

Political Parties Online: Digital Democracy as Reflected in Three Dutch Political Party Web Sites

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Abstract

This paper examines how three Dutch political parties employ the Internet as a tool to enhance 'digital democracy'. The potential of digital democracy is considered to be strongest in the sphere of collective action outside the domain of political institutions. In this article, however, attention is given to how institutionalized channels might be supportive of digital democracy. Three components of the democratic process – information provision, deliberation, and political decision-making – are examined in the content and user assessments of the web sites of the Socialist Party, the Christian Democratic Party and the Green Party. Minor differences were found in the party web sites regarding information provision; substantial differences were found regarding the degree and nature of political deliberation available on the sites. Indicators of the third component, political decision-making, were least evident on all three web sites. User assessments of the sites and opportunities for political deliberation followed, more or less, the general public images of the related political parties.

Keywords: digital democracy, electronic democracy, electronic networks, public sphere, political party web sites, web site analysis

Introduction

The introduction of the Internet has been accompanied by hope for greater citizen interest and involvement in the democratic process. Computer-mediated communication (CMC), generally, is thought to have political significance because of its capacity to challenge the monopoly of traditional political hierarchies in which citizens obtain political information from the mass media, giving space to citizen-to-citizen communication (Tsagarousanou, 1999).

Various claims are made for one of the developments of CMC on the Internet, namely 'digital democracy', (e. g., Brants, Huizenga, and Van Meerten, 1996; Tsagarousianou, Tambini, and Brian, 1998) and have been summarized in a typology consisting of three components: obtaining information, engaging in deliberation, and participating in decision-making (Tsagarousianou, 1999). The first component, obtaining information, is related to the issue of (equality in) access to information made available via electronic networks. The second component, engaging in deliberation, refers to the opportunities for citizens to take part in politically oriented debates, and is associated with the role of the public sphere in a democratic state. According to Tsagarousianou, "new technologies clearly have the potential to sustain such spaces as they enable both deliberation (citizen to citizen communication) and 'hearing' (citizen to authorities communication)" (Tsagarousianou, 1999: 195–196).

The third component, decision-making, is said to have two manifestations; decision-making can be realized through involvement in institutionalized channels such as elections and referenda as well as through collective actions occurring outside the vested political order. Here, as with the second point, interactivity is said to be the most important factor for achievement of the potential.

Although Tsagarousianou acknowledges that ICT can support activities initiated by the vested political institutions, such as elections, she doubts whether the political will among representatives of institutionalized political channels is sufficiently strong to embrace these technologies, from their view of the democratic process. She agrees with Hacker (1986) that "minimal and often superficial interactivity projects such as those of the US Congress and White House" (Tsagarousianou, 1999: 197) seem a matter of adding channels to the political communication system, as if more communication equals better communication. Tsagarousianou (1999) considers the potential of digital democracy stronger in the sphere of collective action outside the domain of political institutions.

Following Tsagarousianou's argument, we previously examined how the components of digital democracy could be identified in three politically oriented discussions held on the Internet (Jankowski and van Selm, 2000). These electronic political discussions could be characterized as independent initiatives of political action operating outside the institutional sphere (Tsagarousianou, 1999: 196). We feel, however, that to focus merely on such independent initiatives improperly neglects institutionalized channels as active agents that are embracing the Internet and potentially contributing to development of digital democracy. Based on our impressions of the web sites of Dutch political parties, we felt that these initiatives might not be as superficial as Tsagarousianou suggests.

The sites seem to enable citizen-to-citizen interaction that is according to Tsagarousianou “an important element of the democratic process and ... a necessary factor in the formation and maintenance of a culture of citizenship” (Tsagarousianou, 1999: 196–197).

In order to develop a better understanding of the nature and role of digital democracy initiatives of more institutionalized political channels, we decided to examine the web sites of three nationally operating political parties in the Netherlands in terms of the three components of digital democracy formulated by Tsagarousianou. In this paper, we examine how these three components become apparent in the content, the objectives and user assessments of the web sites of three Dutch political parties. The central question of this study, then, is: *To what extent are indicators of three components of digital democracy – information provision, deliberation, and decision making – present in the content and user assessments of the web sites of three Dutch political parties?*

Political party web sites

The web sites of three Dutch political parties were examined: GroenLinks (Green Party), Socialistische Partij (Socialist Party, SP), and the Christen Democratische Appél (Christian Democrats, CDA). All three parties currently function outside the government coalition formed in 1998. The CDA is a traditional party operating in the middle sector of the political arena; the SP and GroenLinks are situated in the left wing of the political spectrum. Brief descriptions of the websites of two of these parties, the SP and CDA will be provided in this section.

These two web sites have been operational since the mid-1990s. The Socialist Party initially launched its web site as a ‘low key’ initiative providing news, commentaries and various interactive tools (e. g., a political IQ-test). In 1997 opportunities for electronic discussions were introduced on the site. The site has now been expanded to more than 22,000 web pages, but the original structure has remained intact. The CDA site has undergone three major revisions since its launch in 1996 and a new web site structure has been designed for each site generation.

The objectives of the party web sites differ marginally. Three objectives are central for the SP site.¹ First, the site is intended to support promotional activities of the party such as distribution of party platforms, promotion of party activities, and recruitment of new members. Second, the site is to meant to promote citizens-to-party and party-to-citizens communication and, third, the site is to support the educational objectives of the party. In this manner, representatives of the party can remain informed about issues important to citizens – both citizens who already support the party and others who may be considering supporting the

party or who are opponents of party policy. Discussions on the web site are organized such that Members of Parliament (MP) may post statements to which citizens are invited to respond and vice versa. This formula is designed to increase the possibility that issues discussed on the web site may have an impact on the political actions of party representatives. The Socialist Party considers this one of the main values of the web site as compared to other Internet arenas such as newsgroups and chat rooms where political issues may be discussed.

Conversely, the CDA places more emphasis on citizen-to-citizen communication on its web site than on citizen-to-politician exchange. To date, party representatives in Parliament have not contributed to the discussions on the CDA web site.

Regarding the third educational objective of the SP site, databases have been developed that are designed to serve as important sources of information for active members regarding statements, activities, and publications from the party. In contrast, information on the CDA site is directed toward persons not affiliated with the party, such as school children and students looking for information about the CDA or politics in general.

Analysis of web site content

In our analysis of the web sites, we employed the above-mentioned typology of digital democracy combined with a model of information traffic patterns, originally formulated by Bordewijk and Van Kaam (1982) and subsequently modified by Jensen (1999). In a theoretical elaboration on the concept of interactivity, Jensen (1999) adapted the four communication patterns – transmission, consultation, registration and conversation – to forms of Internet communication. Inasmuch as the information traffic patterns were developed in order to describe forms of interaction offered by information and communication technology, we considered them useful as a link between the more overall concept of digital democracy and the concrete features found on the party web sites. Put differently, the information traffic patterns represent a middle layer between what is found on a web site and the concept digital democracy. More specifically, we propose the following correspondence between the information traffic patterns and the components of digital democracy:

- transmission (contributing to information provision)
- consultation (contributing to information provision)
- conversation (contributing to deliberation)
- registration (contributing to decision-making).

Transmission refers to a situation in which “information is produced and owned by a central information provider and this center also controls the distribution of information” (Jensen, 1999: 163). The significant consumer activity here is program reception, as in real time radio and television. On the web sites of political parties, news, current political standpoints, announcements of events, temporary headings, but also informational texts can be considered illustrations of the transmission information traffic pattern. Inasmuch as these parts of the web site information are made available to visitors of a web site, they can contribute to the information provision component of digital democracy.

Consultation is achieved when “information is produced and owned by an information provider, but the consumer retains control over what information is distributed and when” (Jensen, 1999: 163). The consumer selects from available options in order to make “a request to the information providing center for specific information to be delivered” (Jensen, 1999: 163). The consulting of a political representative by e-mail, or the electronic ordering of documents are examples of the consultation information traffic pattern that may be present on the web sites of political parties. Inasmuch as web site visitors can obtain information through these facilities, this pattern may also contribute to the information provision component of digital democracy.

The *conversation* pattern of communication occurs when “information is produced and owned by the information consumers who also control distribution” (Jensen, 1999: 163). The consumer activity is “the production of messages and delivery of input in a dialogue structure” (Jensen, 1999: 163). The debate platforms on the web sites of political parties, enabling citizens to discuss political topics among themselves or with party’s representatives, can be considered an example of this communication pattern. The conversation pattern may contribute to the deliberation component of digital democracy, as the exchange of political ideas and opinions is made possible between citizens and politicians, as well as among citizens.

The *registration* information traffic pattern is present when “information is produced by the information consumer, but processed and controlled by the information providing center” (Jensen, 1999: 163). Jensen suggests examples such as surveillance, registration systems, and the monitoring of computer systems. The electronic forms that can be used to register as a member of the political party, or to register for an event organized by a political party are illustrations of this pattern. Other examples are polling and voting tools. These web site features have in common the fact that a linkage is realized between opinions or intentions expressed in a virtual environment (e. g., to register as a member, to vote on an issue) and their possible consequences in real life. For this reason,

Table 1. *Distribution of web pages over site layers.*

		Layer				Total
		1	2	3	4	
Political party	CDA	1	29	127	0	157
	Groenlinks	1	6	45	0	52
	SP	2	11	56	5	74
Total		4	46	228	5	283

Note: absolute figures shown in table

the registration pattern is seen as supportive of the third component of digital democracy – decision making.

The three political party web sites were analyzed in terms of the four information traffic patterns, proposed by Bordewijk and van Kaam (1982) and Jensen (1999). The research material consisted of the first three ‘layers’ of web pages belonging to the web sites with URLs: www.groenlinks.nl, www.sp.nl, www.cda.nl. For example, the first layer consists of the welcome or starting page of the web site. The second layer refers to all those pages that can be opened by means of a button placed on the welcome page. Hence, the second layer represents pages that are encountered when visitors choose to click on a hyperlink available on the welcome page. Pages on this layer typically share the URL ‘stem’ of the welcome page. The third layer includes all those pages that can be opened by means of a button placed on one of pages located at the second layer. We decided to analyze only three layers of each web site, inasmuch as the number of pages grew nearly exponentially with every layer.² The total number of pages analyzed was 283, of which more than half (157) belonged to the CDA-site, a quarter (74) to the SP site and 18% (52) to the GroenLinks site. As shown in Table 1, four pages were identified on the first layer, 46 on the second, 228 on the third. We found two pages on the first layer of the SP-web site, as the welcome page, after a few seconds, changed automatically into another page. The CDA site contained considerably more pages at the second layer compared to the web sites of the other two parties. The increase in pages between the second layer and the third was greatest for the GroenLinks site, by a factor of 7.5, and weakest for the CDA site (factor 4.3), even though the latter site contained the most pages in total.

Our decision to examine the web sites in this ‘hierarchical’ manner could be criticized, inasmuch as visitors are able to reach pages belonging to the site in many ways (e. g., via hyperlinks found on other web sites). In spite of this, during one of the interviews (referred to in the

Table 2. *Abbreviated coding form.*

Transmission	Informational texts Announcements events Other information Illustrations Internal and external links
Consultation	Asking questions by email Ordering documents Search tools
Conversation	Characteristics of electronic discussion Chat
Registration	Membership form Polling Register for events Guest book

introduction) the representative for the CDA site commented that the log data for the site www.cda.nl suggests that more than 75% of all visitors initiate their visits at the CDA homepage.

The web pages were analyzed by means of a coding form including items aimed at the identification of the four information traffic patterns: transmission, consultation, conversation, and registration. Table 2 is an abbreviated version of the coding form. The topics refer to both content and structural aspects of what is available on the web pages. One web page formed the unit of analysis, meaning that the topics in the coding form were addressed to each of the 283 web pages. The data were gathered with the help of the computer program *Indata*; for the analysis we used routines in *SPSS*.

Findings

Transmission

The information traffic pattern 'transmission' was found on the web sites of all three parties. On 199 of the pages examined (70%) informational texts were found. Table 3 shows what types of information could be identified on these pages.

A considerable amount of the information related to highly diverse topics and could not be placed in the initial coding categories related to announcement of events or standpoints of the political party regarding government policy. All pages on the first layer of the web sites contained informational texts; for the second layer this was the case for 78% of the pages and for the third layer 68%. The political parties differ dramatically in the portion of web pages used to make explicit their respective

Table 3. *Types of information on party web pages.*

Type of information	Number of times identified	
Announcement of event	26	
Political party's standpoint	46	
– Against government policy		27
– Pro- government policy		1
– Not regarding government policy		18
Other	172	

Note: absolute figures shown in table

Table 4. *Manner information presented on party web sites.*

Presentation information	Number of times identified in categories	
	standpoint	other information
Bullet point	2	21
Paragraph	3	26
Screen	5	36
More than a screen	36	89
Total	46	172

Note: absolute figures shown in table

standpoints. Whereas the CDA uses a small percentage (3%) of its web pages for this purpose, GroenLinks expresses its standpoints on more than 21% of the pages and the SP on almost 32% of its pages.³ The code 'announcement of events' was identified on less than 3% of the SP web pages, on almost 10% of those of the CDA site, and on more than 15% of the GroenLinks web pages.

In general, the information available on the web pages is predominantly text. Table 4 indicates that in the categories 'standpoint' and 'other information' information is mainly provided by texts that fill more than a single screen. In spite of this, more than two-thirds of the web pages examined contained at least one illustration.

The web pages differ in the number of internal links made available. These links refer to pages elsewhere on the web site. By far, most internal links are placed on the 'third layer-web pages', suggesting that web sites gradually provide visitors with more optional internal links (see Table 5). The pages located on the first three layers of the CDA site contain more than twice as many internal links (1586) than pages of the SP site (777 internal links), and than the GroenLinks site (685 internal links); see Table 6.

Table 5. *Internal links on layers of web sites.*

Number of internal links	Web pages on layer			
	1	2	3	4
0–4	0	19	54	0
5–20	2	25	134	5
20–30	1	1	36	0
30 or more	1	1	4	0
<i>Total</i>	4	46	228	5

Note: absolute figures shown in table

Table 6. *Types of links and party web sites.*

Political party	Internal links	External links	Links to
CDA	1586	689	1314
Groenlinks	685	199	956
SP	777	106	1376

Note: absolute figures shown in table

With respect to the external links (hyperlinks to web pages with another URL than those of the political parties), the CDA web site provided the most external links, followed by GroenLinks and the SP. This order changes, however, when the number of pages is examined to which the site is linked.⁴ Twice as many sites are linked to the CDA site than the number of links found on the CDA site itself. For the GroenLinks site this is five times as many and for the SP site 13 times. The SP site is, in other words, embedded in the largest network of other web sites (see Table 6).

Summarizing the findings with regard to the transmission pattern, transmission of information was, first of all, achieved by means of informational texts, mainly found at the first and second layers and to a lesser degree at the third layer of the web sites examined. The sites of the parties differed with regard to the number of pages used for expressing their respective party standpoints. The SP used a much larger portion of its web pages for this purpose than did the CDA.

Registration

As an indication of registration we examined whether a form was available on the web site to become a member of the party. GroenLinks provides such a form on one web page; the CDA on two pages and SP on a total of 34 web pages. The high degree of availability of a member-

Table 7. *Party web sites and navigational tools.*

Presence of navigational tools	Number of pages (absolute number and percentages of total number web pages belonging to each party)			
	CDA	Groenlinks	SP	Total
Search engine	2 (1,3%)	3 (5,8%)	63 (85,1%)	68 (24%)
Return button	155 (98,7%)	51 (98,1%)	69 (93,2%)	275 (97,2%)
Permanent frame	140 (89,2%)	51 (98,1%)	71 (95,9%)	262 (92,6%)

ship registration form on the SP site is mainly due to the fact that the form was placed in a frame that remained visible on the computer screen. Other indications of registration were present to a very limited extent. Only two instances of polling could be identified; one on the GroenLinks site and one on the SP site. The same situation was found regarding the availability of a guest book: the CDA site lacked this facility on the web pages examined, while the SP and GroenLinks did have a guest book. None of the three sites offered the possibility to register for an online or real life event.

Consultation

Consultation of representatives of the political parties via email was possible on all but one page of the GroenLinks web site, on 20% of the CDA web pages, and on almost 25% of the SP pages. On some pages only one general email address was made available; on other pages many more individual representatives could be reached by email. Consultation of documents was seldom possible on the web pages examined. On the GroenLinks web site this was not possible at all; CDA and SP offered this facility on two web pages.

In addition, we looked for search tools, considering such functions as indications of the degree of consultation possible on the sites. Table 7 shows the presence of search engines, return buttons and permanent frames on the web pages examined. Return buttons and permanent frames are available on a large portion of all the web pages. A search engine is only available on a considerable number of the SP site pages.

Conversation

A platform for discussion between citizens is available on 13 of the CDA web pages, on five GroenLinks pages and three SP web pages. A debate forum facilitating discussion between citizens and representatives of the political parties is only available on the SP site and covers five web pages.

Most discussion pages are located on the third layer, with the exception of the debate forum of the SP, which is located on the fourth layer of the site.

In order to gain a better understanding of the character of the electronic discussions, we examined one discussion on each site in more depth. These three discussions were comparable regarding the number of contributions; a recent discussion was selected from each site for study. In Table 8 an overview is provided of a number of the characteristics of these discussions. Table 8 shows that only on the SP site was a debate facilitated between citizens and a MP; on the other two party sites citizens discussed the issues among themselves. In the SP discussion the least number of contributions were posted by women (14%), excluding the female MP, whereas in both the CDA en GroenLinks discussions women were responsible for a third or more of the contributions. Comparing the quality features of the three discussions, the CDA discussion seems to have more of these, containing the longest threads, the most contributions per participant, and a serious and rational exchange between participants.

User assessment of web sites

An online survey was held among participants of the discussions initiated on the web sites of the three political parties we investigated. Questions were formulated that related to the three components of digital democracy proposed by Tsagarousianou (1999): information acquisition, politically grounded deliberation, and decision-making regarding political issues.

Regarding *information acquisition*, the survey posed questions as to whether participants felt they 'learned something new' during the discussions, whether they consulted other informational pages on the party web sites, and what their assessment was regarding the reliability and clarity of the information provided on the site.

Regarding the online *political deliberation*, questions were asked about the number of discussions in which respondents participated and the number of postings submitted to these discussions. Questions were also asked as to whether participants conversed about issues raised in the online discussions with persons outside these discussions, either face-to-face or by email. Finally, questions were asked regarding satisfaction with the online discussions; whether participants felt they had received sufficient reactions to their postings, what their assessment was of the quality of the discussions, and whether they would be willing to participate in future online discussions.

Regarding contributions to *political decision-making*, participants in the discussions were asked how important they felt it was for politicians to participate in the online discussions and the degree to which such

Table 8. *Characteristics of three political party web-based discussions.*

	SP	CDA	GroenLinks
Subject	Dutch Monarchy – upcoming royal marriage – monarchy vs. republic	Foot and mouth disease – unpopular measures by Minister of Agriculture	Citizen safety – wide range of topics
Number of contributions	86	83	69
Posted by:			
– MP	36	–	–
– citizens	50	83	69
.....
– men	35	29	20
– women	7	24	36
– gender not known	8	30	13
Formula	Statements of single representative of Parliament vs. citizens	Citizens discussing statements posted by party's webmaster	Citizens discussing statements posted by party's webmaster
Participants			
– MP	1	–	–
– citizens	37	46	43
Voters of party	Majority	Unknown, both pro and against CDA politics	Unknown, many expressions of criticism on the party
Length of threads	No threads in lay out	12 short (1–3 postings) 9 long (4–12 postings) Average: 3.9	27 short (1–3 postings) 4 long (4–12 postings) Average: 2.2
Number of contributions per citizen	Max 4, min 1 Average: 1.35	Max 22, min 1 Average: 1.8	Max 11, min 1 Average: 1.6
Quality	– responses from MP to all citizen contributions – comments confined to topic under discussion – serious	– comments confined to topic under discussion – well composed contributions	– A broad variety of topics – Emotional, sometimes rude
Tone of speech	Informal	Informal	Informal

participation took place in the discussions in which they were involved. Questions were also asked about their perception of the influence of the online discussions on party programs, the activities of members of Parliament, and whether online discussions contributed to enlargement of member support for the policy positions of the political parties.

Survey procedures

Effort was made to obtain the email addresses of all participants of recent discussions held on the three political party web sites. In the case of the SP and GL web sites, the archives of discussion contributions were available on the site and a list of email addresses was compiled with a so-called 'email extractor' program applied to a text file of the contributions. In the case of the CDA site, the contributors' e-mail addresses were not accessible on the site, but a representative of the party headquarters provided a list of email addresses of discussion participants who had also registered for the party's electronic newsletter. These efforts resulted in a list of 301 addresses.

Email addresses with incorrect syntax or other errors were removed from this combined list, resulting in a total of 281 email addresses. A letter was sent per email to these addresses, inviting the recipients to complete a web-based questionnaire. This questionnaire could be accessed via a hyperlink placed in the email message. Some 30 of these letters were returned as undeliverable, suggesting that these addresses were no longer valid. A total of 195 persons had responded a week after sending this letter.

Deducting the 30 undeliverable addresses from the initial list of 281 addresses means that 251 persons were approached to complete this online questionnaire. The response rate, 195 returned questionnaires from 251 valid email addresses, was 77%. Inasmuch as no indicators were available about the users of these email addresses, it was not possible to compare respondents to the questionnaire with members of the survey population. Although this means that no indication was available to ascertain possible bias in the response to this online survey, the level of the response rate provides some assurance that the replies to this questionnaire reflect the majority of the participants surveyed.

Characteristics of online discussants

The age of respondents ranged from 12 to 75 years, the average age was 40 years. Nearly 86% of the respondents was male and the majority was employed in white collar or technical professions. Some 70% had completed a trade or university-level education. A third (34%) of the

respondents had made use of the Internet for five years or more, and half of the respondents spent seven or more hours per week on the Internet (including use of email). Almost two-thirds of the respondents (65%) were members of political parties and more than three-quarters (77%) had voted in the last municipal elections. A quarter of the respondents (n = 51; 26%) participated in discussions on the CDA site, little more than a third (n = 68; 35%) participated in discussions on the GroenLinks site, and 39% (n = 76) in discussions on the SP site. In this contribution, only those findings that relate to the participants on these three sites and the three previously mentioned components of democracy: information acquisition, political deliberation, and influence on political decision-making, are reported.

Information acquisition

More than a third (37%) of the respondents felt that they had learned something from participating in the online discussions and more than three-fourths (78%) consulted other informational pages on the party web sites. A majority felt this information was easy to find (53%), easy to read (74%), relevant (61%) and reliable (55%). No significant differences were found between respondents active on the three party web sites and these four indicators of information acquisition – learning something new, consulting other informational pages, and reliability and clarity of information.

Politically-oriented deliberation

The large majority of the respondents (81%) participated in one to three discussions. Some 42% of the respondents posted only one contribution to the discussions; the same percentage posted between two and three messages, about 9% four to five, 8% were responsible for six or more postings. When comparing respondents who participated in the discussions on the web sites of the three parties, we found that CDA participants contributed significantly more contributions to the discussions than did participants in the GroenLinks and SP sites; see Table 9. This finding is in agreement with the earlier description of the debates on the web sites. There, the CDA discussions contained the longest threads; here is seen that participants to the CDA discussions posted the most contributions.

The degree of satisfaction with the online discussions was mixed. In terms of the number of reactions to their postings, the respondents were equally divided between those that felt the number of reactions was satisfactory and those that were disappointed. A little more than half of the respondents (55%) felt the discussions were conducted seriously, about

Table 9. Contributions to discussions on web sites.

Party	Number of Contributions				total
	1	2–3	4–5	6+	
CDA	11 (25%)	20 (46%)	9 (21%)	4 (9%)	44 (100%)
GL	33 (49%)	29 (43%)	2 (3%)	4 (6%)	68 (100%)
SP	34 (45%)	29 (38%)	6 (8%)	7 (9%)	76 (100%)
total	78 (42%)	78 (42%)	17 (9%)	15 (8%)	188 (100%)
$\chi^2 = 14.1$	df = 6	$p = 0.03$			

Table 10. User satisfaction regarding responses to postings.

Party Site	Sufficient response to postings?				total
	no	more or less	yes	don't know	
CDA	19 (37%)	16 (31%)	7 (14%)	9 (18%)	51 (100%)
GroenLinks	22 (32%)	34 (50%)	12 (18%)	0	68 (100%)
SP	14 (18%)	19 (25%)	36 (47%)	7 (9%)	76 (100%)
$\chi^2 = 38.7$	df = 6	$p = 0.00$			

a third (35%) felt this was more or less the case and 10% were not impressed with the quality of the discussions. Despite these reservations, the large majority of the respondents (82%) planned to participate in online discussions in the future.

When comparing respondents participating in the discussions on the web sites of the three parties, it was found that those involved in discussions on the SP site significantly more often felt they received sufficient reactions to their postings; see Table 10. The other indicators – number of discussion in which participated, discussions or email exchanges outside the party site, and quality of the discussions – did not result in significant differences between the respondents on the three party web sites. Taken as a whole, few differences were found in the reactions of the participants on the three web sites regarding these indicators of political deliberation. As a group, the participants seemed reasonably satisfied with the political discourse made available and were clearly interested in engaging in more online discussions.

Contribution to political decision-making

A series of questions were asked of the respondents regarding the influence of the online discussions on the creation of the content of party

Table 11. *Influence of online discussions on party-related issues.*

Issue	no influence	some influence	is of influence	don't know	total
Content party program	91 (47%)	53 (27%)	17 (9%)	34 (71%)	195 (100%)
Party election program	81 (42%)	56 (29%)	21 (11%)	37 (19%)	195 (100%)
Activities members of Parliament	93 (48%)	56 (29%)	19 (10%)	27 (14%)	195 (100%)
Changes in party policy	107 (55%)	46 (24%)	6 (3%)	36 (19%)	195 (100%)
Expansion of support for party standpoints	65 (34%)	66 (34%)	34 (17%)	30 (15%)	195 (100%)

Table 12. *Influence of discussions on party election program.*

Party Site	Influence on party election program?				
	no influence	some influence	is of influence	don't know	total
CDA	13 (26%)	18 (14%)	7 (14%)	13 (26%)	51 (100%)
GroenLinks	43 (63%)	21 (31%)	4 (6%)	0	68 (100%)
SP	35 (46%)	14 (18%)	6 (8%)	21 (28%)	76 (100%)

$$\chi^2 = 33.1 \quad df = 6 \quad p = 0.00$$

platform, upcoming election program, activities of members of Parliament, and changes in party policy. Considerable consistency was evident in the answers provided to these issues; a little less than half felt the discussions had no influence on these matters, around a quarter felt there was some measure of influence and around 10% were of the opinion that the discussions did influence these aspects. The most influence from the discussions was expected in the expansion of support for party standpoints. The responses for each of these issues are noted in Table 11.

When these indicators were examined for the participants of each of the party web sites, clear differences emerged. Participants in the GroenLinks discussions were significantly more pessimistic than participants involved in discussions on the other two party web sites regarding the influence that the discussions would have on the party election program, on the work of members of Parliament and the overall support that the discussions would generate for party policy; see Tables 12, 13 and 14. In terms of political decision-making, these findings suggest that the participants, in at least the GroenLinks discussion groups, were not impressed with the contribution of the discussions to political decision-making.

Table 13. *Influence of discussions on work of politicians.*

Party Site	Influence on work of politicians?				
	no influence	some influence	is of influence	don't know	total
CDA	22 (43%)	12 (24%)	6 (12%)	11 (22%)	51 (100%)
GroenLinks	47 (69%)	20 (29%)	1 (2%)	0	68 (100%)
SP	24 (32%)	24 (32%)	12 (16%)	16 (21%)	76 (100%)
$\chi^2 = 33.9$	df = 6	$p = 0.00$			

Table 14. *Influence of discussions on party support.*

Party Site	Influence on party support?				
	no influence	some influence	is of influence	don't know	total
CDA	10 (20%)	19 (37%)	8 (16%)	14 (28%)	51 (100%)
GroenLinks	36 (53%)	26 (38%)	6 (9%)	0	68 (100%)
SP	19 (25%)	21 (28%)	20 (26%)	16 (21%)	76 (100%)
$\chi^2 = 37.0$	df = 6	$P = 0.00$			

Discussion

This contribution addresses the question: To what extent are indicators of three components of digital democracy – information provision, deliberation, and decision making – present in the content and user assessments of the web sites of three Dutch political parties? The content of 283 web pages on the web sites of the political parties GroenLinks (Green Party), Socialistische Partij (Socialist Party, SP), and the Christen Democratische Appél (Christian Democrats, CDA) were analyzed. The topics on the coding form used for this purpose constituted operationalizations of the above-mentioned three components of digital democracy. A typology of information traffic patterns was also used to develop this coding form.

With regard to the content of the web sites, we found the first component of digital democracy, *information provision*, present in the transmission and consultation patterns on the web sites of all three parties. Information was provided by informational texts – announcements of events, party standpoints and other forms of information – on almost three-quarters of the web pages. Of the three political parties, the SP dedicated the most space to elaboration of party standpoints. In addition, the availability of internal and external links contributed to information pro-

vision. In order for visitors to obtain further information, all parties provided an email address so that party-representatives could be consulted. Of the three parties, this facility was offered most of ten on the web pages of the GroenLinks site. Another tool facilitating information acquisition – a search engine – was only available on the SP web site.

The *deliberation* component of digital democracy was examined in the electronic discussions made available on each of the three web sites. Most of the discussions were situated on the third layer of the web sites, meaning that visitors to the sites needed to explore these virtual environments in some detail before reaching one of the discussions. We examined three discussions in depth and found that citizen-to-authorities communication was made available only on the SP web site. The discussions on the other two web sites facilitated citizens-to-citizens communication. The discussion on the CDA site contained several features associated with quality discussions – the longest threads, more contribution per participant, and a serious and rational form of exchange.

The third component of digital democracy, *political decision-making*, was less evident on the three web sites than were the other two components. One indicator of this component, membership forms, was present on all three of the web sites. Other indicators, such as polling facilities and a guest book, were available only on the GroenLinks and SP site.

Regarding user assessment of the web sites, information available on the sites was consulted by most of the respondents. In addition, various aspects of the information were positively evaluated by a large majority of the respondents. Overall, then, it appears that the information on the web sites was used and appreciated by participants in the discussions.

All respondents to the survey participated in one or more electronic discussions, but nearly half posted no more than a single contribution. The CDA site participants posted significantly more contributions than participants on the other two party sites. This correlates with the analysis of the content of the web sites which showed that the CDA site contained the largest number of contributions per participant and the longest discussion threads. The finding from the analysis of the CDA discussion, suggesting that this discussion contained more aspects related to a quality discussion, was not supported by findings from the survey: no significant differences were found regarding evaluation of the discussions between participants on the three party web sites. The discussion on the SP site differed from those on the CDA and GroenLinks sites in that exchange between citizens and elected representatives was stimulated. SP site participants also felt more often than participants on the other two sites that their contributions to the discussion received sufficient number of reactions. Involvement of a Member of Parliament or other party

representative may, in this manner, be a factor for improving the level of exchange in electronic discussions.

Participants in the GroenLinks discussion were more pessimistic than discussants on the two other web sites regarding the influence of the discussions on party politics. This finding correlates with the analysis of the content of the web sites, showing the GroenLinks discussion to be less focused and more emotional in character. A possible explanation for the pessimism among the GroenLinks discussants may have to do with the topic of discussion – citizen safety – and the feeling of powerlessness in contributing to solving this societal problem.

The theoretical starting point for this contribution was Tsagarousianou's (1999) conceptualization of digital democracy, involving provision of politically relevant information, deliberation on political issues and contribution to political decision-making. We especially encountered problems in operationalizing and measuring the third component of Tsagarousianou's typology, political decision-making. Tsagarousianou intended to emphasize the potential value of computer-mediated communication for collective action outside vested political institutions. We, alternatively, interpreted this component as the opportunities political parties provided for citizen participation in the political process. Our examination suggests that the web sites of the three political parties do reflect these three components of digital democracy.

Although in this study we intentionally focused on the web activities of political parties, our long-term objective is to combine the study of these web initiatives with those of less institutionalized political actors (see also Jankowski and Van Selm, 2000). For example, a project in which one of us is engaged (Tsaliki, 2001) examines the use of web sites by a wide range of political actors in a number of European states. Here, sites are examined maintained by governmental agencies, political parties and action groups. In future studies we plan to extend this effort at understanding how a broad spectrum of individuals, groups, and organizations attempts to incorporate the Internet into their political agendas and actions.

In this study, Jensen's (1999) information traffic patterns were applied to the three components of digital democracy only in the analysis of the web sites' content. A limitation of this study is that we did not use the information traffic patterns in the same way in our examination of user assessments of the sites. This should be incorporated into future studies. Such information would shed more light on the value of integrating concepts related to digital democracy with the information traffic patterns sketched by Jensen (1999).

We attempted to modify conventional research methods – survey research and content analysis – to a relatively new terrain for study: com-

munication and discourse in cyberspace. Although online survey methods are advancing rapidly, much remains uncertain, untried and problematic with this research tool. Elsewhere (Jankowski and Van Selm, forthcoming) we describe our experiences with the online survey undertaken in this study. Here, we simply wish to record our awareness of the limitations of data collection conducted with an online survey instrument and object of study where little is known about the population parameters and characteristics of the sampling frame. This reservation having been stated, we continue to feel that application of online surveys in this particular area of study provides rapid access to valuable information that would otherwise be difficult and cumbersome to collect.

A similar situation applies to application of traditional content analysis techniques in a web environment. Modifications to this methodology are discussed in the literature (e. g., Weare and Lin, 2001; MacMillan, 1999), and necessary in order to accommodate it to the volatile nature of web sites that is possible through internal and external hyperlinks. This latter aspect of web environments has, in fact, led others (Schneider and Foot, 2001) to give preference to a new term for this form of study: web sphere analysis. Without going into the details of this approach, suffice it to say that considerable methodological rethinking and retooling is necessary in order to investigate web content. This study, we believe, represents a small step in the long-term process of accumulating experience with this methodology.

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Notes

1. Information on the site objectives for each of the web sites comes from interviews held with representatives of each political party.
2. For the analysis of the SP web site a fourth layer was included since the electronic

discussion was located at this layer and constituted a central element of our analysis.

3. Five pages on the fourth layer of the SP site were not included in this comparison.
4. The search engine www.Altavista.com and the command 'link to' were used in order to find the number of web pages that have a hyperlink to the web sites examined in this study.

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