What does it take to make online deliberation happen?
- A comparative analysis of 28 online discussion forums

Martin Karlsson
Doctoral Candidate in Political Science
Örebro School of Public Affairs
Örebro University, Sweden

Paper prepared for presentation at the
IV International Conference on Online Deliberation

Introduction
Recent research on the topic of online deliberation has more than earlier been focused on finding
determinants of differences in outcome and characteristics of public deliberation online and applied
comparative research approaches (Jansen & Kies 2005, Hendricks 2006; Macintosh & Whyte 2006;
Wright & Street 2007; Åström & Grönlund 2010; Davies 2009:6f., Kies 2010). This has meant
advancement from the prior domination of case studies and the dichotomous division between E-
optimists and E-skeptics. This research has so far been able to pinpoint some crucial factors
determining success and failure in online deliberation. Primarily, recent research has been
successful in showing the importance of relating the amount and quality of deliberation to the
design of online environments and instruments for deliberation (Wright 2005; Wright & Street
2007; Åström & Grönlund 2010; see also Morison & Newman 2001; Davies & Gangadharan 2009:
Part VI; See also among others Linaa Jensen (2003) and Karlsson (2010) for single case studies
supporting this claim). One specific design-related issue that has been depicted as a crucial feature
for online deliberation is the level and style of moderation of online discussion forums (Coleman &
Goetze 2001; Trénel 2009; Wright & Street 2007; Davies & Gangadharan 2009: Part V). Also the
connection between online forums and political institutions has been found to be important for the
level of participation and deliberation. Both the phase of the policy process as well as what weight
the citizen participation is given in the policy process seems to have an impact on participation

This paper aims to contribute to research about conditions for fostering public deliberation in
online settings by way of empirically investigating theoretical assumptions about determinants of
online deliberation other than the design related and institutional factors underlined in previous
research. The analysis will be conducted through a comparative study of online forums for which
the above-presented factors are held constant. The 28 online forums compared in this paper share
the same design (technological, as well as process), have the same connection to the policy process,
were moderated in the same way, and implemented simultaneously. Still, great divergences are
apparent in the level of deliberation occurring on the forums. On some of the forum discussions
between participants were scarce and voting was the dominating form of participation, while on
other forums discussion was much more intense. Attention is therefore drawn towards alternative
factors for understanding online deliberation. The paper presents statistical analysis of aggregate
data regarding (n=28) online discussion forums initiated by the EU-commission.

Case Description
The European Citizens Consultations 2009 (ECC) was a participatory project implemented in all
EU-member states and initiated by the EU-commission as the major project of the Debate Europe
program (COMM 2008). The aim of the project was to produce a set of recommendations to the
EU-institutions regarding social and economic issues decided upon by citizens from all over Europe. The process included several phases implemented during a period of eight months (December 2008 to August 2009). The project included online discussion forums and face-to-face deliberative conferences that were implemented in all EU member states as well as a common pan-European deliberative conference with participants from all countries and five regional outreach events directed at stakeholders.¹

This analysis will focus on the public online discussions that made up the initial phase of the ECC process. The online discussion forums had an agenda-setting function for the rest of the process, and were implemented in order to give the broader public an opportunity to influence the process. Each forum produced a list of ten recommendations creating the starting point for the deliberative conference with randomly selected participants that was held in each country. Citizens were invited to register as participants on the forum in their country² and then got the chance to debate the issues they found most important for the social and economic future of Europe, and put forward proposals for what actions the EU should take (ECC 2009). Throughout the process, participants could vote in favour of (but not against) proposals, all participants were allowed to place one vote on each proposal on the forum with the exception of the proposals that they had posted themselves.³ The ten proposals in each country that received the most votes were then selected to set the agenda for the next phase of the project. All in all, registered participants could choose between three activities: writing discussion posts (either contributing to an existing discussion thread or launching a new one), writing proposals for other participants to vote on, or voting on other participants’ proposals.

The forums were all moderated by one moderator working one and a half hours a day throughout the project period. The style of moderation used was what Wright and Street (2007:857) depict as silent moderation, when the moderator is allowed to delete messages without leaving any traces visible for the participants. Besides the moderator, each forum was supported by an outreach person contacting stakeholders such as political parties, NGOs, and political bloggers and encouraging them to participate in the forum or advertise the project with banners on their websites in order to make the forum better known to citizens. Banners advertising the forum were also visible on the EU-commissions national websites as well as the websites of the organizations implementing the ECC project in each country.

**Figure 1: Level of deliberation - the share of activities on the forums out of discussions made**

![Image of Figure 1](image-url)

Comments: The figure shows the percentage of all manifest activities on the forum in each country made up of the posting of discussion-posts.

¹ For more information visit the project website: [www.european-citizens-consultations.eu](http://www.european-citizens-consultations.eu)

² In Belgium two forums were launched, one in French for the Walloon region and one in Dutch for the Flemish region.

³ Visitors that had not registered as participants were not restricted from any area of the forums but could view all discussion posts, proposals and all statistics on voting and participants.
Even though all 28 forums shared this design and were advertised in a similar way, the level and character of participation on the forums varied greatly. The busiest forum (the French) received over 26,000 unique visitors. Most of the forums (25 out of 28) had less than 5000 unique visitors. The least lively forum (the Maltese) had only 327 visitors during the period of the online consultation (See Appendix 1 for full participation statistics of all 28 forums). The forums also varied significantly regarding the level of deliberation taking place. The participants on the ECC forums had three different manifest activities at their disposal when participating on the forum, they could issue proposals for other participants to vote, themselves vote on other participants proposals or engage in discussion with other participants by way of writing discussion posts. Measured as the percentage of all manifest activities on the forums made out of the writing of discussion posts, the level of deliberative activities varied between 52% and 3%. In four of the forums over 90% of the activities registered among the participants were of aggregative nature, meaning that they were made out of voting and the issuing of proposals, and consequently less than 10% were deliberative. Six of the forums had instead over 30% deliberative activities. An overview of the level of deliberation on the different forums is presented in Figure 1 above.

Research design
Since the level of deliberation varied greatly between the different forums neither the design of the ECC forums, neither the style of moderation nor the connection of the forums to the policy process can be said to have created a low or high level of deliberation in general. Other factors must be investigated in order to understand why the amount of deliberation varied between identically designed and simultaneously implemented discussion forums. This study will attempt to explain the emergent differences in the intensity of deliberative participation occurring on the forums in relation to other patterns of participation on the forums. This way, theoretical assumptions about determinants of online deliberation can be empirically investigated. Several theoretical arguments have been made about determinants of the engagement of citizens in deliberation and this study will investigate four claims about what conditions are favourable and unfavourable for deliberation in online participation. These claims complement the list of identified determinants of deliberation discussed in the introduction of this paper that this study design holds constant.

1. Number of participants
The intensity of deliberation occurring in the forums may well be dependent on the number of participants. Deliberation is often expected to be regarded as more meaningful by participants when occurring in a relatively exclusive setting when a responsive discussion is more likely to occur. Meirowitz (2007) has showed in game theoretical models that the incentives for deliberating should decrease with the number of participants joining if the discussions are, as in our cases, followed by a decisive vote. Schlosberg et al. (2009), Persson (2007), and Karlsson (2010:104) show in case studies that mass-participation in participatory processes can lead to an aggregative rather than a deliberative approach (Schlosberg et al. 2009:144) to participation. In participatory settings with many participants, strong argumentation may be regarded as less important than strength in numbers as single arguments may be lost in the larger flow of information. In their seminal work on size and democracy Dahl and Tufte (1973:44) suggest the existence of a connection between size of demos and political competitiveness, meaning that a large demos is less likely to generate a cooperative form of political engagement than a smaller demos. In connection to the studies discussed above the suspicion that a discussion forum with many participants is less likely to generate deliberative forms of participation will be investigated in this study through a test of the following hypothesis:

H1: The more participants registered on a discussion forum the less deliberation will occur between the participants.
2. Opinion diversity
Stromer-Galley (2003) identifies two competing perspectives on the function of the Internet as a public sphere and political behaviour online. According to the “homophily perspective” the Internet promotes fragmentation of the public into narrow, homogenous groups. Sunstein (2001) has argued, in line with this perspective, that the vast possibilities offered by the Internet to exclusively discuss with likeminded people results in a situation where deliberation will occur more often in opinion wise consensual settings than in settings where opinions differ greatly. The opposite argument is put forward in what Stromer-Galley calls the “diversity perspective” which states that diversity promotes incentives for online discussions to a greater extent than homogeneity. Stromer-Galley’s research findings are in line with this perspective as her respondents express that they are intrigued by online deliberation as a form of participation for the reason that a diversity of opinions are offered (2003: The diversity perspective). Other studies has indicated that in settings such as the ECC forums where lay citizens are invited to participate and hence “partisanship is less prominent” then in parliamentary assemblies, the discourse of deliberation is more constructive and less polarized (Thompson 2008:511, with reference to Steiner et.al 2004). The conflicting pictures of online engagement painted by the homophily and the diversity perspectives will be investigated in this paper through a test of the following hypothesis specifically addressing the diversity perspective:

H2: The more a forum is characterized by a diversity of opinion the more deliberation will occur between the participants.

3. Aggregative dynamic
As the process design shared by our 28 cases features both deliberative discussion and aggregation of preferences through voting, this study raises the issue of combining voting and deliberation. For most scholars of deliberative democracy, the role of deliberation is one prominent episode in a sequence of events leading up to a political decision (Barber 1984; Fishkin 1995; Guttmann & Thomson 1997; Bohman 1998:415; Goodin 2005). Deliberation is often seen as a necessary prelude for decision-making through voting in order to ensure that the decision is being made in relation to the relevant knowledge about the issue at hand as well as with regard to opposing arguments. Deliberation is however not usually seen a sufficient mechanism for decision-making in itself. Hence, a decisive vote is often seen as necessary or at the least as a necessary evil (See Saward 2000:42 for an overview). The procedural constraints of deliberative practices are set in motion in order to create a refined opinion formation among the voters before the decisive act of voting and, correspondingly, in a body of elected representatives preceding a parliamentary vote. Public deliberation is thought to encourage more thoroughly considered voting behavior, where participants are more likely to be exposed to and take into account opposing views (Barber 1984; Fishkin 2000; Chambers 2001). Decision-making procedures, including deliberative phases, are thought to create substantially better decisions (Dryzek 1994; Cohen 1997; Faron 1998). In accordance with this line of thinking the combination of voting and deliberation is not just possible, but a necessity in creating legitimate democratic decision-making procedures.

Whether or not an open and equal exchange of knowledge and opinions in deliberation is possible and likely to occur if followed by a decisive vote is a subject given increasing attention, not least from game theorists (See Dickson et al. 2008 or Landa & Metrowitz 2009 for overviews). Recent studies have underlined the importance of not taking the occurrence of deliberation for granted, and instead shown that it can be strategically correct for agents, being citizens or decision-makers, to not actively participate in deliberation when decisions are being made through voting (Dickson et al. 2008; Stasavage 2007; Merowitz 2007). Chambers (2001) argue that designs where

4 Or in a third option that deliberation among citizens can create a knowledge basis for parliamentary decision-making.
deliberation and voting are combined can create a greater focus on aggregation and strength in numbers than on deliberation and strength in arguments. When the constraint of consensual decision-making through unanimity is abandoned the risk emerges that a (unthreatened) majority will lack strong reasons to listen to the arguments of the minority (Chambers 2001:242). Indeed, in some cases of online deliberation, discussion spaces have been abandoned when the possibility of voting is offered (Åström 2004:200; Karlsson 2010:101).

As the forums compared in this study share the same design, no comparison can be made between deliberation in forums that offer the possibility of voting and forums that exclusively offer deliberative forms of participation. The fact that the participants focus on deliberation and voting was so greatly divergent between the different forums underlines the fruitfulness of investigating the relationship between voting and deliberation even within a specific design that creates opportunities for both forms of participation. Instead, we have an opportunity to investigate whether the occurrence of an aggregative dynamic, visible through a more intense voting practice, is affecting the level of deliberation. The relationship between voting and deliberation will be investigated through the following hypothesis:

**H3:** The more the participants of a forum engage in voting the less deliberation will occur between the participants.

4. **Level of engagement**

As is widely recognized in the literature on deliberative democracy, deliberation is a costly form of public participation for societies and individuals alike (Elstub 2008:189; Habermas 1996:325f.). To engage in a deliberative process demands more of a participant than engaging in an aggregative form of participation such as signing a petition, registering as a member of a group, or voting on one of a set of predetermined alternatives (Schlosberg et al. 2009:144). It is therefore likely that the level of engagement among the participants can explain the occurrence of deliberation on the forums. This might be especially true in a forum with the design used in ECC where both aggregative and deliberative forms of participation are offered. The suspicion that a higher level of engagement among participants is needed in order to foster deliberation will be investigated by testing the following hypothesis:

**H4:** The higher the level of engagement among the participants in a forum the more deliberation will occur between the participants.

The four hypotheses presented above all regard patterns of participation on the forums; as such, they expect to find explanations of a phenomenon by investigating differences between the cases that all are found on the same “level of explanation” as the dependent variable. Other factors that create a larger distance between the object of explanation and the explanatory factors could of course be regarded as interesting to investigate. On the top of a list of such factors should probably be cultural and contextual factors. An obvious difference between the cases in this study is the countries in which they are implemented. Hence, cultural explanations might be possible to find concerning the level of deliberation occurring on the forums. Although they are excluded from this study, such factors must be kept in mind by the reader as possible alternatives or even underlying explanations to the results of this study. The exclusion of cultural and contextual factors does not render this study meaningless. Even though the factors of explanation included in this analysis might be contextually and culturally dependent, they could possibly emerge in any context or any culture and are hence important to investigate in relation to the level of deliberation.

**Dependent and independent variables**

Deliberation is a concept for which empirical operationalizations are both numerous and widely debated. One common characteristic among many operationalizations is that they discriminate
between deliberation and other forms of communication and interaction (Steiner 2008; Neblo 2007). Deliberation is separated by a varying set of procedural/substantial constraints. Only to the extent that the investigated practices of communication employ such constraints are they qualified as being deliberative. The operationalizations of deliberation used in this paper make the bold move away from including such constraints and indicate the level of deliberation by measuring the mere occurrence of discussions on the forums. In opposition to the act of voting (and posting of a proposal) the writing of discussion posts is in this study regarded as an act of deliberative participation.

One definition of deliberation used by Scott Wright and John Street seems suited for our purpose to separate deliberative and aggregative participation on the forums. Wright and Street proposes that “[t]he essence of deliberative democracy lies in the idea that citizens engage not only in registering preferences, but also in talk about those preferences” (2007:851). In connection to this definition the central division between the act of voting and the act of writing discussion posts is just this, that the discussion posts (and the preferences they express) are made available for open scrutiny (Wilhelm 1998:315), and a discussion about them. Votes are on the other side only registered preferences that does not invite to any discussion. By employing this broad and allowing definition and operationalization the paper also connects to Fishkin's (1995:41) concept of “incompleteness” in deliberation. Fishkin sees deliberation not as a sole and exclusionary concept, but underlines the importance of regarding communicative practices as more or less deliberative. In connection to Fishkin the operationalization used in this paper regards practices that are thought to some extent deliberative.

The measurement used for studying the level of deliberation on the forums is the average number of discussion posts written by a registered participant (the total number of discussion posts on the forum divided by the number of registered participants). This measurement is weighted against the size of the forums (the number of participants), rendering the different forums comparable. The measurement could be said to regard the relative amount of deliberation on the forum or the intensity of deliberation. Another advantage with this variable in comparison to other possible measurements is that it does not automatically contrast the practices of discussion and voting. A forum characterized by much discussion according to this measurement can at the same time have had a high intensity in aggregative forms of participation through voting.

### Table 1: Dependent variables

<table>
<thead>
<tr>
<th>Factor</th>
<th>Operationalization</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliberation</td>
<td>The more discussion has occurred between participants on the forum the higher level of deliberation.</td>
<td>Average number of discussion posts per participant.</td>
</tr>
<tr>
<td>Voting</td>
<td>The more votes posted by the participants on the forum the higher the level of voting.</td>
<td>Average number of votes per participant.</td>
</tr>
</tbody>
</table>

As the primary concern of the paper is to investigate determinants of online deliberation and not online participation more widely we will need to include a second dependent variable besides the variable for intensity of deliberation. In order to make any conclusions about the investigated hypotheses in relation to the intensity of deliberation on the forum we must also investigate the hypotheses in relation to aggregative forms of participation. We are this way able to conclude whether or not the investigated relationships are exclusively concerning deliberative forms of participation or online political participation in more general terms. A corresponding measurement is therefore included for the level of voting activity on the forum, the average number of votes per participant. Including this measurement in our study makes it possible to determent if the results from the analysis regard deliberative forms of participation specifically or effect voting behaviour.

---

5 One other possibility is to use the variable displayed in Figure 1, the share of all activities on the forums made out of discussions. While this is a great variable for illustrating the divergence in the level of discussion between the forums, it presupposes that voting and discussion makes up a null sum game since the maximum level of discussion (100%) excludes any voting and vice versa.
equally (or more strongly). If so, our results would regard participation more generally and not be applicable specifically in relation to deliberative practices of political participation. The two variables for the levels of discussion activity and the level of voting activity are hence made comparable in relation to the independent variables (See Table 1 above) and are studied in relation to those variables in the same manor so that we can conclude whether the investigated relationships are exclusive for either one of the forms of participation or common for both.

The independent variables regard the patterns of participation on the different forums, the operationalizations described in Table 2 below present attempts to empirically address the complex theoretical concepts discussed above with the material available. As the material is constricted to statistics of the participation and activity on the 28 forums some of the operationalizations may be disputable and seen as sub-optimal. Still these attempts at operationalizations present what is thought to be the best available empirical indicators for addressing the above described hypotheses.

<table>
<thead>
<tr>
<th>Table 2: Independent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor</strong></td>
</tr>
<tr>
<td>Number of participants</td>
</tr>
<tr>
<td>Opinion diversity</td>
</tr>
<tr>
<td>Aggregative dynamic</td>
</tr>
<tr>
<td>Level of engagement</td>
</tr>
</tbody>
</table>

Comments: *= The scales of the variables are reversed in order to create positive measurements of the investigated concepts.

Methodological considerations

This study rests on analysis of aggregate data; the cases up for comparison are the forums and not the participants on the forums. With this circumstance follows some considerations that need to be addressed. First, this analysis excludes analysis of any differences in the patterns of deliberation on the forums dependent on the individual characteristics of the participants as such data are not available. Factors related to the gender, age, social position, education, and the cultural backgrounds of the participants will remain unnoticed in this analysis. Second, the analysis includes only a low number of cases. The ECC project included 28 online forums which all are included in this study. The usual research approach for attacking this kind of comparative data with few cases, a qualitative analysis inspired by Boolean truth-tables (See for example Kies 2010:101 & Pratchett et.al 2009), rests heavily on the possibility to categorize and group the different cases based on the investigated qualities. The cases compared are categorized dependent on a set of factors and their success in an output variable (also categorized often in successful/ unsuccessful) is then analyzed in relation to the different settings in the independent factors.

Since our cases lack clearly distinguishable differences, sharing the same design, institutional affiliation and moderation, a categorization and of the cases is difficult. What does differ between the cases is instead the participation statistics, as seen in figure 1 above there is a great divergence between the cases in the level of deliberation on the forums. There are also differences in other participation statistics (see appendix 1) available for analysis. The variables presented above are able to analyze with the help of this statistics (as is shown in tables 1 and 2 above). The best methodology for addressing this kind of differences in statistics is not a truth-table design relying on exclusive categories, but instead statistical methods including all variation in the variables in the analysis. We are therefore employing bivariate correlation analysis of the participation statistics of
the forums in this study. In order to make a statistical analysis possible with these few cases, a higher level of uncertainty is tolerated in the correlation analysis used in the analysis than is usually the case. In the empirical analysis, significant correlations with 90% certainty or higher will be interpreted.

Another circumstance that needs to be addressed is the snapshot nature of our measurements. Even though the studied discussion forums have emerged gradually and cumulatively during a period of four months, all our measurements regard the state of the forum after the discussions and voting was finished. Hence, the analysis will interpret the patterns of participation as visible through and determined by the state of the forum at this point in time. This is done even though the forums could have looked very different with regard to, for example, the level of participation, the aggregative dynamic, and the divergence of opinion at a different point in time. Therefore, this analysis rests on the assumption that the character of the forums at the end of the discussions reproduces with satisfying certainty the character of the forums when the most participation took place. It is assumed that the relative relationship between the different statistical figures used in the study (voting, discussion, participation, votes for the most popular proposal, etc.) and visible in the snapshot at the end of the process is similar throughout the period of online discussions.

A second difficulty stemming from the snapshot design of the study is determining the causal direction of a relationship between two variables. Since there is no difference in time between the independent and dependent variables there must be a logical reason for us to believe that the independent variable in our models effect the dependent variable and not the other way around. For three out of four of our hypotheses this is not a problem; in these cases it would be illogical to expect a reversed causality. In the fourth case, the relationship between diversity of opinion and the level of deliberation, reversed causality seems possible. Our model wants to investigate whether the diversity of opinion influence the level of discussion occurring. But a positive relationship could possibly stem from the fact that extensive deliberation creates a greater diversity of opinion. The reader must therefore have this possibility in mind when investigating the results. What speaks to the advantage of our interpretation of the relationship is that the reversed relationship described above diverges from most expectations about the opinion effects of deliberation. In the literature, deliberation is generally thought to promote a higher level of agreement rather than a diversity of opinion (see, for example, Sunstein 2003; List 2007)

**Analysis**

When putting the arguments about the relationship between different patterns of participation and the level of deliberation to empirical scrutiny interesting results emerged, some of which confirm and others that clash with prior argumentation and research. The level of participation in the forum that was expected to have a negative impact on deliberation, is displaying no significant relationship to the level of deliberation. The same factor does on the other hand show a strong and significant positive relationship with the level of voting on the forums. Hence, on the basis of these results, many participants cannot be said to be at a disadvantage for deliberative forms of participation but at a clear advantage for aggregative forms.

**Table 3: Bivariate correlations, patterns of participation, and the level of deliberation and voting**

<table>
<thead>
<tr>
<th></th>
<th>Level of participation</th>
<th>Opinion diversity</th>
<th>Aggregative dynamic</th>
<th>Level of engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliberation</td>
<td>-0.251</td>
<td>0.349*</td>
<td>-0.158</td>
<td>0.338*</td>
</tr>
<tr>
<td>Voting</td>
<td>0.724***</td>
<td>0.578***</td>
<td>-</td>
<td>-0.108</td>
</tr>
</tbody>
</table>

Comments: N= 28, *, p < 0.1, **, p < 0.05, ***, p < 0.01

The opinion diversity on the forum seems to connect with Stromer-Galley’s findings of attracting a higher level of discussion, as we find a positive relationship between the variable for opinion diversity and the level of deliberation on the forum. An even stronger relationship is found
regarding the level of voting on the forum that as well seems to be enforced by the diversity of opinion. These results do not indicate that participants avoid participating in settings with diverse opinions but rather that opinion diversity encourages participants to engage in deliberation and voting.

The pressing question of whether the emergence of an aggregative dynamic on the forum excludes deliberation was addressed through a correlation between the level of voting and the level of deliberation on the forums. Results indicate that no significant negative relationship between voting and deliberation was present on these forums. The correlation produces a non-significant coefficient indicating a nonexistent relationship between the two variables. On the basis of these results we can also conclude that within the realm of these 28 forums, the results indicate that the level of voting and the level of deliberation are seemingly unrelated.

The last factor investigated regarding the pattern of participation on the forums is the level of engagement among the participants. This factor was studied by creating a measurement for the “threshold for participation” on the forums. A low threshold is thought to equal a low engagement while a high threshold indicates a high level of engagement among participants. The analysis shows a positive relationship between a high threshold/high level of engagement and the level of deliberation on the forums while no significant relationship is visible for the level of voting. This result indicates that deliberation is reinforced by a more engaged group of participants while the level of voting is unrelated to the level of engagement. The results of the analysis are summarized and related to the four hypotheses of the study in Table 4. In sum, the analysis has found support for two of the four hypotheses within the cases of the ECC online discussion forums.

**Table 4: Results of the analysis in relation to the hypotheses**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Test</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: The more participants registered on a discussion forum the less deliberation will occur between the participants.</td>
<td>Correlation between: Number of participants &amp; Deliberation (See tables 1 &amp; 2 for operationalizations)</td>
<td>Not supported &lt;br&gt; Pearson's r: -0.251 &lt;br&gt; Significance: 0.197</td>
</tr>
<tr>
<td>H2: The more a forum is characterized by a diversity of opinion the more deliberation will occur between the participants.</td>
<td>Correlation between: Opinion diversity &amp; Deliberation (See tables 1 &amp; 2 for operationalizations)</td>
<td>Supported, but stronger correlation with intensity of voting &lt;br&gt; Pearson's r: 0.349* &lt;br&gt; Significance: 0.069 &lt;br&gt; (To be interpreted with caution due to the possibility of reversed causality)</td>
</tr>
<tr>
<td>H3: The more the participants of a forum engage in voting the less deliberation will occur between the participants.</td>
<td>Correlation between: Aggregative dynamic &amp; Deliberation (See tables 1 &amp; 2 for operationalizations)</td>
<td>Not supported &lt;br&gt; Pearson's r: -0.158 &lt;br&gt; Significance: 0.422</td>
</tr>
<tr>
<td>H4: The higher the level of engagement among the participants in a forum the more deliberation will occur between the participants.</td>
<td>Correlation between: Level of engagement &amp; Deliberation (See tables 1 &amp; 2 for operationalizations)</td>
<td>Supported &lt;br&gt; Pearson's r: 0.338* &lt;br&gt; Significance: 0.079</td>
</tr>
</tbody>
</table>

**Summary and Discussion**

In this paper divergences have been analyzed in the level of deliberation between 28 online forums sharing similarities regarding many of the factors that prior research on online deliberation has seen as important for understanding online deliberation. With this research design, additional and alternative explanations to the occurrence of online deliberation have been investigated. The results of the analysis indicate that the diversity of opinion and the level of engagement of participants seem to be important for understanding these divergences while the size of the forums and the aggregative dynamic of the participation seems unrelated to the level of deliberation. The analysis also indicates that the level of voting and deliberation seems to be dependent on different factors with the exception of diversity of opinion, a factor that seems to work reinforcing for both forms of participation.

So what can we learn from this analysis when designing future practices of online
deliberation. First, the analysis gives us no reason to believe that we should avoid combining voting and deliberation. The 28 forums studied employed the same design including both deliberation and voting, and got very different results regarding the level of deliberation. Since the level of voting and the level of deliberation were unrelated, the divergence between the 28 forums in the level of deliberation seems to be dependent on non-voting-related factors. An aggregative dynamic or the simple occurrence of a decisive vote in the design of the forum does not seem to rule out the possibility of intense deliberation occurring on the forum. Neither should large-scale discussions be avoided, on the basis of these results, for the reasons that they could weaken deliberative forms of participation. The results of this analysis show us that between the smallest forum of 82- and the largest of 9400 registered participants, no such pattern could be found.

The analysis also tells us that two factors should be carefully investigated. These are the level of opinion diversity regarding the issue up for deliberation and the level of engagement among participants. The analysis gives us reason to believe that deliberation is more likely to be successful if the issue of deliberation is surrounded by a high level of engagement and conflicted opinions rather than being an issue that renders participants indifferent or is surrounded by a high level of consensus regarding the topics under investigation. The influence of the level of engagement among participants is exclusive for deliberative forms of participation, a result that mirrors earlier studies indicating that public deliberation is a more demanding form of political participation than many other available modes of participation.

In sum, these results paint a picture of online deliberation as a more robust form of political participation than earlier studies have claimed. Under the specific circumstances shared by these cases, deliberation is seemingly unaffected or even reinforced by several factors that were believed to be problematic for online deliberation. As a recommendation for practitioners of online deliberation, the results can be interpreted as saying: do not fear mass participation, controversial topics, or combining voting and deliberation. Instead, focus your attention on finding forms and issues that promote a high level of engagement and interest from participants.

References


Appendix 1: Descriptive statistics

<table>
<thead>
<tr>
<th>Country</th>
<th>Votes Proposal nr 1</th>
<th>Votes</th>
<th>Proposals</th>
<th>Posts</th>
<th>Participants</th>
<th>Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>148</td>
<td>577</td>
<td>36</td>
<td>283</td>
<td>381</td>
<td>1877</td>
</tr>
<tr>
<td>Belgium - F</td>
<td>164</td>
<td>675</td>
<td>35</td>
<td>119</td>
<td>517</td>
<td>1751</td>
</tr>
<tr>
<td>Belgium - W</td>
<td>165</td>
<td>422</td>
<td>35</td>
<td>48</td>
<td>387</td>
<td>1428</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>105</td>
<td>223</td>
<td>24</td>
<td>38</td>
<td>224</td>
<td>847</td>
</tr>
<tr>
<td>Cyprus</td>
<td>24</td>
<td>175</td>
<td>15</td>
<td>54</td>
<td>124</td>
<td>376</td>
</tr>
<tr>
<td>Denmark</td>
<td>228</td>
<td>330</td>
<td>12</td>
<td>66</td>
<td>360</td>
<td>958</td>
</tr>
<tr>
<td>Estonia</td>
<td>139</td>
<td>176</td>
<td>7</td>
<td>34</td>
<td>238</td>
<td>1492</td>
</tr>
<tr>
<td>Finland</td>
<td>418</td>
<td>749</td>
<td>11</td>
<td>42</td>
<td>732</td>
<td>2202</td>
</tr>
<tr>
<td>France</td>
<td>3829</td>
<td>40087</td>
<td>257</td>
<td>1204</td>
<td>9400</td>
<td>26741</td>
</tr>
<tr>
<td>Germany</td>
<td>1400</td>
<td>2081</td>
<td>132</td>
<td>805</td>
<td>4296</td>
<td>12179</td>
</tr>
<tr>
<td>Greece</td>
<td>44</td>
<td>225</td>
<td>30</td>
<td>38</td>
<td>207</td>
<td>767</td>
</tr>
<tr>
<td>Hungary</td>
<td>248</td>
<td>1488</td>
<td>29</td>
<td>146</td>
<td>557</td>
<td>2795</td>
</tr>
<tr>
<td>Ireland</td>
<td>134</td>
<td>299</td>
<td>24</td>
<td>92</td>
<td>319</td>
<td>775</td>
</tr>
<tr>
<td>Italy</td>
<td>354</td>
<td>1614</td>
<td>84</td>
<td>305</td>
<td>1069</td>
<td>3986</td>
</tr>
<tr>
<td>Latvia</td>
<td>32</td>
<td>86</td>
<td>19</td>
<td>113</td>
<td>164</td>
<td>999</td>
</tr>
<tr>
<td>Lithuania</td>
<td>69</td>
<td>399</td>
<td>34</td>
<td>97</td>
<td>220</td>
<td>621</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>87</td>
<td>324</td>
<td>35</td>
<td>43</td>
<td>196</td>
<td>712</td>
</tr>
<tr>
<td>Malta</td>
<td>12</td>
<td>37</td>
<td>8</td>
<td>25</td>
<td>82</td>
<td>327</td>
</tr>
<tr>
<td>Netherlands</td>
<td>164</td>
<td>343</td>
<td>21</td>
<td>82</td>
<td>339</td>
<td>730</td>
</tr>
<tr>
<td>Poland</td>
<td>384</td>
<td>1229</td>
<td>18</td>
<td>282</td>
<td>1020</td>
<td>4424</td>
</tr>
<tr>
<td>Portugal</td>
<td>147</td>
<td>614</td>
<td>63</td>
<td>499</td>
<td>595</td>
<td>2600</td>
</tr>
<tr>
<td>Romania</td>
<td>34</td>
<td>136</td>
<td>13</td>
<td>108</td>
<td>214</td>
<td>847</td>
</tr>
<tr>
<td>Slovakia</td>
<td>148</td>
<td>163</td>
<td>7</td>
<td>55</td>
<td>305</td>
<td>543</td>
</tr>
<tr>
<td>Slovenia</td>
<td>148</td>
<td>277</td>
<td>20</td>
<td>96</td>
<td>305</td>
<td>1102</td>
</tr>
<tr>
<td>Spain</td>
<td>3414</td>
<td>14376</td>
<td>115</td>
<td>868</td>
<td>5011</td>
<td>26425</td>
</tr>
<tr>
<td>Sweden</td>
<td>290</td>
<td>792</td>
<td>13</td>
<td>75</td>
<td>617</td>
<td>1624</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>183</td>
<td>344</td>
<td>12</td>
<td>84</td>
<td>405</td>
<td>1384</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>235</td>
<td>715</td>
<td>37</td>
<td>384</td>
<td>641</td>
<td>2236</td>
</tr>
</tbody>
</table>

Comments: The table displays descriptive statistics for the 28 cases. All figures are in absolute numbers and regard the period when voting and discussion was open for the participants, except the number of visitors for which no data was available for the first month of the project. Data was collected from Google analytics and the ECC websites in February 2010.