may have in this sense triggered some mutual understanding and the creation of new alliances among civil society participants.<sup>52</sup>

In sum, our results indicate that the capacity of participants to monitor and influence the online consultation process and outcomes was undermined in the online Rio Dialogues. The criteria of codesign, decisive power, and collaborative learning were only partly fulfilled while interaction with governments was not fulfilled at all. However, the extent to which effective participation (or the lack of) is attributable to Internet use is not always clear. In particular, codesign, decisive power, and interaction with governments rather depend on political decisions made by the organizers of the consultation.

#### Transparency

Did the dialogues enhance the transparency of the Rio+20 conference process? We understand *transparency* here as the degree to which information is available to civil society in a way that enables it to have an informed voice in decisions or to assess the decisions made by governments.<sup>53</sup> We consider an online consultation transparent if both substantive and procedural elements of the transparency notion are met.

First, the criterion of substantive transparency would require an online consultation to enhance access to and dissemination of information related to the substance of the consultation. Specifically, participants should be provided with reference documents stemming from a variety of sources (including academia, international organizations, and NGOs) that set out the challenges of the theme of the consultation.

In the Rio Dialogues, the Internet provided better access to and dissemination of information on the topics of the discussions. Six to fourteen reference documents (i.e., briefs, notes, papers, and reports), prepared by academic facilitators with the support and oversight of UNDP staff, were available on each of the online discussion pages.<sup>54</sup>

However, substantive transparency was limited in the diversity of the sources from which the reference documents were selected. According to the list of documents available on the online platform in October 2014, in eight out of ten dialogues, all reference documents came from international organizations, either from specialized agencies of the UN or international financial institutions. Only two out of ten dialogues included reference documents authored by academic institutions or NGOs.

Second, the criterion of procedural transparency would expect an online consultation process to provide information on all procedures, specifically the access to and dissemination of information related to the consultation process and outputs. In the case of the Rio Dialogues, however, the potential of the Internet for increasing procedural transparency was not fully materialized. The government of Brazil sent a concept note to participants, detailing the aims of the online dialogues, the different stages of the process, and its technical features. Additionally, information notes for participants on how to join the online dialogues were available on the website of the Rio+20 conference. However, to the best of our knowledge, this information was not available on the online platform.

Furthermore, some procedural rules were not clearly defined by the organizers and not communicated to the participants. For instance, the criteria for the selection of recommendations were not transparent. Officially, facilitators selected the recommendations according to how much support they received and to their relevance. Yet as this last criterion was subjective, the selection of recommendations eventually depended on the good judgment of the facilitators whose decisions were likely to be biased toward their own preferences. A representative from the Brazilian government acknowledged that "the main difficulty of Internet use in civil society consultations is that, from this mass of contributions, it is sometimes hard to separate what is important from what is not. There will always be some degree of subjectivity in this decision."<sup>55</sup>

In addition, there was an overall lack of traceability of the contributions uploaded by civil society participants on the online platform. In some cases, participants were upset by the final reports and recommendations produced by the facilitators because they did not match their initial input. A participant from civil society referred to the lack of procedural transparency as one of the major complaints formulated by civil society actors who "send their remarks and bullet points to the consultation but then . . . feel like it goes into a black hole [or that] it's not used, or [that international organizations or governments] just really pick up what they want."<sup>56</sup>

Such lack of procedural transparency has implications in terms of accountability as well: indeed, without appropriate follow-up information, civil society cannot make accountability claims to UN and governments representatives. We turn to this point below.

## Accountability

Accountability is conceptualized as the capacity of civil society participants to exercise oversight and constraint on the making of consultation outputs and their effective integration into intergovernmental negotiations.<sup>57</sup> There are two types of accountability: internal and external.<sup>58</sup>

First, we define *internal accountability* as accountability to the people inside a process or institution.<sup>59</sup> It is an accountability relationship that institutionally links civil society participants in a consultation with the cochairs and member states of the intergovernmental negotiations for which civil society input is sought. Second, *external accountability* is accountability to people outside the acting entity.<sup>60</sup> It refers to the accountability relationship between the actors who do not have the opportunity to participate in the online consultation but whose lives may be affected by the policy process in which it is embedded.

However, as we lack data from civil society representatives or other actors who did not directly participate in the dialogues, we focus here alone on internal accountability. We evaluate internal accountability using two criteria. First, we determined whether the organizers provided feedback report(s) to the participants on the outputs of the online consultation and its impacts on intergovernmental negotiations (top-down feedback). Second, we determined whether the participants were able to provide feedback information (e.g., comments, opinions) on the consultation and its outputs (bottom-up feedback).

#### Top-down Feedback

Each report of an online discussion was written by the academic facilitators and uploaded onto the online platform. In addition, participants received an email with the dialogues' final report that detailed the set of thirty recommendations presented to governments during the Rio+20 conference. However, the organizing parties did not provide participants with follow-up information on how the Rio Dialogues in general and their contribution in particular affected the Rio+20 conference process and outcomes. Without this specific information, participants could not formulate accountability claims vis-à-vis the organizers. In fact, many civil society participants as well as the facilitators did not have a clear idea of exactly how the recommendations were to fit into the official segment of the Rio+20 conference, nor did they have a clear idea of the potential policy implications of the dialogues' outputs after Rio+20.<sup>61</sup>

Although the recommendations from the dialogues were incorporated in the annexes of the report of Rio+20, such a document does not have any legal value and cannot be taken up in future negotiations by civil society to hold international organizations and governments accountable.<sup>62</sup> Besides, as a UN officer put it,

You can have all these voices and make all these consultations but if it doesn't feed into the process, who's going to write the reports to these people saying "here's how what you said affected the intergovernmental process, here's how what you said affected what the world is going to do"? Nobody has the mandate to do that. And if we had to do that, people [at the UN or governments] would be much less willing to do more consultations for the sake of doing consultations. Because they would have to report back.<sup>63</sup>

Therefore, while increasing access, Internet use in civil society consultations may actually decrease accountability since the organizers often lack the capacities to process, address, and report back on an ever increasing amount of civil society contributions.

## Bottom-up Feedback

Regarding bottom-up feedback, civil society participants were not given the possibility to comment on draft versions of the facilitators' reports mainly because of time constraints, nor were they given the opportunity to provide their feedback on the online consultations. However, UNDP asked the facilitators for their opinion about the discussions, recommendations, and voting phases of the dialogues as well as the technical features of the online platform and the voting site. They also provided their suggestions on whether and how future online dialogues needed to be improved.<sup>64</sup>

All in all, the use of the Internet in the Rio Dialogues did not foster internal accountability between governments and international organizations, and civil society. In fact, the only accountability relationship was between UNDP, the main entity in charge of coordinating the online phases of the Rio Dialogues, and the government of Brazil, from which it received financial support and moral authority and which led the entire consultation.

## Conclusion

With the example of the Rio Dialogues, our research showed that cyberdemocracy is not a panacea for the lack of democratic legitimacy of intergovernmental negotiations. On the one hand, online civil society consultations have substantial strengths, including their openness and nonhierarchical nature compared to, for instance, the more traditional face-to-face dialogues between representatives of Major Groups and governments. On the other hand, using the Internet in consultations also brings major limitations that tend to reproduce the biases that characterize face-to-face participation based on the representation of broad constituencies.

Specifically, the use of the Internet may reinforce exclusion and favor the participation of the most powerful and well-organized civil society organizations over that of a broader and unspecialized public. Furthermore, the potential of online consultation tools for increasing transparency and accountability in intergovernmental negotiations on sustainable development issues has not yet been materialized either: although it allows for greater access to and sharing of substantive information, Internet use has not fostered procedural transparency and accountability. In some cases, it might have even reduced the capacity of civil society participants to hold governments and international organizations accountable concerning the input they provided.

The Internet is thus only a tool: whether it can effectively involve civil society in intergovernmental negotiations will have much to do with what the organizers and members of this process decide to do with such technologies. Consequently, the performance of such technologies in enhancing democratic legitimacy depends on the willingness of international organizations and governments to involve civil society beyond tokenistic practices and on the interest and ability of civil society actors to engage in such interactions.

#### Notes

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1. See, for example, Jan Aart Scholte, "Civil Society and Democracy in Global Governance," *Global Governance* 8, no. 3 (2002): 281–304.

2. See, for example, Manuel Castells, "The Internet Galaxy: Reflections on the Internet, Business, and Society," Clarendon Lectures in Management Studies (2001); Robert O. Keohane, "Global Governance and Democratic Accountability," in David Held and Matthias Koenig-Archibugi, eds., *Taming Globalization: Frontiers of Governance* (Oxford, UK: Polity Press, 2003), pp. 130–158; Peter M. Haas, "Addressing the Global Governance Deficit," *Global Environmental Politics* 4, no. 4 (2004): 1–15.

3. Manuel Castells, "Global Governance and Global Politics," PS: Political Science and Politics 38, no. 1 (2005): 9–16.

4. The Major Groups include Business and Industry, Children and Youth, Farmers, Indigenous Peoples, Local Authorities, Non-governmental Organizations, Scientific and Technological Community, Women, and Workers and Trade Unions.

5. The outcome document of the UNCED, the Rio Declaration on Environment and Development, stipulates in its Principle 10 that "environmental issues are best handled with the participation of all concerned citizens, at the relevant level." A/CONF.151/26 Vol. 1. *Rio Declaration on Environment and Development* (New York: United Nations Department of Economic and Social Affairs, Division for Sustainable Development, 1992).

6. For a review of these issues, see Barbara Adams and Lou Pingeot, *Strengthening Public Participation at the United Nations Conference on Sustainable Development: Dialogue, Debate, Deliberation, Dissent* (New York: United Nations Department of Economic and Social Affairs, Division for Sustainable Development, 2013).

7. Frank Biermann, Earth System Governance: World Politics in the Anthropocene (Cambridge, MA: MIT Press, 2014).

8. Mary Kaldor, "Civil Society and Accountability," Journal of Human Development 4, no. 1 (2003): 5–27.

9. See the report of the Commission on Global Governance, *Our Global Neighbourhood* (New York: Oxford University Press, 1995).

10. See, for example, ibid.; Richard Falk and Andrew Strauss, "Toward Global Parliament," Foreign Affairs 80, no. 1 (2001): 212–220; Andreas Bummel, The Composition of a Parliamentary Assembly at the United Nations (Berlin: Committee for a Democratic UN, 2010); D. Heinrich, The Case for a United Nations Parliamentary Assembly (Berlin: Committee for a Democratic UN, 2010). See also Campaign for a United Nations Parliamentary Assembly, http://en.unpacampaign.org.

11. See, for instance, John Dryzek, *Deliberative Global Politics Discourse and Democracy in a Divided World* (Oxford, UK: Polity Press, 2006); John Dryzek, André Bächtiger, and Karolina Milewicz, "Toward a Deliberative Global Citizens' Assembly," *Global Policy* 2, no. 1 (2001): 33–42.

12. Biermann, Earth System Governance, p. 143.

13. See, for example, Jay G. Blumler and Stephen Coleman, Realising Democracy Online: A Civic Commons in Cyberspace (London: Institute of Public Policy Research, 2001); Castells, "The Internet Galaxy"; Brian S. Krueger, "Assessing the Potential of Internet Political Participation in the United States: A Resource Approach," American Politics Research 30, no. 5 (2002): 476-498; Bruce A. Bimber, Information and American Democracy: Technology in the Evolution of Political Power (New York: Cambridge University Press, 2003); Michael Froomkin, "Technologies for Democracy," in Peter M. Shane, ed., Democracy Online: The Prospects for Political Renewal Through the Internet (New York: Routledge, 2004), pp. 3-20; Archon Fung, Empowered Partic*ipation—Reinventing Urban Democracy* (Princeton: Princeton University Press, 2006); Andrew R. Glencross, 2007, "E-participation in the Legislative Process: Procedural and Technological Lessons from Estonia" (London: New Political Communication Unit of the Royal Holloway University of London, 2007), http://newpolcom.rhul.ac.uk /politics-web-20-paper-download/Glencross E Participation Estonia Royal Holloway .pdf, accessed 31 October 2014; Cass R. Sunstein, Republic 2.0 (Princeton: Princeton University Press, 2007); Terry Flew, New Media: An Introduction (Melbourne: Oxford University Press, 2008).

14. See, for example, Aina Ostling, "How Democratic Is E-participation?" in Peter Parycek, Manuel J. Kripp, and Noella Edelmann, eds., *CeDEM11: Conference for Edemocracy and Open Government* (Krems, Austria: Edition Donau-University Krems, 2010), pp. 59–70; Peter M. Shane, *Democracy Online: The Prospects for Political Renewal Through the Internet* (New York: Routledge, 2004); Stephen Coleman, ed., *Connecting Democracy—Online Consultation and the Flow of Political Communication* (Cambridge, MA: MIT Press, 2012).

15. See, for example, Oren Perez, "E-democracy, Transnational Organizations, and the Challenge of New Techno-intermediation," in Stephen Coleman and Peter M. Shane, eds., *Connecting Democracy—Online Consultation and the Flow of Political Communication* (Cambridge, MA: MIT Press, 2012), pp. 357–376.

16. See, for example, Peter M. Haas, "Addressing the Global Governance Deficit," *Global Environmental Politics* 4, no. 4 (2004): 1–15; David Held and Matthias Koenig-Archibugi, "Introduction," *Government and Opposition* 39, no. 2 (2004): 125–131.

17. Frank Biermann, "Curtain Down and Nothing Settled: Global Sustainability Governance after the 'Rio+20' Earth Summit," *Environment and Planning C: Government and Policy* 31, no. 6 (2013): 1099–1114.

18. See the Rio Dialogues web platform, www.riodialogues.org.

19. See the results of the final vote, including disaggregated data by continent, by Human Development Index (HDI), by age, and by gender, at http://vote.riodialogues.org.

20. Karin Bäckstrand, "Democratizing Global Environmental Governance? Stakeholder Democracy After the World Summit on Sustainable Development," *European Journal of International Relations* 12, no. 4 (2006): 467–498.

21. Vivien A. Schmidt, *Democracy in Europe: The EU and National Polities* (New York: Oxford University Press, 2006). Höreth (1998, 1999), Bäckstrand (2006), or Bursens (2009) frame transparency and accountability as part of input legitimacy while Bekkers and Edwards (2007) frame accountability as part of output legitimacy. Bäckstrand, "Democratizing Global Environmental Governance? Stakeholder Democracy After the World Summit on Sustainable Development"; Marcus Höreth, *The Trilemma of Legitimacy: Multilevel Governance in the EU and the Problem of Democracy* (Bonn: Centre for European Integration Studies, 1998); Marcus Höreth, "No Way Out for the Beast? The Unsolved Legitimacy Problem of European Governance," *Journal of European Public Policy* 6, no. 2 (1999): 249–268; Peter Bursens, "The Legitimacy of EU Decision-Making," in Ingolfur Blühdorn, ed., *In Search of Legitimacy: Policy-Making in Europe and the Challenge of Complexity* (Opladen, Germany: Verlag Barbara Bu-

drich, 2009), pp. 39–64; Victor Bekkers and Arthur Edwards, "Legitimacy and Democracy: A Conceptual Framework for Assessing Governance Practices," in Victor Bekkers, Geske Dijkstra, Arthur Edwards, and Menno Fenger, eds., Governance and the Democratic Deficit: Assessing the Democratic Legitimacy of Governance Practices (Aldershot, UK: Ashgate, 2007), pp. 35–60.

22. This research follows the ethical guidelines for good research practice. In particular, it protects research participants and respects the principle of informed consent as well as informants' rights for confidentiality and anonymity. We provided research participants with information related to the aims of the study, the anticipated uses of the data, and the degree of anonymity and confidentiality afforded to them.

23. The web survey consisted of five closed questions: Q1: Are you male or female? Q2: Which of the age categories below do you belong to? Q3: Where are you from? Q4: What is your level of education? Q5: Which field did you receive your highest degree in?

24. Seed Media Group participated in the organization of the Rio Dialogues on a pro bono basis: in particular, it designed and provided the voting website, collected and processed the data from the vote, and finally designed and developed a tool to visualize the voting results.

25. The categories are delineated at the voting website of the Rio Dialogues, http://vote .riodialogues.org.

26. UN Population Division database, http://esa.un.org/unpd/wpp/unpp/panel \_population.htm, accessed 12 February 2015.

27. Ibid., p. 26.

28. UN Development Programme, Human Development Reports database, http://hdr.undp.org/en/content/population-total-both-sexes-thousands, accessed 12 February 2015.

29. Interviewee 4, interviewed by the first author, Paris, 4 December 2013.

30. International Telecommunication Union (ITU), Measuring the Information Society Report (Geneva: ITU, 2014).

31. Ibid., p. 30.

32. Ibid.

33. Thomas Webler and Seth Tuler, "Fairness and Competence in Citizen Participation," *Administration and Society* 32, no. 5 (2000): 566–595; Thomas C. Beierle, "Using Social Goals to Evaluate Public Participation in Environmental Decisions," *Review of Policy Research* 16, nos. 3–4 (1999): 75–103; Julia Abelson, Pierre-Gerlier Forest, John Eyles, Patricia Smith, Elisabeth Martin, and François-Pierre Gauvin, eds., "Deliberations About Deliberative Methods: Issues in the Design and Evaluation of Public Participation Processes," *Social Science and Medicine* 57, no. 2 (2003): 239–251; Kristi M. Branch and Judith A. Bradbury, "Comparison of DOE and Army Advisory Boards: Application of a Conceptual Framework for Evaluating Public Participation in Environmental Risk Decision-making," *Policy Studies Journal* 34, no. 4 (2006): 723–754.

34. UNDP had previously developed Teamworks, a knowledge management online platform that enables UNDP staff to store and share knowledge and to discuss experiences and lessons learned.

35. Interviewee 25, interviewed by the first author via Skype from Paris, France, 16 July 2014.

36. Ibid.

37. Interviewee 17, interviewed by the first author from Paris via Skype, Mexico City, 25 April 2014.

38. Interviewee 39, interviewed by the first author from Paris via Skype, New York, 22 October 2014.

39. Interviewee 38, interviewed by the first author from Paris via Skype, Oxford, UK, 21 October 2014.

40. Information note for facilitators on the Rio Dialogues online platform, update from the government of Brazil, May 2012.

41. See www.uncsd2012.org/sddialoguedays.html.

42. Information note for participants, available at the United Nations Conference on Sustainable Development web page, www.uncsd2012.org/sddialoguedays.html.

43. Interviewee 8, interviewed by the first author, New York, 3 April 2014.

44. Daniel J. Fiorino, "Citizen Participation and Environmental Risk: A Survey of Institutional Mechanisms," *Science, Technology and Human Values* 15, no. 2 (1990): 226–243; Beierle, "Using Social Goals to Evaluate Public Participation in Environmental Decisions."

45. In reference to the outcome document of the Rio+20 conference, *The Future We Want*, UN Doc. A/RES/66/288, 2012.

46. Interviewee 16, interviewed by the first author from Paris via Skype, Rio de Janeiro, 23 April 2014.

47. Ibid.

48. Carole Pateman, *Participation and Democratic Theory*, (Melbourne: Cambridge University Press, 1970); Thomas Webler and Seth Tuler, "Fairness and Competence in Citizen Participation," *Administration and Society* 32, no. 5 (2000): 566–595; Gregg B. Walker, Susan L. Senecah, and Steven E. Daniels, "From the Forest to the River: Citizens' Views of Stakeholder Engagement," *Human Ecology Review* 13, no. 2 (2006): 193–202; John Gastil and Peter Levine, *The Deliberative Democracy Handbook: Strategies for Effective Engagement in the 21st Century* (San Francisco: Jossey-Bass, 2005).

49. Interviewed 39 interviewed by the first author from Paris via Skype, 22 October 2014.

50. Ibid., p. 40.

51. Interviewee 5, interviewed by the first author, Paris, 11 December 2013.

52. Interviewee 2, interviewed by the first author, New York, 27 September 2013.

53. Ann Florini, The Right to Know: Transparency for an Open World (New York: Columbia University Press, 2007); Aarti Gupta and Michael Mason, eds., Transparency in Global Environmental Governance: Critical Perspectives (Cambridge, MA:

MIT Press, 2014).

54. See www.riodialogues.org/sitemap, accessed 28 October 2014.

55. Interviewee 25 interviewed by the first author from Paris via Skype, 16 July 2014.

56. Interviewee 1, interviewed by the first author, New York, 27 September 2013.

57. See, for example, Frank Biermann and Aarti Gupta, "Accountability and Legitimacy in Earth System Governance: A Research Framework," *Ecological Economics* 70, no. 11 (2011): 1856–1864.

58. Robert O. Keohane, "Global Governance and Democratic Accountability," in David Held and Matthias Koenig-Archibugi, eds., *Taming Globalization. Frontiers of Governance* (Oxford, UK: Polity Press, 2003), pp. 130–159.

59. Ibid., p. 58.

60. Ibid.

61. Interviewee 27, interviewed by the first author from Paris via Skype, Washington, DC, 13 August 2014.

62. Interviewee 17 interview.

63. Interviewee 2 interview.

64. Interviewee 23, interviewed by the first author, Paris, 16 June 2014.