Making sense to decreasing citizen eParticipation through a social representation lens

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ARTICLE INFO

ABSTRACT

This paper investigates the development of an electronic platform by a local government with the goal of increasing citizens' participation in public decision-making process, particularly the modality known as participatory budgeting. The local government of Belo Horizonte, a Brazilian municipality, decided to use web-based technologies to create a project called digital participatory budgeting (DPB), whose purpose was to include new segments of the population –particularly the middle class and youth – in the process of prioritizing the allocation of investments in the city's public works. The project was launched in 2006 and repeated in 2008 and 2011. Intriguingly, however, citizen participation decreased significantly. This study seeks to understand why citizens' participation decreased over time, despite the availability of a cutting-edge, user-friendly and iterative web-based platform to help connect citizens to the process. The theoretical approach is based on social representation theory (SRT) and the methodology of critical discourse analysis (CDA) of 101 documents and 19 interviews. This combination of SRT and CDA helps in understanding how people gave meaning to a new social object - the digital participatory budgeting – through their voices. Simultaneously, this approach represents a skillful approach to uncovering power imbalances signaled by "silences". The results suggest that deviations in the social representation process, namely, trivialization and reification, help us to understand the process through which citizen participation decreases. Therefore, governments seeking to improve eParticipation should, without neglecting the technical aspects, pay more attention to the social representational processes that characterize their web-based initiatives.

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1. Introduction

There is growing interest among academic researchers and governmental representatives in new forms of relationships between the state and its citizens, especially in the sphere of citizen participation. Electronic participation, or simply eParticipation, is one type of relationship that is increasingly the subject of investigation. eParticipation implicates processes and structures through which information and communication technologies (ICT) supports relationships among citizens and other organizations. ICT implementations that foster eParticipation present new opportunities, particularly for governments, to promote new forms of "communication, consultation and dialogue between public organizations and citizens" (Federici et al., 2015, p. 287). However, it

is not easy to increase citizens' participation and engagement through eParticipation platforms, and more research is needed to understand how such initiatives might succeed.

"Participatory budgeting" is an example of a public participation process that occurs at the municipal level as it allows citizens to influence or decide on public budgets, usually in terms of expenditure allocations in their territories (city, state). Although there are various methodologies and versions of participatory budgeting, the process usually relies on periodic open meetings and direct negotiations with the local government. A Brazilian local government's decision to create the first web-based, digital version of participatory budgeting – called DPB –represented an attempt to benefit from new technologies to engage citizens, particularly youth and the middle class, who were not participating in participatory budgeting in its traditional offline form. The DPB was introduced in 2006 as a new alternative to allow citizens to vote on public works, and the experiment was repeated in 2008 and 2011. Surprisingly, despite the belief that electronic technologies have the potential to increase engagement in democratic processes (Dertouzos, 1997), public participation in the city of Belo Horizonte *significantly* decreased over time: approximately 172,000 people took part in the first deployment (2006), 124,000 participated in the second deployment (2008), and 25,000 participated in the third deployment (2011).

This decrease is intriguing. The various modalities of public budgeting have been seen as having the potential to increase citizen participation in public decision-making (Pinho, 2011; Cunha, Coelho, & Pozzebon, 2014). When conceived as an e-platform, public budgeting enters the research area of eParticipation, which also seems promising with regard to facilitating citizens' involvement (Sæbø, Rose, & Flak, 2008). Because the Belo Horizonte experience combines the two aspects of participatory budgeting and eParticipation, the decrease in public participation was unexpected, which suggests that there remain gaps to be filled regarding governmental effort in implementing e-platforms that serve to include citizens in public decision processes. We therefore address the following research question: *How to explain a governmental e-platform's failure to help increase citizens' participation in public decision-making?*

To explore our research question, we designed a research project using social representation theory (SRT) as our theoretical lens and combined it with critical discourse analysis (CDA) as a methodological frame. Serge Moscovici (2000) argues that through social representation, new objects come to make sense to people. People construct representations to make sense of social objects or concepts, and based on those representations, they perform their daily actions, interact and communicate. By investigating the DPB experience, we seek to understand the social representations of the participatory budgeting modality that was created in Belo Horizonte. As existing research insists on proposing ICT as a trigger of positive social impacts, the case of DPB is quite interesting and deserves investigation.

Our study makes two main contributions. First, from a substantive viewpoint, our results shed light on why the use of web-based technologies might not have positive effects on citizen participation in public decision-making processes. More than the ICT itself, the political use of ICT represents a significant source of explanation. From a governmental practices perspective, it is inadequate to mobilize substantial resources to create a dynamic and user-friendly electronic platform that is technically well designed if representational meanings are not considered. Second, from a theoretical perspective, our results illustrate the value of applying a social representation lens combined with critical discourse analysis to better understand emerging areas such as eParticipation. The original combination of STR and CDA has the potential to rescue the critical dimension of social representation analysis (Hoijer, 2011). Discursive practices enact social representational processes and certain deviations, e.g., trivialization and reification, might obstruct some of the intended consequences, such as increasing participation or fostering the emergence of emancipatory practices.

In the next two sections, we present the theoretical background of eParticipation, including a description of social representation theory. We then outline our methodological approach and show how social representation theory as a theoretical lens was integrated within critical discourse analytical techniques. We then present the case study in detail and describe the results. The rest of this paper contains the discussion and conclusions.

2. Theoretical background on eParticipation

For decades, academicians, politicians and activists have been proclaiming the positive political implications of ICT use in general, and the Internet in particular, and have attributed to it the potential to revolutionize various aspects of society, including business, education, government and democracy. Terms such as eBusiness, eEducation, eGovernment, and eDemocracy have appeared in an attempt to reinforce particular aspects of these new forms of social practices. Ainsworth, Hardy, and Harley (2005) argue that this view not only reflects change in ICT infrastructures but also has profound implications with regard to communication and organizational practices that both affect and are affected by social and political relations.

Grönlund (2001, p. 93) defines eDemocracy as the "use of IT in democratic processes", a very broad definition that covers all forms of democracy. The focal point of eDemocracy research is to explore how ICT might facilitate the achievement of democratic goals (Sucha & Grönlund, 2012). eParticipation is being seen as a sub-field of eDemocracy (Macintosh, 2004), although Sucha and Grönlund (2012) delineate two discrepancies between these concepts. For the purpose of our investigation, we outline the first one: there is a lack of internal logic in linking eParticipation uniquely to democratic regimes of governance, particularly because technological tools can be used for different purposes depending on how they are mobilized. This linkage extends to non-democratic regimes when, for example, they are used to create barriers to public participation.

The term eParticipation refers to the use of new technologies, particularly the Internet, and their ability to either change or transform citizens' involvement in deliberative or decision-making processes (Sæbø, Rose, & Flak, 2008). eParticipation connects with opportunities for consultation and dialogue between government and citizens using a series of ICT tools. One exemplary

illustration is e-voting, i.e., the use of ICT to support the democratic electoral process (Macintosh, 2004). However, eParticipation involves much more than simply voting (Rose, Grönlund, & Andersen, 2007). It includes extended and transformed participation in democratic and consultative societal processes mediated by ICT (Sæbø, Rose, & Flak, 2008). This process involves the use of ICT in three spheres of governance: political, civil, and administrative (Grönlund & Horan, 2005). The focal point of eParticipation is the citizen and the purpose of eParticipation is to increase citizens' abilities to participate in digital governance (including the processes of providing public services at various stages in the production chain, i.e., planning, decision-making, implementation, evaluation) (Grönlund, 2001; Sæbø, Rose, & Flak, 2008), thereby enabling them to make a genuine impact on public policies (Aström, Karlsson, Linde, & Pirannejad, 2012).

Macintosh (2004) characterizes the use of technologies in public decision-making processes in three levels: 1) *e-enabling* refers to the support provided to attract a broader audience, one that previously had not Internet access, by implementing a variety of technologies to satisfy citizens' technical and communication needs; 2) *e-engaging* refers to support for deliberative debate, in which citizens can interact with the government and initiate a dialogue wherein citizens are consulted in relation to certain projects, decisions or activities; and 3*) e-empowering* refers to support for active citizen participation in decision-making, working with users, members or citizens and giving them responsibilities, tasks and options for participating in and exerting influence on the political agenda. These elements are useful in designing initiatives to increase the effectiveness of citizen participation in decision-making processes.

We found numerous studies aiming at evaluating eParticipation initiatives, such as the identification of elements that can help in the initial phases of implementation or examination of the quality level of those initiatives after implementation (e.g., Aichholzer & Westholm, 2009; Loukis, Xenakis, & Charalabidis, 2010; Macintosh & Whyte, 2008; Panopoulou, Tambouris, & Tarabanis, 2014, Sæbø et al., 2010). Panopoulou et al. (2014) identify factors that contribute to the success of eParticipation initiatives and outline the importance of citizens' involvement in the process. From the 23 factors that those authors identify in eParticipation initiatives, four are closely related to citizen involvement: user needs and expectations (identifying all relevant actors and integrating them into the design process); value for citizens (improving the quantity and quality of information received by participants and providing feedback); the digital divide, including providing user training to the disabled and desired target groups (providing access for all citizens); and the participation process, policy making and policy roles (defining the actors and their roles, and linking them to decision-making). Much more investigation is needed to better understand which new strategies might improve citizen inclusion in public decision processes. In this study, we target an experience that combines two phenomena that were previously studied separately: participatory budgeting processes that represent innovative ways of promoting citizen participation in public decision-making and eParticipation or the use of the Internet to bring citizens closer to their governments. Although initiatives that have failed to sustain citizens' participation represent a precious source of learning, very few, if any, studies have delved into those "failures" as we did in this research.

3. The tenets of social representation theory (SRT)

According to Moscovici (2000), the term social representation refers to a group of perceptions, concepts and explanations that arise in everyday life and permeate the range of interpersonal communications. Representations are social because they are built on and emerge from social interactions. People attribute meaning to the world not in isolation but through the processes of exchange and communication. Social representations are about processes of collective meaning-making (Hoijer, 2011). They correspond to a socially shared set of common knowledge and ideas that agents elaborate and communicate to make sense of and act in their environments (Moscovici, 1961, 2000; Vaast, 2007). Social representations and practices are interrelated and influence each other over time (Vaast and Walsham, 2005). Therefore, social representations can be understood either as collective elaborations of social phenomena or as unknown events that become social reality because of the representations that a community constructs (Moscovici, 2000). SRT is useful in the search for a fuller comprehension of collective practices wherein representations are shared, thereby helping us attribute meaning to the objects in this world, act and communicate with one other (Abric, 1994).

Moscovici (2000) proposes two basic socio-cognitive and communicative mechanisms that help us understand the generation of social representations, which involves two distinct but complementary processes: anchoring and objectifying. The first mechanism "strives to anchor strange ideas, to reduce them to ordinary categories and images, to set them in a familiar context" (Moscovici, 2000, p. 42). Anchoring is a form of "symbolic coping" and involves naming and classifying novel objects according to an existing system of thought (Wagner et al., 1999). Taking, for instance, the complex phenomenon of climate change, to anchor the abstract issue of climate change into recognizable frames of reference, people can name it "weather", the "weather alarm" or the "climate threat". Hoijer (2011) explains that because weather is a common topic of everyday conversations, it is everybody's concern. Because people do not want the weather to be too hot, or too cold, or too stormy, words as "threat" or "alarm" anchor the issue of climate change in well-known media discourses of threat and alarm reports.

The purpose of the second mechanism is to objectify those new ideas, i.e., "to turn something abstract into something almost concrete, to transfer what is in the mind to something existing in the physical world" (Moscovici, 2000, p. 42). Objectifying renders a conceptual scheme real, thus making it possible for an image to materialize. It has the function of allowing a group to share the "reality" in which its members live. Thus, scientific, technical and abstract concepts are transformed into comprehensible, familiar and unthreatening concepts (Vaast, 2007), which allows members to communicate with each other (Moscovici, 2000). Objectification strengthens this classification and makes an object tangible by associating it with images, material examples, models or verbal metaphors. Thus, returning to the example of climate change, when media links specific storms, heat waves or floods to

climate change, then the abstract phenomenon is objectified. Therefore, objectification occurs when ordinary signs such as summer heat, an autumn storm, or a short winter are considered concrete anecdotal evidence of climate change (Hoijer, 2011).

Anchoring is dialectically linked to objectifying (Moscovici, 2000). Each mechanism phase brings new elements to the social representation of the object and participates in its construction until the representation achieves relative stability. Indeed, this process can never be considered definitively over. It is also important to notice that different groups might enact different social representations of the same phenomenon because these representations depend on each group's historical and social context. In brief, the representational process starts with the anchoring of the new phenomenon or new object to something known. Next, through objectification, the intangible and abstract becomes tangible and concrete; i.e., images and ideas find a concrete place in the physical world. Gal and Berente (2008) provide an additional illustration using the World Trade Center attacks, recalling that at an early moment, people anchored the new fact to earlier representations of "terrorist attacks", something they already knew. Later, they started to represent the event in more concrete words as "9/11", and this concrete and precise representation allowed people to distinguish that particular event from all the others. The event was thus objectified.

Numerous authors advocate the value of using social representation as a theoretical lens to understand social phenomena involving ICT, including Vaast and Walsham (2005), Pawlowski et al. (2007), Vaast (2007), Gal and Berente (2008), Jung et al. (2009) and Kaganer and Vaast (2010). Vaast and Walsham (2005) seem to be among the first to use SRT in the IS field, mobilizing theory to understand how work practices change with the use of ICT. A second empirical study that is relevant to illustrate SRT's value to the IS field is that of Vaast (2007), who analyzes the social representations of IS security produced by various professional communities (e.g., physicians, nurses, ICT staff) in a health care organization. The results corroborate the process through which each social group anchors a new phenomenon to something with which it is familiar. For example, for physicians and nurses, IS security is related to the privacy of patient information, whereas for ICT staff, IS security is something inherent in their practice of implementing and managing systems and networks. The coexistence of various social representations is not without consequences, and theory helps provide an understanding of this fact. Finally, a third example of the use of SRT in the IS field is provided by Jung et al. (2009), who use SRT to explain students' social representations around electronic health records. The results show that the students anchored the new object in several elements relevant to their social world, including records/files, helpful/valuable, failure/crash. All of these studies illustrate the value of SRT as a rich alternative for better understanding the process by which people make sense of new things and interact accordingly.

Although the representational process helps people make sense of a new phenomenon or problem, Audebrand and Iacobus (2008) propose a framework that identifies some potential traps that may emerge along the sense-making path. Those traps are related to the dynamic nature of the representational process (Table 1).

Anchoring processes can experience either excess or deficiency in the representational process. Excess connotes a situation in which the new social practice presents little or no distinctive consonance with other social practices and the new object is so thoroughly anchored in well-known objects that it loses its originality. In this case, *trivialization* occurs, i.e., the act of making an object trivial, common, and ordinary or denying it its originality. When the anchoring process is influenced by deficiency, the new social practice or object is introduced with little or no contiguity with other social practices and assumes an exotic character, i.e., *exoticization* takes place. Similarly, objectifying can be influenced either through excess or deficiency. Excess is involved when the social practice is emptied of its symbolic and emblematic aspects such that it acquires the appearance of something ordinary, a process called *reification*. It can be influenced by deficiency when it is introduced as a social practice disconnected from the tangible world and concrete reality and remains at such a high a level of abstraction as to be unreachable, thus bringing *abstractization* into play (Table 1).

Audebrand and Iacobus (2008) illustrate the value of this lens of social representation "traps" with the fair trade (FT) movement and the effort of building marketing campaigns to promote FT engagement. A FT marketing campaign can fall into the trap of trivialization "by not sufficiently emphasizing the traits that distinguish fair trade from other, similar practices" (Audebrand and Iacobus, 2008, p. 12). In that case, fair trade risks being categorized as a practice with no added value. A FT marketing campaign could fall into the trap of exoticization when the differences between FT and other types of trade are over-emphasized, thus making it difficult to classify FT alongside other programs. A FT marketing campaign can fall into reification when it loses its symbolic content to become a mere commodity. For instance, "when a multinational firm includes an FT coffee product among its conventional coffee products, it contributes to its own 'fairwashing', but also to the reification of FT" (p. 13). Finally, a marketing campaign for FT can fall into the trap of abstractization by emphasizing general principles or precepts of FT to the detriment of particular and relevant elements, such as ensuring supply, products and pricing. There is a danger of losing both consumers looking for clear, concrete images and people who find it difficult to grasp abstract ideas.

To understand the arrival of DPB in the lives of citizens of Belo Horizonte, we mobilized the two mechanisms proposed by Moscovici (2000) – anchoring and objectifying – and we complement the analysis with the social representation traps lens proposed by Audebrand and Iacobus (2008). There are two primary reasons for this theoretical choice. We are aware that SRT is a complex theory that proposes more conceptual tools, e.g., the central core and peripheral elements (Pawlowski et al., 2007;

Table 1
The representational processes and the four potential traps.

	Low	High
Anchoring	Exoticization	Trivialization
Objectification	Abstractization	Reification

Jung et al., 2009), than those retained in our analysis. Nevertheless, we argue that anchoring and objectifying are mechanisms that helped aid in understanding of *how* this new object – *DPB* – was appropriated and integrated into the everyday lives of citizens living in the target Brazilian city. In addition, because this new object has apparently failed to achieve its purpose (i.e., to improve public participation in municipal decision-making processes), the application of a social representation "traps" lens helped us understand the unintended consequences of the social representational process, i.e., w*hy* the process occurred in the way that it did.

4. Methodological approach

To answer our research question, we combined SRT as a conceptual framework with CDA as a methodological approach. Although Moscovici refers to power in his writings, some authors note that questions about power relations are often absent from the application of SRT (Voelklein & Howarth, 2005). As proposed by Hoijer (2011, p. 14), "theoretically, though the power and ideology aspects certainly need to be developed, for example by combining social representations theory and critical discourse theory". This theoretical-methodological combination is also coherent with the ontological and epistemological nature that pervades researchers' perspectives and choices: we aim to be critically reflective in examining complex phenomena in the ICT and eParticipation fields.

We seek to explore discourse as constitutive of the social representation process. CDA has been described as a suitable approach to produce relevant insights into how discourse reproduces – or resists and transforms – social and political inequalities, abuse of power and domination (Ainsworth et al., 2005). One of the seminal CDA authors is Fairclough (1995), who explores the imbrications among language, social practices and broader political and institutional structures. CDA "questions" texts, aiming to expose the deep structures, systematic communicative distortions and power relations that underlie discourses (Cukier et al., 2008).

Among the empirical studies using CDA, Alvarez (2002) and Thompson (2004) provide exemplary illustrations of the benefit of CDA as a research approach for critically examining ICT-related issues. Thompson (2004) is particularly didactic and proposes an analytical and well-structured method. He notes that Fairclough (1995, 1996) places social structures into a dialectical relation with social activities. The critical part of the method relates to the use of language and the exertion of power, whereas the discourse analysis aspect highlights texts as one of the primary types of evidence of social structures, relations and processes. CDA relates texts from the micro-level (text level) to the macro-level power structures (social-cultural practice) that they reproduce. In CDA, discursive practice is the mediator between the micro and macro levels. This method of applying CDA, using Fairclough but inspired by the reading proposed by Thompson (2004), has three steps: description, interpretation and explanation (Fig. 1).

Description is the first step and implies a careful reading of all documents and interviews, seeking an initial understanding of the story being told and examining the production of meaningful fragments of text. The interpretation phase is much more purposeful and involves the mobilization of concepts to give sense to the descriptions. Such concepts might emerge from the analysis or *might be borrowed from a given theoretical approach*. In our study, the concepts applied *were borrowed from SRT*. Herein lies the originality of our combination: the use of CDA as a methodological frame in which SRT is mobilized as a theory that integrates the interpretation phase. Finally, the explanation phase seeks to produce a social analysis of the phenomenon under study. This is the moment when CDA acts more purposively, and it enables a connection among texts, interpretations produced by the use of SRT's sensitizing concepts and our understanding of the complex political conjuncture that characterizes the phenomenon under analysis. In our study, we therefore proceeded by linking all of the social representations identified in the previous phase at a broader level, connecting them to the institutional and political contexts.

4.1. Data collection

To collect rich empirical material, we combined two main data sources: in-depth interviews and an extensive collection of public documents. This combination of multiple sources has been suggested by IS scholars as a powerful strategy to enrich data collection, particularly when discourse analysis is at stake (Ngwenyama & Lee, 1997; Cukier et al., 2008). Our research followed the ethical principles recommended for qualitative research in social sciences and all of the respondents signed a confidentiality form assuring the ethical and anonymous use of all of the collected data.

CDA in three steps:

(1) **Description**: Detailed analysis of texts, looking inside the text production.

(2) **Interpretation**: Purposeful analysis of discursive practices. Here starts the combination of CDA and SRT: the concepts applied to Interpret are borrowed from SRT.

(3) **Explanation**: Comprehensive social analysis linking all previous interpretations, revealing underlying power relations and power asymmetries. SRT concepts are connected to broader social, political and cultural contexts.
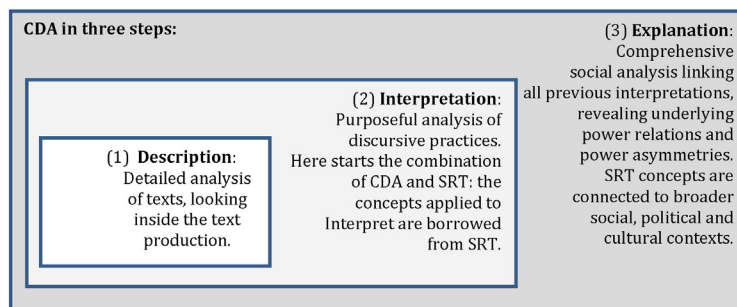
Fig. 1. The integration of SRT into CDA.

Table 2
Summary of data collection.

Type of data	Data source	Number of documents			
Interviews					
• Interviews with government administrative staff directly involved with DPB	Government	5			
• Interviews with citizens recognized as active in the DPB process	Citizens	14			
	Total	**19**[*]			
Type of data	Data source	Number	2006	2008	2011
Documents related to the DPB					
• Texts selected from six major regional newspapers available on the Internet	Press	60	3	30	27
• Texts published on the local government website	Government	13	3	3	3
• Texts (official communications) produced by the mayor	Government	28	3	17	8
	Total	**101**[**]	**9**	**50**	**38**

[*] All interviews were carried out in 2012.

[**] The number of texts per year is not homogenous. However, they reflect the totality of texts published by the local government and by the selected press about the Belo Horizonte DPB.

The historical description of the case was built based on numerous documents published by the municipal government, particularly on its website (http://www.pbh.gov.br), along with extensive media research for the entire period. In addition, a number of published academic articles were consulted (PBH, 2008; Nabuco et al., 2009; Sampaio et al., 2011; Abreu, 2012; Abreu & Pinho, 2014). The information gathered from these documents was complemented and validated by the interviews, as described below.

We carried out 19 in-depth interviews in 2012: 5 with Belo Horizonte government staff and 14 with citizens who actively participated in the DPB. We started by interviewing both administrative staff and citizens chosen by the DPB management team, based on the main criterion that they were considered very active in DPB implementation and use and thus knew the entire process quite well. In turn, these people indicated other relevant respondents, and so on, following a snowball logic (Miles & Huberman, 1994). We prepared a semi-structured interview protocol with six groups of questions, attempting to capture the respondents' perceptions of the three DBPs – 2006, 2008 and 2011 – including elements such as the nature of citizen participation, the benefits that they identified as arising out of citizens' participation, what could be improved in each version, and interesting events or feelings regarding citizens' participation. Although all of the interviews took place in March 2012, we attempted to retrospectively cover the entire period under examination.

We could grasp a type of excitement from active staff and users about the "potential" of the governmental e-platform to engage citizens and improve participation. Nevertheless, it is well known that participation significantly decreased from 2006 to 2011. What explains this failure or at least the very limited success of the government initiative? The barriers that we encountered to gaining access to more interviews with citizens who either had not participated or stopped participating in the DPB led us to a second data-collection phase. We decided to analyze the failure from the perspective of governmental efforts by recovering from public documents all of the communications generated by the local government to connect with citizens in the process of implementing and operating the e-platform. These documents included content published on the government website and e-platform, mayor-written texts directed to citizens and often reproduced by the local press, and all other news and posts published by the local press. We collected data according to a longitudinal and retrospective rationale to capture data from the three studied periods – 2006, 2008 and 2011 (Table 2) – we collected the data based on a longitudinal and retrospective rationale.

We collected 41 texts produced by local government and 60 texts published by local press, reviewing 101 documents whose subject or theme was the Belo Horizonte DPB. With respect to the local press, we selected the six major regional newspapers: *O Estadão, O Estado de Minas, Globo Minas, Voz das Gerais, TV Alterosa* and *O Tempo*. Although those 101 documents were produced and published in three distinct time periods – 2006, 2008 and 2011 –, we collected them in 2012 (when they were all fully available). All of the collected data, including the interview transcriptions and documents, were organized by type of data, data source and date in the ATLAS.ti® software. Appendix 1 shows an example of the public documents that were collected.

4.2. Data analysis

The documents and interviews were first read chronologically to formulate an initial description. This corresponds to the first step of CDA. After careful description of each segment of text, the second step is interpretation. CDA suggests the use of sensitizing concepts in the interpretation phase as a strategy both to impart meaning and to interpret the constitutive role of discursive practices. In our analysis, we mobilized the SRT concepts. We identified 441 relevant fragments in the analysis of documents and 1060 relevant fragments in the analysis of interviews, which we aggregated based on their similarities. Through successive readings and rereading of the texts, we began to fill in the tables of the first and second steps, i.e. description and interpretation respectively, until we achieved a given stability in the concepts. The third column is the explanation: the final step in a CDA analysis. It involves connecting the interpretation to the political context and exploring the deeper structures reflected by the texts.

Table 3 contains an excerpt from the generated tables and illustrates the description, interpretation and explanation processes. We use gray to highlight that the *explanation is built progressively* after reading/coding all of the texts and interviews. We could compare this iterative movement from the description and interpretation phase, which represents parts, to the explanation phase,

Table 3
Example of how the analysis table is filled out (anchoring process).

Quotation (fragment of a text or interview)	Description	Interpretation	Explanation
"The voting is open for one more Belo Horizonte participatory budgeting."	The press explains the concept of DPB as a means to vote, naming it a form of "voting".	Using SRT, we identify a process of anchoring: DPB as voting, a means to vote.	The process of strongly anchoring DPB by the press and the government as a means to vote reduced the possibilities of DPB being seen as a mechanism for participation and deliberation (taking into account the Brazilian culture of distrusting the voting process).

which represents a whole, as a type of hermeneutical movement from parts to whole to parts and so on until the final (whole) explanation encompasses all the parts.

5. The case of Belo Horizonte's digital participatory budgeting

Participatory budgeting began in 1989 in the city of Porto Alegre. Described as a collective decision-making process that involves both government and citizens in voting on the city's budget, a process that was recognized as the first of its kind, Porto Alegre's participatory budgeting attracted massive media attention (Sangha, 2012). After this successful experience, numerous other participatory processes were implemented by public administrations in different Brazilian cities and states, including public hearings and consultations, cooperation of civil-society representative entities, user participation in public service provision, public meetings, surveys, the use of focus groups, citizen councils and new forms of participatory budgeting (Cunha et al., 2014). The replication of participatory budgeting was not confined to Brazil, and there are now more than 1500 similar experiences around the world. Although most are found at the city level for municipal budgets, others are found within various counties, states, housing authorities, schools, universities and public agencies (www.participatorybudgeting.org).

Notwithstanding the variety of new initiatives, in this article, we focus on the digital version of the original modality of participatory budgeting, one that seeks public participation in the process of municipal budgeting. It is defined as a deliberative collective process that involves government and citizens in which the government opens, albeit partially, the decision-making arena to the participation of citizens, who are encouraged to discuss and take an active role in the public budget (Pinho, 2011; Sampaio et al., 2011).

The first step taken by Belo Horizonte's local government was to implement its own version of traditional participatory budgeting in 2003. Belo Horizonte, with more than 2.3 million inhabitants and 1.7 million potential voters, is divided into nine regional administrations or district forums. Offline participatory budgeting was organized according to that type of geographical division. Each district forum pre-selected a certain number of public works projects (worksites) to include in the budget. Each forum also elected its sub-regional deputies. Visits were arranged for regional deputies to get to know (as a group) the pre-selected worksites. Regional deputies selected a maximum of 14 works projects per region and could supervise their implementation. From 2003 to 2006, Belo Horizonte's local government evolved in its experience with participatory budgeting, creating three categories with distinct budget allocations to allow citizen participation in decisions involving a portion of the resources available for investments. The first was directed to physical participation in regional participatory budgeting, in which the public participated in decisions involving important infra-structure investments. The second was also directed to physical participation, specifically involving housing participatory budgeting. We consider these two first institutional spaces as part of the traditional (offline) participatory budgeting. The third modality was designed to be exclusively virtual, encouraging citizen participation on the Internet, which was when the so-called digital participatory budgeting, or DPB, was born.

It is important to include here a brief explanation of the Brazilian context regarding electronic voting. On the one hand, Brazilian citizens are familiar with electronic voting processes. Indeed, since 2000, all of Brazil's election processes have been automated and placed online. Using electronic terminals, the citizenry votes for executive positions (e.g., President of the Republic, Governor of the State, Mayor of the city) and legislative positions (e.g., Deputies, Senators). Voting is mandatory for citizens aged 18–70 and optional for citizens aged 16, 17 or over 70. On the other hand, although voting is obligatory in Brazil, there is a high degree of mistrust among Brazilian voters regarding the democratic election process itself (Baquero & Gonzalez, 2011), a sentiment that is corroborated by the huge number of absenteeism and blank and null votes cast in each election. In 2014, for example, during the presidential elections, the proportion of abstentions, blanks and null votes reached 29% (Cristina & Massali, 2014). Another significant trend is young people's increasing lack of interest in the electoral process. Recent surveys indicate an increasing reduction in the number of voters under 18 years old, an age group for whom voting is optional. From 2006 to 2014, the percentage of Brazilians aged 16–17 years old who registered to vote fell from 39% to 25%.

The DPB of Belo Horizonte has been recognized as the first governmental participatory budgeting initiative involving the use of the Internet as a deliberative tool open to all citizens. This can be seen as an innovation vis-à-vis previous participatory budgeting projects. It was planned to be bi-annual and long-term; however, because of sharply decreasing participation, it was discontinued. The history and the main features of these four DPB editions is presented in Table 4 and described below.

In addition to more factual information, such as the number of participants, number of website visits and investment amount, we included a column with relevant information provided by Abreu and Pinho (2014), who analyze 2323 testimonials and messages posted by the DPB participants in 2006, 2008 and 2011 in the online forum of discussions and we attempted to synthesize what they called the "overall meaning or perception" that citizens attached to the process. We found the authors' interpretations interesting because citizens expressed high expectations in the first deployment, followed by a less positive feeling in the second deployment and a truly negative expression of disillusion and mistrust in the third and final deployment. The main difference between the data collection carried out by Abreu and Pinho (2014) and our data collection is that Abreu and Pinho (2014) analyze all of the testimonials and discussions posted by the citizens in real time in 2006, 2008 and 2011, whereas we, in 2012, interviewed only people who were actively involved in the process of implementing and using the DPB.

In the first utilization (2006), the local government created the web-based platform to work in parallel with traditional participatory budgeting. The implementation of DPB was conceived as a response to one primary challenge: to integrate new segments of the population into the decision-making process, particularly among youth and the middle class (Nabuco et al., 2009). A website (http://opdigital.pbh.gov.br) was developed with information about the DPB, with citizens' forums, pictures of the pre-selected projects, FAQs and a list of public places available for Internet access. Numerous elements were considered during the implementation of the platform, including the usability of the system, its interactivity and the appropriateness and richness of the content. The management of the DPB project indicates a strong governmental concern with the development of an environment that would be available to the largest possible number of citizens and would facilitate access to information, debate and voting (Nabuco et al., 2009). It is also important to mention that in terms of the platform creation and evolution, the first deployment was integrally implemented by the local government's ICT staff. Beginning in 2008, however, firms specializing in website development were also engaged, providing increased expertise for this project.

A communications campaign employing TV, radio, leaflets and website was developed by the local government, representing an explicitly institutional tool for DPB promotion. One hundred seventy-eight Internet voting places were installed for 40 days, with more than 500 computers and a staff trained to provide voter support. To obtain mobility, some of the voting points were buses equipped with Internet access. The local government had many volunteer partners, such as commercial associations, churches and community groups that installed additional public Internet stations to facilitate access for people who wanted to participate.

All of the citizens registered in the system could vote online to select nine major public works projects from among the 36 projects that had been pre-selected by the local government and the association working on offline participatory budgeting. Because the city is structured into nine regions and each region had four pre-selected projects to be voted, the nine selected projects represented one per region, with a total budget of approximately US$ 11.1 million (amounting to less than 1% of the city budget). The preselection of public works was carried out by regional deputies in tandem with the city administration (PBH, 2008).

The government's participation goals were reached in the first deployment in 2006, with 172,938 participants. This number represents 10% of the city's registered electoral voters and five times the number of citizens who participated in the traditional participatory budgeting that same year (Nabuco et al., 2009). In addition to voting, the citizens actively engaged with discussion forums. In their analysis of the content of the testimonials posted on the online discussion forum, Abreu and Pinho (2014) identify a feeling of trust and expectation in terms of the DPB's potential for promoting the advance of democracy. Citizens also posted compliments to the government for the initiative. After the end of the first voting process, the e-platform was kept alive with information about the winning public works projects.

In 2008, the DPB process was partially modified. The investment resources were increased by 47% and the voting process included several changes. Five major works were pre-selected to be digitally voted on by citizens. Thus, citizens with the right to vote could participate in selecting one from among the five pre-selected works, instead of one per district forum as in 2006. The main reason for this change was related to the success of the preceding deployment. Instead of voting on nine small-to-medium (in terms of investment) works projects, the government decided to include major projects in the DPB that required a huge investment and would have a greater impact on citizens' lives. This is why the final number of selected works was one instead of nine, with almost 50% more investment. The consequences of this change are difficult to assess, but as we discuss below, they might be among the reasons for that year's decrease in participation.

In addition to Internet availability, citizens were given the opportunity to make their choice using a toll-free phone call. The 2008's DPB involved virtually all of the participating components of government. They organized a technical group with

Table 4
Digital participatory budgeting 2006–2011.

Year	Main features	Investment (US$ million)	Participants	Citizens' overall perception of DPB (Abreu & Pinho, 2014)
2006	36 options in terms of investments available for vote, 4 per region, 9 were selected.	11.1	172,938	DPB was perceived as a democratic expectation
2008	5 options in terms of **major** investments for vote, 1 was selected.	22.2	124,320	DBP was perceived as a competitive arena
2011	36 options in terms of investments available for vote, 4 per region, 9 were selected.	22.2	25,378	DPB was perceived with disillusion and distrust

representatives of all the municipal entities to collaborate on the DPB. More than 26 entities (including both secretaries and foundations) participated. Three private firms were engaged to improve the website and manage the electronic apparatus and toll-free phone services (Nabuco et al., 2009).

The government provided rich information about each pre-selected works project, indicating impact, cost, potential advantages and number of beneficiaries (Sampaio et al., 2011). The platform included infographics describing the situation before and after the project, educational videos and virtual maps with the location of the projects and the locations for voting. The website also showed the number of votes per project in real time. From a technological standpoint, the platform mobilized advanced tools to create a dynamic and attractive environment for the users. With two clicks from the homepage, voters were able to reach the page to vote (Nabuco et al., 2009).

The tools devoted to promoting participation were expanded following the first deployment. In addition to the discussion forum, which was reactivated, the platform included a "talk to us" functionality to encourage citizens to interact with administrative staff responsible for the DPB, to chat about previously scheduled dates, to allow participants to share their doubts, suggestions and criticisms among themselves and to receive answers from the administrative staff. The platform also integrated a *quiz*, an online game with questions and answers about some important elements of the city of Belo Horizonte (Nabuco et al., 2009).

Public participation was lower than in 2006, with 124,320 citizens participating in DPB, for a decrease of approximately 30%. Although we recognize this decrease in the absolute number, it still represented three times more than the number of citizens participating in traditional participatory budgeting that same year. Abreu and Pinho (2014) identify a change in the perceptions expressed by the citizens of Belo Horizonte in the discussion forum during this second edition of the DPB. On the one hand, the dominant tone of the testimonials and discussions leaned toward comparing the DPB to an arena of competition. Many criticisms of the government were posted and a feeling of distrust appeared to emerge (Abreu & Pinho, 2014). On the other hand, although interactions among citizens were intense, interventions in the debate among government administrative staff were virtually absent (Sampaio et al., 2011).

In 2011, the local government of Belo Horizonte released the third edition of DPB, which returned to the 2006 voting format, which had drawn huge participation: 36 public work projects were pre-selected, four from each region (depending on public demand and budget availability), from which nine (one per region) were to be chosen. The second reason for discarding the 2008 format was the risk of selecting a single works project that might not be completed in time: indeed, the winning selection in 2008 had not been completed, and the local government justified that failure on the grounds that such a project was integrated into a major federal work. Therefore, from a political standpoint, a context of uncertainty could surround the 2011 DPB from its beginning.

New safety rules were adopted. To vote, a citizen needed both to install the local government's applet to run the voting program and send an e-mail to receive a confirmation of participation. The confirmation of the vote was sent by e-mail. The platform was again improved to become even more interactive and included a site map, several links leading to essential information about the voting process and the history of DPB history, and tools to allow discussion via chats, forums and social networks such as Facebook, Twitter and Orkut. In addition to the "talk to us" space, an e-mail address was provided for questions and suggestions. Citizens could participate in pre-scheduled chats to address timely issues. As in the two previous deployments, the discussion forum was reactivated but, again, without reaction on the part of the local government (Abreu, 2012).

Participation in 2011 was even lower than in the two previous deployments, with only 25,378 participants, 85% less than in the initial deployment. For the first time, fewer citizens participated in the DPB than in the offline process. According to Abreu and Pinho (2014), the 2011 DPB was marked by a disillusionment that clearly dominated the discussion forum, with criticisms of the government and complaints regarding the platform being posted by citizens (Abreu & Pinho, 2014: 839–840):

> "This is not a benefit. These are scraps that you [The Mayor] are offering to people"

> "I think it is a shame to put those works in voting, once they are City Hall's responsibility, democratic management is a pretext".

One likely reason for these signs of frustration in the third deployment was that one of the leading projects selected in the previous deployment had not been completed.

6. Presentation of the results

In this section, we present our results in two phases. First, we present the results from our analysis of the interviews, which helped us clearly recognize DPB's "potential" to increase participation. Second, we present the results from the longitudinal analysis of the public documents using SRT concepts, which helped shed light on the apparent paradox: despite DPB's potential, participation decreased in each succeeding utilization until it was abandoned in 2013.

6.1. The recognition of a DPB's "potential" to increase participation

Our interviews targeted people who were actively involved with the DPB until its last deployment in 2011. Some of them were administrative staff directly engaged with the platform, whereas others were active users who interacted with the DPB process from its first implementation. Some of the users were citizens who had not previously participated in offline participatory budgeting; they began to participate when the process became virtual, thus representing the target group that the government

had in mind when developing DPB. Although these users are not necessarily representative of the population of Belo Horizonte, we argue that they represent people who know DPB well and have actively interacted in the process.

The interviews reveal enthusiasm regarding DPB's potential in promoting a participatory and democratic political process that could lead to inclusion, engagement and emancipation. The DPB was seen by these social groups as an enabler to reach people who had not previously participated, providing access to information and to the opportunity to vote, thus creating the potential for amplified citizens' voices.

> *"There were many youth in the streets, voting"*
>
> [Citizen]

DPB was seen as able to encourage citizens' involvement based on their cluster of interests, to promote awareness and increase the power of Belo Horizonte residents, and to create opportunities to mobilize and support deliberative debate.

> *"A neighbor created a blog and used Twitter and Facebook. I was surprised […] They distributed banners, posters, leaflets. It was daily work"*
>
> [Administrative Staff]

> *"Look, I'm going to engage in this campaign and will mobilize the population"*
>
> [Citizen]

By promoting discussion and mobilization regarding necessary and relevant public works, and leading to a process for establishing priorities, DPB was perceived as a channel to permit citizens' engagement in decision-making processes, thereby empowering them.

> *"People can work together to achieve greater success in society"* [Citizen]

> *"I believe a lot in this process, in this form of democratic choice, in the role of citizenship that people begin to play".*
>
> [Administrative Staff]

Therefore, this set of interviews suggest that, for people interacting proactively with the platform, DPB is perceived to have a strong *potential* to increase and improve citizens' participation in public decision-making in Belo Horizonte. However, this potential was not realized: DPB participation decreased over 5 years. To understand such a paradox, we engaged with SRT concepts.

6.2. Describing and interpreting communicative actions with social representation concepts

Using CDA as a frame and SRT as the sensitizing concept mobilized in the interpretation phase, in this section, we present our results regarding the social representation process triggered by government communications and extensively diffused by the press during the period under examination: 2006, 2008 and 2011. We tried to grasp how the two main processes – anchoring and objectifying – could help explain the social representations built by this group regarding this "new object" represented by DPB.

Anchoring consists of understanding a new object as a function of another, the unknown being anchored in the known. The unknown acquires the conceptual characteristics of the known, taking on its problems and qualities in an analogous manner. We can identify anchoring during the analyzed period: an attempt by government and press to render the new DPB familiar in terms of known objects. Two main categories emerged from the anchoring process in a very balanced manner. Although these categories are related, they are not identical. To transform the new object – the DPB – into something familiar, the government and the press anchored it to a representation that everybody knew well: the process of electoral voting. Therefore, the new object was anchored by the concept of voting.

> *"For the first time, the municipal administration submitted by internet a voting process of works to be performed throughout the city"*
> [Government communications, 2006]

> *"It is the voting process of participatory budgeting via Internet, the so-called DPB"*
>
> [Press, 2008]

> *"The voting process is open to one more participatory budgeting in Belo Horizonte"*
>
> [Press, 2011]

We can also recognize a second category that goes beyond simply voting: the idea of choice, i.e., the possibility of selecting from among a number of options. This is relevant because a slightly different anchoring process could lead to different objectifications. Voting and choosing are not the same in the social representational vocabulary of Brazilian citizens. Voting evokes something more negative than choosing, given the feeling of distrust that has often been attached to the process of voting in Brazil's

recent history. Choosing relates more to competition, contesting, and selection among ideas, i.e., the opportunity to select among different possibilities.

> _"[…] The population selected, via the Internet, nine works, one in each region, which are of the great value to the city"_
>
> [Press, 2006]

> _"The population has the opportunity to participate in making choices online, a transparent and innovative process"_
>
> [Government communications, 2008]

> _"It is the choice of works that will be financed by digital participatory budgeting in 2011"_
>
> [Government communications, 2011]

Comparing the analyzed documents published directly by the government with those published by the press, we could not find differences in terms of the representational process. Indeed, we identified an alarming repetition in two dimensions: (1) the press's reproduction of texts produced and published by government during each deployment and (2) the government and press's reproduction of that same content over the three deployments of DPB. This practice was almost like posting the same text from the previous deployment and merely changing the date. We found this repetition difficult to understand from a communications point of view, and we think that it may help explain why the anchoring process was virtually the same across the three deployments. However, as we discuss later, we argue that such an excess of the same idea published innumerable times leads to a process of trivialization of DPB. This excess might also explain why different objectifications did not emerge. The anchoring process recognized in the texts that were produced by the government and reproduced by the press, when analyzed in a longitudinal manner, revealed recurring repetition that led to a limited objectification process.

The anchoring process represented DPB initially as voting, as a means to vote, as something familiar to them, as choosing and as the possibility to choose. By attributing a temporary image or designation to the new social object, people attached some characteristics to DPB, distinguished DPB from other objects and made DPB a subject of conversation, thus starting to objectify it. The objectifying process produces a vocabulary and image reservoir (i.e., concept as object) that can serve as a reference for group members to select characteristics of this object that distinguish it from others.

Two primary objectification categories emerged from our analysis of the texts produced by the government and the press. The first involved the presentation of DPB as a technology or more precisely, as a _technological tool_. This happened because the government's texts emphatically refer to the "digital" dimension, punctuating a distinction between the traditional model (physical) and the electronic web-based model that mediates participation (digital). In this case, the focus is on technology, DPB was objectified by the particular online tool, the digital modality of the program, the telephone and the Internet (bold type is used to emphasize objectification):

> _"This **online tool** democratizes decision-making at Belo Horizonte"_
>
> [Press, 2006]

> _"The **digital modality** of the program […] retains more interest because it has a more advanced model than the others"_
>
> [Government communications, 2008]

> _"In the case of the digital version of participatory budgeting, the possibility of voting via **telephone** and **Internet** means greater adhesion"._
>
> [Press, 2011]

The second discourse category found in government and press documents presents DPB as a technological platform that facilitates inclusion because it is highly accessible, user-friendly and iterative. The local government's major technical effort in developing the platform is emphasized. DPB is a platform that facilitates citizen inclusion because it provides rich, complete and relevant information that creates all of the conditions for inclusion, such as how to use the platform, when to participate, how to select among the pre-selected works projects, where to find additional information, and where to use it. These discursive actions that focus primarily on the tool – the use of the digital modality and the Internet, the technology that could allow the inclusion of new actors in the democratic process of voting – were literally replicated from the first deployment in the following two. DPB was therefore objectified as a platform for inclusion, emphasizing the points of access: a computer at home, the telecenters, and the public places to vote (bold used to emphasize objectifying).

> _"For those who do not have access to a **computer at home**, the local government made available around **150 points of access** in several locations in the city, in all the regions"_
>
> [Government communications, 2006]

*"The local government opened voting places, public and free, in **telecenters**, municipal schools and administrative entities"*

[Press, 2008]

*"The local government of Belo Horizonte will provide citizens without Internet access with more than **400 public places to vote**"*

[Government communications, 2011]

The anchoring and objectifying mechanisms help reveal that the underlying premise of the importance of technology was relevant in the representational process, somehow hiding the participatory and deliberative possibilities that such a technology can support and therefore relegating the political process to a secondary status. For Moscovici (2000), it is by virtue of the representations of social objects that individuals and collectivity both impart meaning to new objects and base their actions upon them. A social representation is a product of two dialectically linked processes: anchoring and objectifying. Although these processes help people integrate new social objects into their everyday lives, some traps may emerge, and the process can be influenced by either excess or deficiency, thereby affecting the richness and diversity of the final social representations. The city of Belo Horizonte launched a DPB three times, and the project experienced a huge decrease in citizen participation before it was eventually discontinued.

One avenue to explain this decrease is that in the anchoring process that occurred in the three deployments, both press' and government's communicative actions *trivialized* the social representational process of DPB. The anchoring process linked the new object – DPB – to a well-known concept: voting. Too much emphasis was placed on well-known practices involving the electoral voting process, which, in the mind of the Brazilian public, is per se a process that warrants distrust. This trivialization process, which occurs when anchoring is too strong, excluded the possibility of DPB stimulating other images and elements in the minds of Belo Horizonte citizens, therefore reproducing the status quo.

As we could identify a *trivialization* process occurring in the anchoring process, during objectification, we could recognize a *reification* process taking place, due again to the nature of the communicative actions of government and press. The social practice was emptied of its potential emblematic aspect – i.e., of more proactive participation in public decision-making – and had its symbolic aspect relegated to a taken-for-granted digital tool for voting. DPB was described merely as an instrumental tool that provided access to vote, not as a transforming platform for the promotion of more political interaction between government and citizens. Although we could identify a potential for the DPB platform to create spaces and occasions for improving democracy and deliberative spaces, these representations did not emerge from either the communicative practices of the promoters of the e-platform or from the press. There was hardly any encouragement related to important issues such as broadening participation in public discussion, achieving better governance with better decisions, or rendering citizens co-responsible for making public decisions. Conversely, the government created discussion forums for the platform and then rarely participated in them, leaving citizens to debate among themselves.

6.3. Explaining the connection among SRT concepts and the broad political context

This section presents the third phase proposed by CDA: explanation. This phase seeks to expose the deep structures, systematic communicative distortions and power relations that lie behind discursive practices. In addition to analyzing the power of multiple and often *conflicting voices*, one of CDA's strengths is to identify the power of *absent voices*. CDA is skillful in analyzing the power imbalances signaled by "silences", in this case, the absence of citizens' voices and alternative visions of the DPB in the media and public documents. The trivialization and reification processes recognized through an SRT analysis were products of not only the strong repetition of an identical discourse over the years but also the paucity of content in that repeated discourse. The counterpart of this repetition and dearth of content was the absence of alternative discourses produced by other social actors, particularly political activists and social movement militants who are not given space in the Brazilian media.

As in many other countries, the mass media in Brazil plays an important role in shaping people's opinions, general trends and accepted "truths". What is not necessarily well known by a non-Brazilian reader is that a small number of powerful families own most of Brazil's mass-media outlets, particularly TV and newspapers.

"We live in a country in which almost the totality of the mass media – TV, radio, newspapers and magazines with the highest circulation – advocate the same point of view [...] about any subject that is of general interest. They are ideologically and politically aligned. They are owned by a small group of not more than 10 rich families" [GGN, 2014].

Those powerful groups have a hidden political agenda and are traditionally linked to the conservative economic elites. Put simply, throughout the history of the Brazilian republic, the mass media have almost never promoted processes of emancipating or facilitating the participation of the Brazilian citizenry, particularly its poorest segments. In these media, alternative voices are not welcome. In such a political environment, the press is a tool for those in power.

CDA leads us to mobilize the critical side of discourse analysis to uncover the power relations and imbalances that underlie the repetitive and somewhat conformist discourse of the local government and press when presenting and promoting the DPB and the absence of alternative voices in the press. We also explore some inherent contradictions between the government's goals and its efforts. Particularly in the explanation phase, the analytical techniques of CDA helped us not only connect the interpretations that emerged from the analyzed texts but also identify the absence of some texts.

The explanation phase mobilizes our knowledge of the political and cultural conditions under which the media operates in emerging countries and serves to highlight the weight of the silent voices. On the one hand, citizens' voices were absent from the media; on the other hand, the government's voice was silent in the discussion forums in which citizens were quite active. This **double silence** has implications concerning how power is articulated through DPB, leading us to identify some contradictions in the government's communicative actions. Analyzing the political context of Belo Horizonte in the period covered – from 2006 to 2012 – we claim that the local government *stopped* its efforts in the *e-enabling* properties of the DPB platform not by chance but intentionally. Indeed, the local government's political repertoire does not include an emancipatory political agenda. This means that the instrumental view that dominates the local government's social representational process – as exemplarily illustrated by the technical care which with the digital platform was implemented – is how the government knows to relate to citizens, politically speaking.

The dynamics of the DPB platform are somewhat marked by asynchrony: the government shared information with citizens and invited them to vote. The government was more concerned about distributing relevant information on time and giving citizens' access to Internet than about promoting political debates among the social actors using the technological platform. The DPB did not foster the collective construction of a process that went beyond a consultative nature. The government, which was already the more powerful party in the process, might have even increased its power by legitimating the "inclusive and democratic" character of the DPB as "digital participatory budgeting" when that budget actually represented only a small fraction of the total city budget. We argue, based on all of these connections, that the main goal of the government was actually not to increase participation in the sense of a political process but to just increase **numerical participation** by including more people in the voting process. However, the government failed to increase numerical participation. This interpretation cannot be supported by isolated facts but by the connection among texts, the interpretation of those texts –in our case the SRT concepts – and the broad political context. Here, our knowledge about the complex Brazilian political conjuncture plays a role and in this type of sense-making process, we believe less in the objectivity and external validity of our results than in the importance of the authenticity and plausibility of our interpretations for evaluating the quality of our results. This observation is in line with our epistemological position as critical-interpretive researchers.

7. Discussion

One of the most interesting results of our analysis is the disclosure of the following paradox: despite the high potential of a cutting-edge, user-friendly and iterative web-based platform for enabling citizens' inclusion and promoting new democratic practices, such a positive effect did not emerge. Numerous changes in the format with the second and third deployments, along with the emergence of rumors of fraud (e.g., votes from dead people) and incompetence in carrying out previous selected works, provide part of the explanation for this failure. However, these elements alone cannot make sense of this 85% decrease from the first to the third deployment, as several modalities of traditional participatory budgeting all over the country had also encountered similar obstacles – particularly the lack of confidence in political institutions, which is somehow omnipresent in Brazilian culture – and yet, they have survived.

Unlike the process triggered by government and press, the interviews with active users of DPB objectified it in different ways, emphasizing the potential for inclusion (e.g., access to information and resources and being able to vote), engagement (e.g., new interactions among the social actors), and emancipation (e.g., the exercise of citizenship). We had the opportunity to perform a longitudinal analysis of the social representational process generated by government and press through the dense volume of available public documents. The longitudinal analysis allowed us to recognize a *strong repetition of discursive practices* that ultimately decreased the richness of the DPB representations and was particularly focused on its functionalities as a technological tool or platform (e.g., being user-friendly and iterative and giving easy access to the voting system). This means that the social representational process produced by government and press emphasized the technical effort put into the implementation of a cutting-edge electronic platform and decreased the political possibilities of debate and experimentation with the new social object.

These results are in line with Macintosh's (2004) three levels of technology use in public decision-making processes: e-enabling, e-engaging and e-empowering. The strong focus on the informational and technological character of DPB – as found in the documents published by government and press during the three deployments – reinforced the *e-enabling* aspect too much. E-enabling means achieving a broader audience, one that has been digitally excluded, by making available a variety of technologies that fill citizens' technical and communication needs. For Macintosh (2004), however, e-enabling should represent just the first step. It should be followed by additional efforts to provide spaces and occasions not only for deliberative debate and interaction (e-engaging) but also for encouraging the effective influence of citizens in the decision-making process (e-empowering). In the case of DPB, the government emphasized and stopped its efforts at the first step to such an extent that e-engaging and e-empowering lost ground, even though they had potential. In addition, the trivialization and reification traps help explain why the Belo Horizonte DPB could not transcend a *consultative e-democracy* mold, following the classification proposed by Ainsworth et al. (2005), i.e., the focus was limited to a type of unidirectional communication between government and citizens.

Table 5 helps us summarize the discussion. Although the mobilization of SRT concepts helps explain part of the failure of government efforts, it does not cover all of the influential factors. The novelty of DPB could encourage citizens' participation in an active and democratic debate instead of just enabling them to vote. The discursive practices of government, reproduced by the press, and related to the inclusive character of DPB, could be better interpreted as an obstruction of the possibilities for increasing spaces for deliberation and democratic debate, since the meaning attached emphasizes the technological and instrumental

aspects, not the political process. Although SRT lens helps us understand *how* trivialization and reification took place, it is not very helpful for understanding *why*. Herein lies the value of integrating SRT within a critical version of a discourse analysis approach.

The contradiction that CDA helps us uncover is that local government's ambivalent effort in implementing a cutting-edge, user-friendly and iterative web-based platform while removing a sense of a more engaging and emancipatory political process was not accidental. What *was* somehow "accidental" was that by ignoring the representational process triggered by its discursive actions, the local government failed to increase participation in the shallow meaning it had attributed to that concept, i.e., to increase the number of voters.

8. Conclusion

Our study holds a number of implications for both theory and practice. For theory, this study proposes a new understanding of the use of technology in participatory practices. The literature on eParticipation has a tendency to search for misuse or poor implementation of ICT to explain the absence of positive effects of web-based platforms on citizen participation, democratic practices and better interactions between the state and society (Grönlund, 2001; Sæbø et al., 2008; Aström et al., 2012). Our results go beyond this argument, showing that the political strategy may be one of not exploring the potential of collective and social construction and interaction of the web-based platform, thereby trivializing and reifying it. Belo Horizonte's local government developed and managed the digital platform in an exemplary manner, technically speaking. The platform that the government implemented was iterative, user-friendly, dynamic, explorative of social networks and easily accessible. However, citizens/users might abandon a cutting-edge digital platform because the key is not ICT per se but the political use of ICT through discursive practices.

Our results also support our argument in favor of increasing the use of a more symbolic and cognitive lens in examining ICT-related social phenomena. SRT as a theoretical lens provides new ways to analyze social phenomena of the type represented by eParticipation. In the case of Belo Horizonte DPB, because the anchoring process equated e-democracy with e-voting, numerous citizens lost interest. The framing of DPB as just an additional platform for voting prevented people from associating the new object with more proactive symbolic weight; DPB as voting defined a discourse in which the citizen had no active role. In addition, the reification process conveying DPB as a technology, a mere tool, helps explain the decrease in the number of participants. Seen merely as a tool, DPB loses its transformative potential as a platform to empower citizens in their relationship with the government. Analyzing the traps or failures that might occur in any social representational process, we find a plausible explanation for the decrease in citizen participation. This explanation is based on two main "deviations" of the social representational process that characterized the launching and implementation of DPB: trivialization and reification. The combination of these two unsuitable breakdowns in the representational process helps us to better understand Belo Horizonte residents' decreasing response to the decision-making call embedded in the DPB.

Finally, our article proposes the combination of SRT and CDA as an original and powerful theoretical and methodological strategy. Although they represent valuable sense-making lenses when they are applied separately, when they are *combined*, they enable the identification of richer results. In our study, SRT showed how people attributed meaning based on discursive practices of the new social object – digital participatory budgeting. We also emphasized the weight of the silent voices – the absence of citizens and alternative visions of the DPB in the media and public documents and the absence of government voices in the discussion forums used by citizens. CDA was adept in analyzing the power imbalances heralded by those "silences".

In terms of managerial implications, our results suggest that promoters of electronic platforms aimed at increasing participation should consider all of the technical and relational aspects of web-based technologies; however, they must not neglect the social representation processes triggered by their discursive actions. Our results emphasize the strength of discursive practices that can not only reproduce and reinforce a system of power relations but also structure the context in which the action takes place. The voice of the government, systematically echoed by the press, can imprint its representations on the community mindset. In addition to focusing on the functionalities and capabilities of the technological platforms, government should consider the effects of its discursive practices and their reproduction by the press. Although we acknowledge that in certain cases, the underlying political strategy might actually be aimed at denying the democratic potential of the web-based platforms, this is not the

Table 5
A summary of the CDA analysis using SRT.

Period	STR process	Description	Interpretation	Explanation
	Anchoring	DPB = vote DPB = choice	Very strong process of anchoring leading to trivialization of DPB as just one more way to vote	Active citizens and administrative staff identify DPB's potential as a political space for inclusion, engagement and emancipation. However, the SR process built by government
2006 2008 2011	Objectifying	DPB = technological tool (e.g., telephone, Internet) DPM = platform for inclusion (e.g., computer at home, telecenter)	Very strong process of objectification leading to reification of DPB as a technological tool that allows citizens to vote	and press trivializes DPB as just one more means to vote (overall, Brazilians distrust electoral voting) and reifies DPB as a cutting-edge tool that allows citizens to vote, an instrumental view that downplays the potential of this platform to promote emancipatory participatory practices. Why? Herein lies the contribution of the CDA analysis: the absence of an emancipatory political agenda of local government and the conservative role of media in Brazil, which do not open space for democratic debate.

rule. Governments seeking to exploit the full potential of those platforms should pay attention to their communicative practices. For their part, citizens should be attentive to those strategies and react more purposively when the government does not encourage the expansion of their (physical or digital) opportunities to actively participate in public decision- making.

The main limitation of our study is methodological in nature. Although we were able to collect data from local government, the press and a segment of active users of DPB, we lacked access to the voices of the citizenry, particularly those citizens who participated in the first deployment but abandoned the DPB in its second or third utilization. Those voices and discourses would have been extremely valuable to increase our understanding of the reasons for DPB's failure.

Future research could expand our combination of SRT and CDA to other contexts. It would be interesting to apply this same framework to different eParticipation projects, both successful and unsuccessful. Social representations are formed through communicative interactions in well-situated social groups. It would be interesting to grasp the social representations of different groups in different contexts and then to compare them with the representations that emerged from our study.

Appendix 1. Exemplary illustration of the public documents consulted

Termina nesta segunda votação do OP digital

Elaine Resende

Obras para BH

Em meio à polêmica sobre o risco de fraudes, termina à meia-noite desta segunda-feira a votação da segunda edição do Orçamento Participativo Digital. Na edição 2008 houve mudanças em relação ao ano passado: em 2007, a PBH ofereceu 36 projetos para que fosse escolhido um em cada regional, o que resultou em nove empreendimentos para a cidade. Desta vez foram listadas cinco opções para que seja eleita apenas uma.

Mas a principal novidade deste ano é que as **cinco obras propostas** integram o programa de Estruturação Viária de BH, conhecido como Viurbs, e que prevê intervenções para melhorar o caótico e perigoso trânsito da cidade. O investimento na proposta vencedora poderá chegar a R$ 50 milhões. Na edição passada, foram R$ 20,25 milhões para os empreendimentos das nove administrações regionais: R$ 2,25 milhões para cada.

Até as 13h desta segunda-feira, 116.835 votos haviam sido computados, sendo 106.991 (91,57%) pela internet e 9.844 votos (8,43%) por telefone, outra forma de participação popular. Em primeiro lugar, com quase 40% da preferência, está a obra de número 5, que prevê mudanças no entorno da Praça São Vicente com o Anel Rodoviário, na região Noroeste da capital.

A votação pela internet é questionada por parte da população. De acordo com denúncias, algumas pessoas usariam o título de eleitor de moradores que já morreram para aumentar a quantidade de votos em favor de determinada região de BH. Até o Ministério Público Estadual se posicionou diante da polêmica. Na última quinta-feira, o MP entrou com uma **ação civil pública** contra o sitema virtual da prefeitura. "O MP não quer que esse tipo de processo, que pode ser fraudado, continue atuando. O certo é uma votação presencial, no qual o eleitor vote em um terminal público. Por meio da internet, como é feito, não é seguro", afirmou o promotor de Justiça de Defesa do Patrimônio Público, Leonardo Barbabela.

O prefeito Fernando Pimentel garantiu, no entanto, que a votação vai até o fim. "Se não houver impedimento jurídico, vamos continuar. O Tribunal Regional Eleitoral já retirou a opção de acesso de consulta aos títulos. Desta forma, a votação não se desvirtua. Não podemos abrir mão da democracia, por causa de poucas pessoas mal-intencionadas", disse.

Como votar

Para escolher uma obra do Orçamento Participativo Digital, é necessário ser eleitor de Belo Horizonte. A votação pode ser feita pelo site **www.pbh.gov.br/opdigital** ou pelo telefone 0800-723-2201, gratuitamente.

Na Praça Sete, a Prefeitura instalou um ponto público de votação, a Unidade Móvel da Prodabel – um caminhão com duas salas e 14 computadores, além de dois monitores para orientar os cidadãos.

Na Regional Barreiro, a participação popular para a votação nas obras viárias do Orçamento Participativo Digital pode ser observada em vários locais. Além de pontos de votação disponibilizados por alguns comerciantes, moradores colocaram à disposição computadores em suas casas e até foi criado um blog com informações sobre o OP.

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