

# Openspending.nl as a platform for deliberative democracy in open budgeting

An analysis of data, interface and potential in democratisation of  
an open budgeting platform in the Netherlands

Master thesis New Media & Digital Culture

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# Abstract

In what ways does Openspending.nl as a platform contribute to democracy? This thesis is concerned with the data, interfaces and potential of Openspending.nl in a context of democratisation and aims to show its contributions by considering the material characteristics of the platform and its concrete impact. Openspending.nl is a platform on which budgets and realisations of local governments are published as open data and made available for comparison. The open data, a form of transparency, makes the information available for citizens. The interfaces through which the data is opened encompass two graphical user interfaces and an application programming interface, creating possibilities for human and non-human actors to interact with the data and interpret it. The impact of Openspending.nl is apparent in a number of use cases, which show the potential for open data and transparency. Finally, I argue that this platform can be understood as moving towards a Latourian Dingpolitik, making fluid assemblies possible and contributing to the democratisation.

# Index

<b>Abstract</b>	<b>1</b>
<b>Index</b>	<b>2</b>
<b>1. Introduction</b>	<b>4</b>
Research questions	4
Method and corpus	5
Developments in Openspending.nl	5
Legal and political background	6
A media studies perspective	7
My background in open data	9
<b>2. Theoretical framework</b>	<b>11</b>
Democracy, participation and accountability	11
Open data and transparency	14
Dingpolitik and platforms	17
<b>3. Method and corpus</b>	<b>20</b>
Method	20
Corpus	21
<b>4. Data and democratisation</b>	<b>23</b>
Affordances of Iv3 and detailed data	23
Platform mechanisms	24
Democracy, participation and accountability	25
Open data and transparency	26
Data-oriented democracy	27
<b>5. Interfaces and democratisation</b>	<b>28</b>
Affordances: the website	28
Affordances: the API	30
Platform mechanisms	32
Democracy, participation and accountability	33
Open data and transparency	34
Interface-oriented democracy	34
<b>6. Democratising potential</b>	<b>36</b>
Impact and use cases	36

Democracy, participation and accountability	37
Open data and transparency	39
Platform-oriented democracy?	40
<b>7. Conclusion and discussion</b>	<b>42</b>
Conclusion	42
An empirical approach to impact and accountability	43
Towards open participatory platforms	44
<b>8. Bibliography</b>	<b>46</b>
<b>9. Appendix</b>	<b>51</b>
Screenshots	51

# 1. Introduction

**Openspending.nl is an online platform for open budgeting and realisations of local governments in the Netherlands. This research is aimed at understanding Openspending.nl's contribution to deliberative democracy through the data, interface and potential of the platform. In order to do this I will make use of the concepts of democratic participation and accountability, Bruno Latour's concept of Dingpolitik and use the concepts of transparency and open data to discuss the value of the platform and its contributions.**

**In this chapter I will introduce my research question, method and corpus. After that, I will discuss the background of the platform by giving a short history of Openspending.nl and setting out the legal and political background of transparency in the Netherlands. Following the background of the research object, I will contextualise the new media studies approach I aim to take and end with my own background in the field, giving context for my own position with regards to the Open State Foundation and open data in general.**

## **Research questions**

My research question is as follows: **In what ways does Openspending.nl as a platform contribute to democracy?** Openspending.nl, as a platform that affords transparency in budgeting of local governments, could be expected to contribute to democracy. With this main research question, I aim to analyse the platform in a very practical sense and evaluate my findings by judging it on the democratic contributions that result from the platform and its characteristics. I will answer my research question in three parts, concerning the data, the interfaces and finally the potential of Openspending.nl and similar platforms:

- 1. In what ways does the data contribute to democracy?**
- 2. In what ways do the interfaces contribute to democracy?**
- 3. What are the potential contributions to democracy?**

This distinction of data, interface and potential is meant to discuss the input, process and output of the platform in separate chapters. Further on, in my theoretical framework, I will operationalise democracy through the concepts of participation, accountability, deliberative democracy, transparency and open data, and define the concept of Openspending.nl as a platform. One specific concept is Dingpolitik as put forward by Latour, which I will discuss more later on, and

will use in the evaluation of the findings and to argue for a form of Dingpolitik in the context of Openspending.nl and similar platforms.

### **Method and corpus**

My method varies for each of the three chapters of the analysis. The first two chapters rely on a material object analysis of the data and the interfaces, respectively. The third chapter is an explorative analysis based on the findings of the two previous chapters and contextualising information from multiple sources. My research as a whole is explorative and descriptive, which brings me to combine multiple methods and rely heavily on the contextualising parts of my research in the third chapter, with a less defined methodology. My corpus is in the first place the platform itself, specifically the data and interfaces, and on top of this the available documentation for context. Because of my role in the Open State Foundation, I can also use the practical expert knowledge and opinions of Tom Kunzler, program manager for Openspending.nl, and my own knowledge from working in the field.

### **Developments in Openspending.nl**

To fully understand Openspending.nl as a platform, I have to describe the processes behind it and how it came to be what it is today. In this paragraph I will discuss the developments since 2013, when Openspending.nl was launched, up until now. For this I have interviewed Tom Kunzler, program manager for Openspending, to get an insider view into the developments.

Openspending.nl started as an Open State Foundation project in 2013, together with Amsterdam-Centrum, one of the eight boroughs of the city. This was later expanded to a project with all eight boroughs of Amsterdam. After it was successfully scaled up within Amsterdam, there was a pilot project with the province of Groningen, to open budgets of another type of local government.<sup>1</sup> With this as background for the project, Open State Foundation applied for subsidies from the Ministry of the Interior and Kingdom Relations (BZK), which were granted in 2015. At the end of this year, Open State opened financial data for all Dutch municipalities.<sup>2</sup> In the next year, 2016, Open State Foundation won an Open Government Partnership Award.<sup>3</sup>

In the first stages of the project, the data was being opened by asking the boroughs, municipalities and provinces for the data they supply to the Central Bureau of Statistics (CBS). This data was already being collected in a standardized format, but the CBS did not disclose the data - they did not consider themselves to be owner of the data. After asking all municipalities for

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<sup>1</sup> "Openspending - Over", *Open State Foundation*. [openspending.nl/pagina/over/](https://openspending.nl/pagina/over/). Accessed July 12th 2018.

<sup>2</sup> "Openspending: from one district to an entire country", *Open State Foundation*, October 2nd, 2015. [openstate.eu/en/2015/10/openspending-from-one-district-to-an-entire-country/](https://openstate.eu/en/2015/10/openspending-from-one-district-to-an-entire-country/). Accessed July 12th 2018.

<sup>3</sup> OGP Awards, 2016 Results. *Open Government Partnership*, 2016. [www.opengovawards.org/2016Results](http://www.opengovawards.org/2016Results)

the original data as supplied to the CBS, escalating the request from civil servants to aldermen to the municipal council where necessary, roughly half of the municipalities ultimately supplied the data. Then, the Open State Foundation approached the CBS again.<sup>4</sup> Now, with the backing of the Ministry of the Interior and with more than 200 positive responses of local governments opening their data, the CBS agreed to disclose the data for all municipalities.<sup>5</sup>

Currently, there are pilots on the opening of more detailed data, with the province of Groningen and the municipality of Groningen.<sup>6</sup> This detailed data builds on the current standard and expands it. I will discuss this in later chapters, but as it is only a small number of governments supplying the data in this way, I will not discuss it with as much attention as the main, standardized datasets.

## Legal and political background

To understand the legal and political background of open and participatory budgeting in the Netherlands, a short introduction into three laws is necessary: the WOB, the WHO and the WOO. The two newest, the WHO and the WOO, are very recent, which can be seen as a sign of the rapidly changing democratic reality and importance of new types of information. The democratic right to information is not new in any sense, but the position of data in this discourse is a recent development, evidenced in these new laws and their rapid succession.

The WOB, *Wet Openbaarheid Bestuur* (Act on disclosure of administration) is the Dutch equivalent of the Freedom Of Information Act (FOIA).<sup>7</sup> It has been signed into law in 1980, and it allows citizens to request information from local and national governments, through a legal process, a ‘WOB-request’. Unless there are grounds for refusal (such as national security or privacy-issues) the requested information must be provided to the citizen.

The WHO, *Wet Hergebruik Overheidsinformatie* (Act on reuse of government information), was signed into law in 2015.<sup>8</sup> It is similar to the WOB, but with the more specific goal of allowing citizens to reuse information in the form in which it is available and/or being

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<sup>4</sup> OGP Awards 2016 - Regional Honorable Mention, Europe: Arjan Al-Fassed [sic], OpenSpending, The Netherlands, *YouTube*, uploaded by Open Government Partnership, January 19th 2017. [www.youtube.com/watch?v=46GMSJub8-4](http://www.youtube.com/watch?v=46GMSJub8-4)

<sup>5</sup> *ibidem*

<sup>6</sup> “Open Spending”, *Open State Foundation*. [openstate.eu/en/projects/political-transparency/open-spending/](http://openstate.eu/en/projects/political-transparency/open-spending/). Accessed July 12th 2018.

<sup>7</sup> *Wet openbaarheid van bestuur*, 31 oktober 1991. [wetten.overheid.nl/BWBR0005252/2016-10-01](http://wetten.overheid.nl/BWBR0005252/2016-10-01). Accessed June 1<sup>st</sup> 2017.

<sup>8</sup> *Wet hergebruik van overheidsinformatie*, 24 juni 2015. [wetten.overheid.nl/BWBR0036795/2016-10-01](http://wetten.overheid.nl/BWBR0036795/2016-10-01). Accessed June 1<sup>st</sup> 2017.

used by the government. In short: where the WOB's main use is freedom of information, the WHO focuses on freedom of data.<sup>9</sup>

The WOO, *Wet Open Overheid* (Act on open government), is still in the process of becoming law. It has been passed by the parliament in April of 2016, but has yet to be approved by the Senate.<sup>10 11</sup> It aims to replace the WOB, and would mean a more contemporary and more far-reaching legislation on open government.<sup>12</sup>

## A media studies perspective

I situate my thesis in the broader field of (new) media studies, showing its relevance and contextualising my approach, coming from a background of media studies.

As I mentioned above when discussing the Open State Foundation's mission, open data can be seen as a tool to promote transparency in government. Accountability and trust in government has been researched extensively, and is an important part of the academic and social relevance of this subject (see Grimmelkhuijsen et al.).<sup>13</sup> Transparency can be a great tool for democracy, but without civic participation, its potential is not fulfilled. For a lively democracy in which citizens play a meaningful role, participation is vital. Open and participatory budgeting finds itself at the intersection of open data, digital innovation, deliberative democracy, data literacy and fiscal literacy, and citizens taking responsibility. Openness of open data is something that can be understood through Habermas' seminal work, *The Structural Transformation of the Public Sphere*.<sup>14</sup> A more literal translation of the subject of this work - Öffentlichkeit - is not 'public sphere', but 'openness'. Habermas is mostly concerned with openness as a prerequisite for democracy and the sphere in which this exists. Openspending.nl and similar platforms are manifestations of this openness. The question is if there is civic engagement around these platforms that would elevate them to public spheres in a Habermasian sense. This gap between information and engagement is a main point in my research.

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<sup>9</sup> "Alles wat je wil weten over de Wet hergebruik van overheidsinformatie", *Expertisecentrum Open Overheid*. [www.open-overheid.nl/blog/alles-wat-je-wil-weten-over-de-wet-hergebruik-van-overheidsinformatie/](http://www.open-overheid.nl/blog/alles-wat-je-wil-weten-over-de-wet-hergebruik-van-overheidsinformatie/). Accessed July 12th 2018.

<sup>10</sup> Boonstra, Wouter. "Eerste Kamer behandelt wet open overheid volgend jaar." *Binnenlands Bestuur*, September 14th 2016. [www.binnenlandsbestuur.nl/digitaal/nieuws/eerste-kamer-houdt-behandeling-wet-open-overheid.9548021.lynkx](http://www.binnenlandsbestuur.nl/digitaal/nieuws/eerste-kamer-houdt-behandeling-wet-open-overheid.9548021.lynkx). Accessed July 12th 2018.

<sup>11</sup> "Initiatiefvoorstel-Snels en Van Weyenberg Wet open overheid", *Eerste Kamer der Staten-Generaal*. [https://www.eerstekamer.nl/wetsvoorstel/33328\\_initiatiefvoorstel\\_snels\\_en](https://www.eerstekamer.nl/wetsvoorstel/33328_initiatiefvoorstel_snels_en). Accessed July 12th 2018.

<sup>12</sup> "Wetsvoorstel open overheid", *Digitale Agenda 2020*. [www.da2020.nl/roadmap/wetsvoorstel-open-overheid](http://www.da2020.nl/roadmap/wetsvoorstel-open-overheid). Accessed July 12th 2018.

<sup>13</sup> Grimmelikhuijsen, Stephan, et al. "The effect of transparency on trust in government: A cross-national comparative experiment." *Public Administration Review* 73.4 (2013): 575-586.

<sup>14</sup> Habermas, Jürgen. *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. MIT press, 1991.

In my theoretical framework I will discuss Bruno Latour's concept of Dingpolitik, or 'making things public'. Latour, and especially his work on Actor Network Theory, is often referenced in (new) media studies, in many cases to emphasize and explore the agency of all actors, specifically including non-human actors.<sup>15</sup> The text I use, the introduction to "From Realpolitik to Dingpolitik", is more political, arguing a new approach to democracy.<sup>16</sup> In this text, Latour argues for the Thing - the assembly, the coming together in what could be understood as a public sphere. His work on the Parliament of Things, in which he argues for a voice for non-human actors in a democratic context, is also important to note, as it is also concerned with non-human actors and a form of democratisation.<sup>17</sup> I employ Latour's concept of Dingpolitik mainly as an approach to democracy that moves away from representative democracy, a democracy that is based on assemblies - or in the context of Openspending.nl, platforms - and as a way to be conscious of non-human actors in democratic constellations.

Open data as a societal movement must also be understood as a movement in digital culture. The Open State Foundation itself is a result of a fusion of two earlier organisations, *Hack de Overheid* and *Het Nieuwe Stemmen*.<sup>18</sup> The Open State Foundation and its predecessors can be placed in a broader movement of grassroots internet-oriented organisations in civic society for democratisation and decentralisation of which Creative Commons, Wikipedia/Wikimedia Foundation and even Pirate Parties are a part of as well. Where the right to information and open data are the theory as discussed earlier under Habermas, the practice of active citizens asserting these rights has a rich history in digital culture, online and offline, of which Open State is a part and in which context Openspending.nl must be understood.

My interest in open and participatory budgeting concerns not primarily the practice or process, but the platforms on which budgeting is opened up and made available for participation. In this respect, the work of José van Dijck et al. on the platform society will provide a starting point for my analysis.<sup>19</sup> However, an important distinction is that they discuss large-scale platforms, allegedly causing economic and social innovation, with the authors focusing on their underexposed role in serving public interests. My research concerns platforms on a smaller scale, for which their role in serving public interests is much more obvious and central to their existence. These platforms can also be seen as breaking through platform economy, or

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<sup>15</sup> Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press, 2005.

<sup>16</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005): 4-31.

<sup>17</sup> Latour, Bruno. *We have never been modern*. Harvard university press, 2012.

<sup>18</sup> "Board", *Open State Foundation*, [openstate.eu/en/about/board](https://openstate.eu/en/about/board). Accessed August 28th 2018.

<sup>19</sup> Van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016.

democratising platform economy, if they successfully provide alternatives to commercial platforms.

In a very practical sense, working with open data through a platform, is a media practice. Data is mediated through interfaces, both of which are objects for media studies. Mediation and preceding datafication of information is a media practice, but the material objects through which these are opened are themselves media objects and should be studied as such. This makes the subject of my research especially interesting from a new media studies perspective. In line of Marshall McLuhan, these media can be seen as “extensions of man” and must be considered as objects that are not in any way neutral.<sup>20</sup> For interfaces, this is not such a common pitfall, but for data, this is something that must be recognized in considering it as a mediating object. Too often data is seen and discussed as the ultimately neutral approach to reality, whereas a media studies perspective will always stress the importance of considering any medium as the message, following McLuhan. The literal meaning of the word ‘data’ - ‘given’ - notwithstanding, data is never just that.

The final way in which my academic background in new media studies and digital culture proves useful is the combination of approaches with a background in digital humanities like affordance analysis and interface analysis, that consider both the societal role of objects of study and their (digital) characteristics.

### **My background in open data**

I was fully introduced to both open data and open budgeting through the Open State Foundation, the organisation in which I did my master’s internship, and at which I have worked after finishing my internship. The Open State Foundation is a non-profit organisation which aims to create transparency in government through open data.<sup>21</sup> One of the major projects the Open State Foundation runs is Openspending.nl.<sup>22</sup> Openspending.nl opens the budgets and realisations for various levels of local Dutch governments (municipalities, provinces, and more) and allows users to inspect and compare this data in a standardized way. This platform started my interest in open and participatory budgeting and motivated me to choose it as a subject for my thesis. Currently, I am involved with a similar organisation, the Open Knowledge Foundation through the local chapter Open Knowledge Belgium, for which I have coached students working on open source projects during Open summer of code 2018.<sup>23</sup> I am committed to the movement and personally, I believe in open data both as a democratic instrument and as a right. However, far too often I see

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<sup>20</sup> McLuhan, Marshall. *Understanding Media: The Extensions Of Man*. McGraw-Hill, 1964.

<sup>21</sup> “About”, *Open State Foundation*, [openstate.eu/en/about/](https://openstate.eu/en/about/). Accessed July 12th 2018.

<sup>22</sup> “Open Spending”, *Open State Foundation*. [openstate.eu/en/projects/political-transparency/open-spending/](https://openstate.eu/en/projects/political-transparency/open-spending/). Accessed July 12th 2018.

<sup>23</sup> “Projects”, *Open summer of code 2018*, [2018.summerofcode.be/2018.html](https://2018.summerofcode.be/2018.html). Accessed August 28th 2018.

the full potential is not realised. By open data as a right I mean that what value and information has been created through public money should be owned and understood by the public.

Even though the Netherlands often scores well on international lists of open data and transparency, participation seems to lag behind.<sup>2425</sup> However, there are developments on local participatory budgeting, evidenced by the publication of “*Nederland op weg naar de burgerbegroting*” (the Netherlands on the way to the citizen budget) by the national government in 2011.<sup>26</sup> As discussed in this report, several municipalities already facilitate some form of participatory budgeting. However, the participation and/or budgets in these forms are limited, in practice or by design, in budgets or in possible scope. On top of this, the initiatives are mostly analogue, whereas my research concerns digital platforms.

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<sup>24</sup> European Data Portal, Country Factsheet the Netherlands. *European Data Portal*, 2016, (4).

<sup>25</sup> Algemene Rekenkamer, Trendrapport Open Data 2016. *Algemene Rekenkamer*, 2016.

<sup>26</sup> Hofman, Joop, “Nederland op weg naar de burgerbegroting.” Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2011.

## 2. Theoretical framework

**In this chapter I will discuss my theoretical framework in three major themes, as mentioned before: democracy, participation and accountability, open data and transparency, and finally Dingpolitik and platform theory. Democracy is the major frame within which this research should be understood, allowing me to qualify platforms of open and participatory budgeting within a larger meaningful context: the supposed democratising value of these innovations. The main focus of my discussion of democratic theory is operationalising democratisation to draw attention to the gap between information and democratic engagement.**

### **Democracy, participation and accountability**

From a media studies perspective, participation on new digital platforms carries with it a promise of democratisation and subsequently a critical evaluation of these promises. I borrow a critical perspective on user participation and its supposed democratisation from Mirko Schäfer's *Bastard Culture*.<sup>27</sup> Specifically, I will use the definition of implicit and explicit participation.<sup>28</sup> Implicit participation in the context of my research is passive and it operates on the platform as it is presented, whereas explicit participation adds something to the platform and is also required for any useful type of deliberative democracy. This distinction will help me to show the gap between a platform that informs and a platform that fosters democratisation.

For a broader evaluation of participation, my main source is Sherry R. Arnstein's ladder of citizen participation.<sup>29</sup> Arnstein, in her seminal work, defines a ladder with eight rungs in three categories. Starting under the category 'non-participation' are (1) manipulation and (2) therapy. Above that, under 'tokenism', (3) informing, (4) consultation and (5) placation. Above that, in the category 'citizen power' are (6) partnership, (7) delegated power and (8) citizen control. Again, this ladder shows a gap between what they call non-participation or tokenism, and citizen power. The first two categories are passive or implicit participation, where governments or platforms are in power and citizens or users go along with the provided structure. Active or explicit participation as a prerequisite for deliberative democracy is only seen in the last category, aptly called citizen power.

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<sup>27</sup> Schäfer, Mirko Tobias. *Bastard culture! How user participation transforms cultural production*. Amsterdam University Press, 2011.

<sup>28</sup> *ibidem*: 51.

<sup>29</sup> Arnstein, Sherry R. "A Ladder of Citizen Participation," *JAIP*, Vol. 35, No. 4, July 1969, pp. 216-224.

Newton and Geissel in *Evaluating democratic innovations*, are much more concerned with the success of forms of (deliberative) democracy. They focus on a number of innovations, and evaluate them and their success in Legitimacy, Effectiveness, Civic Education, and Strengthening of Civil Society.<sup>30</sup> In their framework the division is slightly different:

*Input and Legitimacy*

Responsiveness

Inclusive Participation

Perceived legitimacy

*Throughput and Process*

Democratic process, e.g. transparency

Deliberative quality

*Output, Outcome and Effectiveness*

Identification of collective goals

Impact on debates and policies to reach goals

*Civic Education and Civic Skills*

Improvement of knowledge

Improvement of democratic skills<sup>31</sup>

Each of these four themes has two to three sub-themes, which they use to evaluate innovations. This is especially relevant when considering Openspending.nl as a new media platform, as the innovative quality of online platforms is often touted as democratising, but these promises should be evaluated critically on their actual contribution to deliberative democracy. This framework is aimed more at the process of democratic practices and as such works on a different axis than Arnstein's ladder. Newton and Geissel's framework allows me to consider the process of contributions to democracy as well as their reach.

To define accountability for the purposes of this research, I look to Thomas Hale in "Transparency, Accountability and Global Governance".<sup>32</sup> Even though his research concerns accountability on an international scale, the combination of transparency and accountability makes it especially useful for my research. He employs a definition, borrowed from Andreas Schedler, which hinges on two components needed for accountability: *answerability* and *enforcement*. Answerability is "the right to receive information and the corresponding obligations

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<sup>30</sup> Newton, Kenneth, and Brigitte Geissel, eds. *Evaluating democratic innovations: curing the democratic malaise?*. Routledge, 2012.

<sup>31</sup> *ibidem*: 9.

<sup>32</sup> Hale, Thomas N. "Transparency, accountability, and global governance." *Global Governance: A Review of Multilateralism and International Organizations* 14.1 (2008): 73-94.

to release details", accountability is "the idea that accounting actors do not just 'call into question' but also 'eventually punish' improper behavior."<sup>33</sup> Thomas Hale's prerequisites are mostly useful to evaluate *actual* accountability.

When it comes to participatory budgeting, much has been written on international examples and definitions. I will rely mainly on a recent and extensive book by Sanjeev Khagram, Archon Fung and Paolo de Renzio: *Open Budgets: The Political Economy of Transparency, Participation, and Accountability*.<sup>34</sup> I will rely on their work for two areas of interest: their three major questions and the focus on oversight actors. The three major questions around which their research revolves are: (1) "how and why do improvements in fiscal transparency and participation come about, and how are they sustained over time?"; (2) "under what conditions and through what type of mechanisms do (or might) increased fiscal transparency and participation lead to more government responsiveness and improved accountability, including outcomes such as better fiscal management, reduced corruption, shifts in budget allocations, and improved public services?" and (3) "Does greater transparency contribute to greater participation?"<sup>35</sup> This third question is described as indicative of the broader questions running across the first two broader questions. The focus on oversight actors follows an important quote from the introduction:

There is no question that strengthening the capacity of oversight actors – especially legislatures, audit institutions, civil society groups, and the media – is essential to increasing the use of budget information. These actors can be much more influential in advancing fiscal transparency and using its fruits if they have resources, experience, expertise, and support. Beyond mere strength, however, is the challenge of orientation and organisational strategy. Even when significant budget information is not available, these actors will not use that budget information unless they develop agendas and strategies through which the information can help them advance their particular objectives – winning elections, advocating for policies, or selling newspapers. This is one of the critical frontiers of the transparency and accountability field.<sup>36</sup>

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<sup>33</sup> Hale, Thomas N. "Transparency, accountability, and global governance." *Global Governance: A Review of Multilateralism and International Organizations* 14.1 (2008): 75.

<sup>34</sup> Khagram, Sanjeev, Archon Fung, and Paolo De Renzio. *Open budgets: The political economy of transparency, participation, and accountability*. Brookings Institution Press, 2013.

<sup>35</sup> Ibidem, 21

<sup>36</sup> ibidem: 46

Having discussed the frameworks put forward by others, I will combine these texts and divisions in five steps of participation, which I will use in the following chapters. These steps are as follows: 1) information, 2) input, 3) process, 4) output, 5) accountability. These are primarily based on Newton and Geissels thematic division, with information as an extra first step, as a prerequisite, and accountability as an extra step after the process they describe. Civic educations and civic skills are not relevant to my research, and are as such not represented in my framework.

The first step, information, encapsulates the first three rungs of Arnstein's ladder, and is also strongly related to transparency. This is where the first question Khagram et al. pose will be most relevant. The second step, (citizen) input, is concerned with rungs four and five. These are not exclusive to this step, but shared with the third step, process. This is also where Khagram et al.'s understanding of participation, in their third question, will be most relevant. The fourth step, output, again corresponds (in part) with Newton and Geissels' third theme, and I will use this step to consider rungs 5, 6 and 7 in Arnstein's ladder, even though they can be seen as a part of the process as well. The fifth step, accountability, I completely base on Hale's key words of answerability and enforceability. The second question as posed by Khagram et al., considering among other things improved accountability, will also prove useful.<sup>37</sup>

The gap between information and actual democratic engagement I discussed earlier finds itself between the third and fourth step of participation. Each step is a prerequisite for the next, but only when contributions to democratic value reach output and accountability, there is active civic engagement that accomplishes something - not just democracy for democracy's sake.

### **Open data and transparency**

Information is the first of the five steps of democratic participation as I have defined it in the previous paragraphs. In the context of this research, open data and other forms of transparency are specific types of information that must be understood to fully appreciate their position in democratic participation. When it comes to digital transparency and governance, *Full Disclosure* by Fung et al. is an indispensable book.<sup>38</sup> As per the subtitle, it discusses the 'politics, perils and promise' of transparency in government and other organisations. They define transparency by five characteristics:

- mandated public disclosure
- by corporations or other private or public organisations

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<sup>37</sup> Khagram, Sanjeev, Archon Fung, and Paolo De Renzio. *Open budgets: The political economy of transparency, participation, and accountability*. Brookings Institution Press, 2013: 46

<sup>38</sup> Fung, Archon, Mary Graham, and David Weil. *Full disclosure: The perils and promise of transparency*. Cambridge University Press, 2007.

- of standardized, comparable, and disaggregated information
- regarding specific products or practices
- to further a defined public purpose.<sup>39</sup>

For the purposes of this research, the second of these characteristics can be brought back to public organisations (government in particular), the third is important to note with regard to open data, and the fifth – ‘a defined public purpose’ can be either open budgeting – transparency as a goal in itself – or participatory budgeting – a public purpose as well, but more specifically defined.

Open data, as a form of *digital* transparency, asks for a narrower definition. One of the most used definitions is the five star model, introduced by Tim Berners-Lee:

[D]ata must (1) be available on the Web under an open licence [sic], (2) be in the form of structured data, (3) be in a non-proprietary file format, (4) use URIs as its identifiers (see also RDF), (5) include links to other data sources (see linked data). To score 3 stars, it must satisfy all of (1)-(3), etc.<sup>40</sup>

An open license means that use and reuse is not limited too much - Creative Commons licenses are a good example of open licensing, although their licenses vary in openness, all can be considered relatively open, as opposed to commercial licensing.<sup>41</sup> Structured data will be defined more detailed in the next paragraph, non-proprietary formats refer to formats that are not owned and limited by their owners. An example of a grey area are Excel-spreadsheets (.xls or .xlsx) - while these are opened for other software developers to be used, they are originally proprietary extensions. A more open alternative would be comma-separated values (.csv) for a barebones approach, or OpenDocument Spreadsheets (.ods), used by open source software such as OpenOffice or LibreOffice.<sup>42</sup> URI's (Uniform Resource Identifier) are standardized ways to refer to resources on the internet, the most well-known of which are URL's (Uniform Resource Locator).<sup>43</sup> Using these URI's to link to other data sources allows for a connected and coherent set of datasets.

The Open Knowledge Foundation (OKFN) uses another definition (bold in original):

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<sup>39</sup> Fung, Archon, Mary Graham, and David Weil. *Full disclosure: The perils and promise of transparency*. Cambridge University Press, 2007: 6

<sup>40</sup> “Five stars of open data”, *Open Data Handbook*, 2016.

<http://opendatahandbook.org/glossary/en/terms/five-stars-of-open-data/>. Accessed July 12th 2018.

<sup>41</sup> “About The Licenses”, *Creative Commons*. [creativecommons.org/licenses/](http://creativecommons.org/licenses/). Accessed August 28th 2018.

<sup>42</sup> “OpenDocument Format”, *OpenDoc Society*. [www.opendocumentformat.org/](http://www.opendocumentformat.org/). Accessed August 28th 2018.

<sup>43</sup> Berners-Lee, Tim. "Universal Resource Identifiers In WWW". W3.Org, 1994, [www.w3.org/Addressing/URL/uri-spec.html](http://www.w3.org/Addressing/URL/uri-spec.html). Accessed Aug 28th 2018.

- **Availability and Access:** the data must be available as a whole and at no more than a reasonable reproduction cost, preferably by downloading over the internet. The data must also be available in a convenient and modifiable form.
- **Reuse and Redistribution:** the data must be provided under terms that permit reuse and redistribution including the intermixing with other datasets.
- **Universal Participation:** everyone must be able to use, reuse and redistribute - there should be no discrimination against fields of endeavor or against persons or groups. For example, ‘non-commercial’ restrictions that would prevent ‘commercial’ use, or restrictions of use for certain purposes (e.g. only in education), are not allowed.

If you’re wondering why it is so important to be clear about what open means and why this definition is used, there’s a simple answer: **interoperability**.<sup>44</sup>

This last part of the definition, *interoperability*, means the data is structured in such a way that it can be reformatted and interpreted across digital platforms. Within the Open State Foundation, machine-readability is often used to evaluate the openness of data, which is in many ways interchangeable for interoperability. An extensive write-up on machine-readability can be found on data.gov, the United States’ government data platform.<sup>45</sup>

Machine-readability is also relevant to the specific legal context of the WHO (Act on reuse of government information), as this focuses not on disclosure to one citizen, but on making existing data available to a broader public of citizens in the original format, which often is machine-readable.<sup>46 47</sup> Regardless, the legal status of open data is sometimes muddled by insufficient or unclear communication of (open) licenses. As Mireille van Eechoud advises, actively communicating open licenses would clear up misunderstanding regarding the legal status of open data.<sup>48</sup>

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<sup>44</sup> “What is open data”, *Open Data Handbook*, 2016. [opendatahandbook.org/guide/en/what-is-open-data/](https://opendatahandbook.org/guide/en/what-is-open-data/). Accessed July 12th 2018.

<sup>45</sup> “A Primer on Machine Readability for Online Documents and Data ”, *Data.gov*, 2016. [www.data.gov/developers/blog/primer-machine-readability-online-documents-and-data](https://www.data.gov/developers/blog/primer-machine-readability-online-documents-and-data). Accessed July 12th 2018.

<sup>46</sup> Paapst, Mathieu. “Wet hergebruik: een machinaal leesbaar formaat.” *ICTRecht*, 22 februari 2016. [/ictrecht.nl/opendata/wet-hergebruik-een-machinaal-leesbaar-formaat](https://ictrecht.nl/opendata/wet-hergebruik-een-machinaal-leesbaar-formaat). Accessed July 12th 2018.

<sup>47</sup> Schenk, Marieke. “Alles wat je wil weten over de Wet hergebruik van overheidsinformatie.” *Expertisecentrum Open Overheid*, October 27th 2015. [www.open-overheid.nl/blog/alles-wat-je-wil-weten-over-de-wet-hergebruik-van-overheidsinformatie/](https://www.open-overheid.nl/blog/alles-wat-je-wil-weten-over-de-wet-hergebruik-van-overheidsinformatie/)

<sup>48</sup> Eechoud, M. “Hergebruik herschikt.” *Mediaforum* 26.4 (2014): 106-109.

## Dingpolitik and platforms

The final major theme I will discuss is Latour's concept of Dingpolitik. In the introduction to *Making things public*, Latour argues for a Dingpolitik or *object-oriented* democracy.<sup>49</sup> There is no straightforward definition of this object-oriented democracy, but through the use of Heidegger's 'Ding' - the origin of the word 'thing' (an assembly), Latour argues for an approach of public matters where a *public* is created around *matters*, as opposed to an assembly that is rigid, citing Peter Sloterdijk's 'pneumatic parliament,' that could be parachuted into Iraq.<sup>50</sup> Instead, by contrasting Colin Powell's claim to be representing facts, not assertions, in a presentation at the United Nations, Latour argues for a degree of realism by comparing 'assertions,' instead of the facts that are claim to be transparent and unmediated. He ends with the following list of characteristics:

So what is Dingpolitik in the end? It is the degree of realism that is injected when:

- a) Politics is no longer limited to humans and incorporates the many issues to which they are attached;
- b) Objects become things, that is, when matters of fact give way to their complicated entanglements and become matters of concern;
- c) Assembling is no longer done under the already existing globe or dome of some earlier tradition of building virtual parliaments;
- d) The inherent limits imposed by speech impairment, cognitive weaknesses and all sorts of handicaps are no longer denied but prostheses are accepted instead;
- e) It's no longer limited to properly speaking parliaments but extended to the many other assemblages in search of a rightful assembly;
- f) The assembling is done under the provisional and fragile Phantom Public, which no longer claims to be equivalent to a Body, a Leviathan or a State;
- g) And, finally, Dingpolitik may become possible when politics is freed from its obsession with the time of Succession.<sup>51</sup>

Dingpolitik in the context of my research concerns the creation of assemblies, 'things' and a move away from straightforward representative democracy. It encompasses non-human actors,

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<sup>49</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005): 4-31.

<sup>50</sup> References to Heidegger and Sloterdijk in Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005).

<sup>51</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005): 31.

and is more fluid than a traditional parliament. With Openspending.nl as a platform in mind, I specifically look for ways in which these digital platforms can fulfil the role of these assemblies or make the fluid creation of these assemblies possible. I do not argue for an interpretation of Openspending.nl as the singular assembly or thing. This would go against the fluidity of these assemblies as Latour argues for, as it would be a replacement, virtual, parliament.<sup>52</sup>

For the purposes of this research, I will simplify the above list of characteristics (a-g) in three main conditions. Dingpolitik: is 1) not limited to humans and their limitations (based on a, d) 2) focused on matters of concern (b) and 3) in new public constellations, not limited by state institutions (c, e, f, g). This is a simplification of Latour's definition on what Dingpolitik is, but makes it concrete and allows me to use it to approach the corpus in the next three chapters in practical ways. Because this understanding of Dingpolitik will be applied to the findings of each of these chapters, I will this discuss the implications of these three conditions for Dingpolitik under the last subheading of each chapter, with variations on Latour's object-oriented democracy as my focus. In doing this, I will discuss some preliminary findings of each of these chapters.

As I mentioned before, in my approach to Openspending.nl as a platform I rely on Van Dijck et al. in their discussion of platforms, most notably of *platform mechanisms*.<sup>53</sup> They discuss datafication, commodification and selection as three main mechanisms present in platforms as the ones they discuss.<sup>54</sup> Datafication will be discussed especially in the first chapter, while selection and commodification will prove to be less relevant. Datafication is the process that information goes through when it is digitized and/or translated to a structured format. Van Dijck et al. define it by discussing tracing, quantifying, interpreting and predicting.<sup>55</sup> I will not discuss these submechanisms in detail, but will use them to explain how datafication works on Openspending.nl. Especially when discussing Iv3 as a format datafication will prove a useful concept to show the weakness of the singular approach of using Iv3 and how detailed data solves some of these problems. Selection will prove to be less applicable because of the bulk-type of data providing, but is still relevant when considering pilot projects and the willingness or lack thereof of governments to participate in the earliest versions of Openspending.nl. Selection as a platform mechanism is concerned with the question of what information (and/or data) makes its way onto the platform, and what does not. The relevance of commodification to Openspending.nl is limited because there is no revenue model to Openspending.nl similar to the platforms Van Dijck et al. discuss (including the platforms, like Nextdoor.nl, that have no apparent revenue model).<sup>56</sup> Commodification is the process of monetising the value of the data through which this

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<sup>52</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005): 29.

<sup>53</sup> van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016.

<sup>54</sup> Idem, 38.

<sup>55</sup> Idem, 39

<sup>56</sup> Idem, 37.

information becomes a tradeable ‘commodity’. This will be relevant in discussing outside actors in the final chapter of the analysis, because unlimited reuse of open data also means there is no legal barrier for commercial parties to use the information as part of their business models.

Another part of the Van Dijck et al.’s work on platform society that is more specifically relevant to the subject of my research concerns the role of government in the platform society. They distinguish three roles for governments: platform user, regulator, and developer. In the case of participatory budgeting, specifically on a local level, governments can assume all three of these roles. Because Van Dijck et al. are specifically concerned with the effects of these different roles, this distinction will be most relevant in my final chapter, when it comes to the impact of open and participatory budgeting.<sup>57</sup>

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<sup>57</sup> van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016: 136.

### 3. Method and corpus

**In this chapter I will delineate my research by discussing my method and corpus and their limits. First I will discuss the method and the corresponding literature, after that I will discuss the corpus for my research. Both of these will be discussed in three parts, corresponding to the three chapters of my analysis - data, interface and potential.**

#### Method

For the first part of my analysis, I will rely on affordance theory as put forward by James J. Gibson and later built on by Don Norman.<sup>58 59</sup> I will approach the data as material object.<sup>60</sup> This will allow me to take a concrete approach to otherwise almost intangible subjects of research - I aim to ground my research in the actual characteristics and affordances of the data, instead of approaching it as some intangible phenomenon. When it comes to affordances, I will also employ the distinction between affordances, design and appropriation, as put forward by Schäfer in *Bastard Culture*.<sup>61</sup> This will allow me to analyse the data as separate from the intention of the project and the data. By separating the data and interface from the intentions behind it, I will be able to approach my corpus from multiple sides, while keeping a certain distance from the connection between myself as a researcher and the connection I have with the Open State Foundation, the organisation behind the platform. This will, however, be informed by the contextual knowledge about the platform and the data.

The second part of my analysis also relies on affordance theory and approaches the interface, like the data, as material object. This will mean that I will start with a careful and detailed description of the interface of the platform. I will use the material object analysis as a way to separate the intentions of the platform as a whole and the actual contributions that are a result of this. In this sense, and in this chapter more than the previous, I will be able to use the concepts of affordances, design and appropriation to create a clear understanding of the interface. After discussing the detailed description of the interfaces, I will be able to build a critical analysis of how the affordances in the interfaces contribute to a deliberative democracy.

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<sup>58</sup> Gibson, J. J. "The Theory of Affordances." *Perceiving, Acting, and Knowing*, edited by R. E. Shaw & J. Bransford. Lawrence Erlbaum Associates, Hillsdale, NJ, 1977.

<sup>59</sup> Norman, Donald A. "Affordance, conventions, and design." *interactions* 6.3 (1999): 38-43.

<sup>60</sup> Van den Boomen, Marianne and Ann-Sophie Lehmann, "Material Object Analysis," *New Media Studies Method Reader*, edited by Lehmann, van den Boomen and de Rijk: 9-13.

<sup>61</sup> Schäfer, Mirko Tobias. *Bastard culture! How user participation transforms cultural production*. Amsterdam University Press, 2011: 20.

For the third part of my research, concerning the impact, I will rely mostly on the expert interview on background and employ an explorative analysis of specific examples. This will help in discussing both the tangible impacts and the more abstract impact or possibilities of these platforms. I will not engage in user interviews or similar types of impact analysis, as helpful as this might be. My research is not an evaluation of Openspending.nl, but as I discussed above, an explorative and descriptive analysis of the platform. For this part of my analysis, I have conducted an interview with Tom Kunzler, the program manager for Openspending.nl - currently interim director at the Open State Foundation. This was an unstructured interview and is not a part of my corpus, but informs my research through specific examples of use cases and background. While working at the Open State Foundation, I regularly discussed Openspending.nl, both from my perspective as a researcher and as an employee. This has allowed me to gather examples and use cases, which are useful in understanding the impact of Openspending.nl. I will analyse these examples through an explorative case study. This last chapter will be very much explorative and speculative, and is only meant to be read as such. The empirical results from this chapter will be limited.

## **Corpus**

As I have already mentioned, the corpus of my research follows the three chapters: data, interface and impact. For the first chapter, my corpus is the data in Openspending.nl. However, I will not engage in any data analysis, but approach the data as a material object, as I have discussed above. As such, the corpus also entails the documentation of the data, the standards, such as Iv3, and information on the collection and realisation of the data. These are not part of the corpus in the strictest sense, but I will use them to inform my analysis of the data.

For the second analytical chapter, I will analyse the interfaces of Openspending.nl. As I will explain in chapter 5, this encompasses the main GUI (Graphical User Interface), a secondary GUI (the list maker) and an API (Application Programming Interface). These are fundamental parts of Openspending.nl as a project even though the URL is not the same - here, Openspending.nl is the name of the project, not the website in itself. The API deserves separate attention, because the interface is by definition not human-readable in the way the GUI's are. It is not as easily explained with screenshots, and as such I will need to discuss my specific approach in the corresponding chapter. In this case, the documentation of the API is an important extension of the corpus, as it will allow me to explain the possibilities of this interface without engaging in data analysis.

For the third chapter of the analysis, the explorative analysis of the potential of Openspending.nl, the corpus is not as strictly delineated. Firstly, I will discuss the potential informed by the findings in the previous chapters, for which I consider the preliminary findings

as my corpus. Secondly, because of my background within the Open State Foundation I have been able to collect examples and use cases of Openspending.nl. I can use my own professional knowledge of the platform and its context, as well as unstructured interviews with Tom Kunzler, program manager for Openspending.nl. The examples are anecdotal, informed by my own experience and the interview. Because this is intangible, I do not consider this interview and my own experience as part of the corpus, only the examples and use cases I discuss are the corpus. The interview and my own experience informed me in finding these examples, but they should not be considered all-encompassing or complete.

Fundamental to open data is the possibility that reuse is invisible for the supplier of the data, and as such even the proprietor of such a platform can not say with certainty that they have a complete overview of usage. However, informed by the technical and informal work I have done, seen and discussed as part of my work for the Open State Foundation, I am confident in saying that I have unique and valuable insight into the usage of Openspending.nl as a platform.

## 4. Data and democratisation

**In this chapter I will discuss the platform's data, its structure and the processes behind it. First, I will analyse the material characteristics of both Iv3 and detailed data (the pilot that runs in Groningen), then discuss the platform mechanisms it makes apparent, in particular datafication. Through these findings, I will discuss how it relates to the concepts democracy, participation, accountability, open data and transparency. In my closing remarks, I consider the possibilities of a data-oriented democracy, and how this 'makes things public'.**

### **Affordances of Iv3 and detailed data**

The main structure of data on Openspending.nl is Iv3: *Informatie Voor Derden* (information for third parties), a standard maintained by the CBS.<sup>62</sup> It's meant for use by provinces, municipalities, joint arrangements and regional water authorities.<sup>63</sup> It structures and codifies spending data by a taxonomy of functions and economic categories. Examples of functions are education as a main function (4), further defined as housing for primary education (421) or public health and environment as a main function (7), ambulances as a subfunction (711). Economic categories are divided in income (1) and expenses (2). Income can be further defined as goods and services (3), specifically paid taxes (3.4.1), an example of expenses is financial transactions (5) specifically financial derivatives (5.4).<sup>64</sup>

Before discussing the affordances of the data itself, it is important to consider the processes behind Iv3 as a standard. Primarily, even before Openspending.nl, Iv3 as a standard affords national government institutions to aggregate financial data, compare it, use it for statistical analysis (the CBS's main function) and allows the national government to hold local governments accountable. On the other hand, the standard affords local governments to have their financial data more easily understood, e.g. by external accountants or in benchmarking by consulting firms. In Schäfers' terminology, of these the former affordance is a matter of design, while the latter is a secondary affordance, and can be seen as appropriation.<sup>65</sup> However, Openspending.nl as a project is even more of an appropriation of the original design. The 'third party' in Iv3 was not originally meant to be civic society, but other government institutions: the

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<sup>62</sup> "KREDO", *Centraal Bureau voor de Statistiek*.

[www.cbs.nl/nl-nl/deelnemers-enquetes/deelnemers-enquetes/decentrale-overheden/overzicht/kredo](http://www.cbs.nl/nl-nl/deelnemers-enquetes/deelnemers-enquetes/decentrale-overheden/overzicht/kredo). Accessed July 12th 2018.

<sup>63</sup> *ibidem*.

<sup>64</sup> *ibidem*.

<sup>65</sup> Schäfer, Mirko Tobias. *Bastard culture! How user participation transforms cultural production*. Amsterdam University Press, 2011: 81.

Ministry of the Interior and Kingdom Relations, the European Union and the financial supervisor.

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On to the data: what does data in the Iv3-standard afford? For this, I will only consider affordances in the strictest sense, as any interaction with the data is not yet relevant. As should be the case with open data, Iv3 is accessible in a non-proprietary format, and as such can be opened in many third-party applications. First, the standardized character of the data affords for comparisons on multiple levels: between governments, aggregated or individually, through years, or between budgeting and realisation. Secondly, the numerical aspect of the financial data affords a great many things: following Lev Manovich's principles of new media, it affords it to be described formally and subject to algorithmic manipulation.<sup>67</sup> Lastly, the functions and economic categories affords for an analysis of the data pertaining to the content, connected with for example, political priorities. As such, it affords data-driven discussion.

Because detailed spending data builds on Iv3, its affordances overlap with the Iv3-data. This allows me to only discuss the further affordances of detailed spending data – as technical affordances, in the same way I discussed the technical affordances of Iv3-data. Firstly, it affords a more fine-grained taxonomy, and with that a more deep understanding of government spending. This allows for politicians, journalists and civilians to see spending on a local level. Secondly, it affords for locally-specific categorisation, as detailed data is not standardized on a national level. This lack of standardisation affords an administration to share data on spending of local expenses (parks or subsidy to local initiatives).

### **Platform mechanisms**

Of the platform mechanisms, commodification (monetizing data) is not yet relevant at this stage, as this chapter is only concerned with the data, not the platform as such, so I will only discuss datafication and selection.

Unsurprisingly, datafication is the most apparent platform mechanism when it comes to data.<sup>68</sup> When it comes to tracing and quantifying, financial data such as the data on Openspending.nl, is very suitable for datafication, as there is no qualitative information in amounts of money.<sup>69</sup> There is, however, plenty qualitative information in the categories and functions of which the standard consists. The decision tree that is made available to local

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<sup>66</sup> "Informatie voor Derden (Iv3)", *Rijksoverheid*.

[www.rijksoverheid.nl/onderwerpen/financien-gemeenten-en-provincies/uitwisseling-financiele-gegevens-met-sisa-en-iv3/informatie-voor-derden-iv3](http://www.rijksoverheid.nl/onderwerpen/financien-gemeenten-en-provincies/uitwisseling-financiele-gegevens-met-sisa-en-iv3/informatie-voor-derden-iv3). Accessed July 12th 2018.

<sup>67</sup> Manovich, Lev. *The language of new media*. MIT press, 2001: 49.

<sup>68</sup> Ibidem, 39.

<sup>69</sup> Ibidem, 39.

governments shows these are at the very least ambiguous.<sup>70</sup> The Iv3 standard of fiscal functions and categories seems straightforward when considering the data, but to public servants that have to translate their own local governments' budget into a standard they might not normally work with, this is not at all obvious. The other two parts of datafication, interpretation and prediction, allow for governments, local and national, to contextualize their spending and be accountable to themselves, similar to how the aforementioned politicians, journalists and civilians can check spending data. Mostly, it affords data-driven governance of spending. However, there is no specific way in which Openspending.nl already does this.

Selection as a platform mechanism, discussed by Van Dijck et al., pertains to selection of what information is or is not shared.<sup>71</sup> In this case, the selection of categories and functions for Iv3 as a standard, is in the hands of the governmental agencies, specifically KREDO - a part of the CBS tasked with helping local governments.<sup>72 73</sup> This means there is no civic input or democratic discussion on the selection of data. Detailed data, in its current form, has a similar matter of selection. Although this is meant to give more insight in spending – even on a transactional level – the selection of which transactions are given in fullest detail remains in the hands of the pertaining government. This is safe, in the case of privacy-sensitive data, but can also be a way for governments to obscure some spending data and direct attention to other areas of the budget by giving more detail in those areas.

### **Democracy, participation and accountability**

Of the five steps of participation as set out in the theoretical framework, only the first, information, is relevant to this chapter which only considers the data. There is no citizen input, and as such not process or output of that input. However, there is something to say about accountability in the context of data, which I will get back to.

This first step, information, is visible in the data being shared by government institutions, which opens possibilities for the next four steps. The data is human-readable and machine-readable, which I will discuss under open data and transparency, the next paragraph, and as such affords multiple ways to interact with the data. How this can happen will be discussed in

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<sup>70</sup> “Informatie voor Derden (Iv3)”, *Rijksoverheid*.

[www.rijksoverheid.nl/onderwerpen/financien-gemeenten-en-provincies/uitwisseling-financiele-gegevens-met-sisa-en-iv3/informatie-voor-derden-iv3](http://www.rijksoverheid.nl/onderwerpen/financien-gemeenten-en-provincies/uitwisseling-financiele-gegevens-met-sisa-en-iv3/informatie-voor-derden-iv3). Accessed July 12th 2018.

<sup>71</sup> van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016: 136.

<sup>72</sup> “KREDO”, *Centraal Bureau voor de Statistiek*.

[www.cbs.nl/nl-nl/deelnemers-enquetes/deelnemers-enquetes/decentrale-overheden/overzicht/kredo](http://www.cbs.nl/nl-nl/deelnemers-enquetes/deelnemers-enquetes/decentrale-overheden/overzicht/kredo). Accessed July 12th 2018.

<sup>73</sup> van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016: 50.

the next chapter, on interfaces, but it is important to note that without the data as it is, the interface would be severely limited.

Actual accountability, as I described it in the theoretical framework, cannot be found in data alone. The two keywords, answerability and enforcement, hinge on what is done with data. The question here is: does the data afford actual accountability, or impede it? Answerability according to Hale concerns "the right to receive information and the corresponding obligations to release details" – which is safeguarded in what I discussed under 'transparency' – this connection is made by Schedler as well: "Accountability as answerability aims at creating transparency."<sup>74</sup> Enforceability, founded in relations between actors, is not something which can be found in the data, but the Iv3-standard was created as a tool for local, national and even European accountability, which is the only verifiable aspect of it, that does indeed signify the data affords actual accountability.

### **Open data and transparency**

When it comes to transparency, the five factors of transparency as discussed in the theoretical framework, put forward by Fung et al., are all represented.<sup>75</sup> It is a form of mandated public disclosure, in the sense that Iv3 is mandated by law, and there is no way for local governments to opt out of disclosure of the data. The public disclosure itself, by the CBS, is not mandated by law, but is explicitly connected to the goals of the 'open government action plan'.<sup>76</sup> The public disclosure is by public organisations, whether you regard the disclosure by local governments or by the CBS. The data is standardized, comparable, and disaggregated information. This is noteworthy, because the CBS usually does not disclose disaggregated information. They are first and foremost concerned with statistics, and only publish aggregated information in most of their datasets because of privacy reasons. For this same reason, they are excluded from the WOB and WHO. The data [regards] specific products or practices, i.e. governments spending, and aims to further a defined public purpose, most notably accountability.<sup>77</sup>

When it comes to open data, the three characteristics that allow for interoperability (put forward by the Open Knowledge Foundation) are also present.<sup>78</sup> Availability and Access are

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<sup>74</sup> Hale, Thomas N. "Transparency, accountability, and global governance." *Global Governance: A Review of Multilateralism and International Organizations* 14.1 (2008): 92.

<sup>75</sup> Fung, Archon, Mary Graham, and David Weil. *Full disclosure: The perils and promise of transparency*. Cambridge University Press, 2007.

<sup>76</sup> "Iv3", *Centraal Bureau voor de Statistiek*. [www.cbs.nl/nl-nl/onze-diensten/open-data/iv3](http://www.cbs.nl/nl-nl/onze-diensten/open-data/iv3). Accessed July 12th 2018.

<sup>77</sup> Fung, Archon, Mary Graham, and David Weil. *Full disclosure: The perils and promise of transparency*. Cambridge University Press, 2007: 6.

<sup>78</sup> "What is open data", *Open Data Handbook*, 2016. [opendatahandbook.org/guide/en/what-is-open-data/](http://opendatahandbook.org/guide/en/what-is-open-data/). Accessed July 12th 2018.

apparent in the various ways in which the CBS publishes the information, and Openspending.nl republishes it. This concerns the interface, which I will discuss in the next chapter. Reuse and Redistribution are made possible and are allowed, even encouraged, and Universal Participation is encouraged and made possible by the various ways in which the data is published, which, again, will be discussed in the next chapter. Most important for the data is publishing in a non-proprietary format, which is the case.<sup>79</sup>

### **Data-oriented democracy**

To find the implications for Dingpolitik and object-oriented democracy in the context of data, I will discuss how data ‘makes public’ and what this would mean for data-oriented democracy. First, data-oriented democracy is not limited to humans and their limitations, because of the machine-readability of the data, analysis and debate can in part be taken over by computers or what Latour refers to as prostheses: augmentations of human abilities, such as data-based comparisons on scales that are impossible for humans without computers.<sup>80</sup> Second, Dingpolitik means moving from matters of fact to matters of concern. Data absolutely relates to matters of fact, but the classification of this data in Iv3 makes it possible for a data-oriented democracy to move to matters of concern, when the classification itself is rooted in matters of concern. Iv3 affords discussion on political priorities, as I discussed in the first part of this chapter, which is an example of what I would call data-oriented democracy ‘making things public’. Lastly, Dingpolitik thrives in new public constellations, not limited by state institutions.<sup>81</sup> In the case of data, this is only really true when data is truly open. For now, the data and specifically its format is created by and thus limited by state institutions. However, the Open State Foundation and Openspending.nl is decidedly not a state institution. As they are not the source of the data, this does not change the data itself, but allows for a more open platform. As this does not relate directly to the data, I will discuss this in the next chapter.

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<sup>79</sup> “What is open data”, *Open Data Handbook*, 2016. [opendatahandbook.org/guide/en/what-is-open-data/](https://opendatahandbook.org/guide/en/what-is-open-data/). Accessed July 12th 2018.

<sup>80</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005): 4-31.

<sup>81</sup> *ibidem*: 27.

## 5. Interfaces and democratisation

**In this chapter I will discuss the platform's interfaces. This concerns mainly Openspending.nl as a website and its API. I will analyse these interfaces as material objects and discuss the platform mechanisms they make apparent in addition to what I have discussed in the previous chapter. Through these findings, I will discuss how it relates to the concepts of democracy, participation, accountability, open data and transparency. In my closing remarks, I consider the possibilities of an interface-oriented democracy, and how this 'makes things public'. For figures referenced in-text in this chapter, see the appendix.**

### **Affordances: the website**

For the analysis of Openspending.nl as a website, I will not be concerned only with technological affordances, but also with perceived affordances of the presented interface. First off, I will discuss the perceived structure of the website and the landing page. After that, I will discuss its functions, in particular exploring spending data and comparing spending data.

The Openspending.nl homepage, in a bootstrap theme, consists of several elements (fig. 1). From top to bottom: A navigational header linking to the pages 'Data', 'Voorbeelden' (examples), 'Over' (about), FAQ, and 'Lijstjesmaker' (list maker). Below that, a banner with the Openspending logo and the slogan 'Bekijk en vergelijk de huishoudboekjes van lokale overheden' (View and compare local government's household books). Below the banner, in the main content page, the first thing is a simple form in which users can search and select two local governments for comparing. This sends the user to another page, which I will discuss later. Below the comparing-banner, there is an embedded promotional video, explaining what Openspending.nl is on the right. To its left, local governments are presented, grouped and sorted. Under tabs provinces, municipalities (with focus), joint arrangements and regional water authorities are presented, with a search bar and municipalities grouped by province. Additional, some benchmarks are presented. Clicking any of these local governments will send the user to a page where spending data can be explored. Below this, at the bottom of the page, the footer contains the same logo, links to the Open State Foundation's Facebook, Twitter, GitHub, email, and shows an Open State Foundation logo linking to its website.

Two main functions need an in-depth analysis: viewing and comparing spending data. These are similar, so I will first discuss viewing, and adding to that what is unique in comparing data, a function that builds on the viewing interface.

The viewing interface (fig. 2) consists of the same navigational header, banner and footer as the landing page, with below the banner a line showing the current page in its hierarchy (“Home / Utrecht (gemeente) / Realisatie 2018 Kwartaal 1” in fig. 2). In the main content area, on the left, is a selection menu with multiple years, divided into budgets and realisations, per quarter. The most recent realisation is automatically selected. This affords the user to explore all of the government’s available financial data, but focuses on the most recent figures. To its right, at the top, are four drop-down menu to change the standard selection and an email-button. Functions can be switched for categories; expenses can be switched for income, the standard viewing page can be switched to a comparing page, and the amounts in euros can be switched to amount divided by residents, households, area or FTE (of government employees). This latter function affords users to contextualize amounts and can bring big amounts to a graspable level (for an example, see fig. 2).

Below the drop-down menus, the amounts for main functions are presented, first in a list with bar charts embedded, and below that in a table. Both of these interfaces are sortable on name and amounts. This affords the user to explore interesting functions, and possibly directs the attention to the functions with the highest amounts. Finally, to the right of the list of main functions, the last three years are shown in a column chart, in absolute amounts and relative changes: trends. These years are sorted by amounts, not by year, and affords an insight in the relative spending in each of the last three years.

The page where budgets and realisations can be compared (fig. 4) is mostly the same as the page discussed above. The list of amounts with embedded bar charts are grouped by function, which each of them showing the both budgets that are being compared. The table groups these horizontally, showing each budget or realisation in one column. Absolute budgets and trends show the latest three years as well, grouping both budgets for each year. This comparison of budgets affords the user to contextualize financial data over time, geographically, or find discrepancies between budgets and realisations.

Finally, the other pages in the navigational header. The pages titled data, examples, about, FAQ are all informative pages, the content of which is apparent from their titles. While these certainly afford a better understanding for users not familiar with financial data, as interfaces they do not require further analysis. Suffice it to say, their presence on the website affords understanding. The last page on the navigational header is the so-called list maker, which sends the user to [openspendinglijstjes.nl](https://openspendinglijstjes.nl) (openspending lists, fig. 5). This is a simple webpage, consisting of a header “openspending lijstjes” and anchored links to respectively the ‘list maker’, an explanation and a contact section, linking to the Open State Foundation Twitter, GitHub, email and main website. (Fig. 4) The list maker consists of multiple customizable components in the following

form – each component on a new rule for legibility, options separated by “|”, pre-selected option first.

I want a list of (the)  
10 | 20 | 50 | all  
highest | lowest  
municipal | provincial | joint arrangements | regional water authorities | district  
budgeted | realized  
expenses | income  
in the  
whole year | first quarter | second quarter | third quarter | fourth quarter (of)  
2009 | ... | 2017

Further, a user has to pick one function or category (main or minor), and can normalize these amounts by residents, households, area or FTE, or keep it on euros. Customising this form and submitting it results in a top 10 list with embedded bar charts, similar to [openspending.nl](https://openspending.nl) (fig. 6). These items link to the page where they can be explored further. Finally, there is a button to download the data in CSV-format. In this way, [openspendinglijstjes.nl](https://openspendinglijstjes.nl) affords the user to make custom lists, affording for a crowd-sourced way to find the most interesting outliers. However, there is no explicit affordance for sharing on social media. In this way, there is no explicit technological affordance for sharing or discussing these lists, other than downloading the data and sharing it in any possible way.

### **Affordances: the API**

In addition to the obvious interface of [openspending.nl](https://openspending.nl), there is another interface [Openspending.nl](https://openspending.nl) offers: the Openspending API. The Application Programming Interface is not a Graphical User Interface (GUI) like the website, but offers the same data, easily accessible by defining a set of definitions, protocols and parameters. In the next paragraph, I will discuss what this API affords in a material sense. There is an introduction to the API on the previously mentioned ‘data’ page on [openspending.nl](https://openspending.nl).<sup>82</sup> This page also refers to a more technical documentation, based on the Swagger protocol, an open standard for open API’s.<sup>83 84</sup>

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<sup>82</sup> “Openspending - Data”, *Open State Foundation*. [openspending.nl/pagina/data/](https://openspending.nl/pagina/data/). Accessed July 12th 2018.

<sup>83</sup> “Openspending API documentation”, *Open State Foundation*. [openspending.nl/api/v1/doc/](https://openspending.nl/api/v1/doc/). Accessed July 12th 2018.

<sup>84</sup> “About Swagger Specification” *Swagger*. [swagger.io/docs/specification/about/](https://swagger.io/docs/specification/about/). Accessed July 12th 2018.

First of all, the API as a platform affords users to build sustainable applications. The provided data is not static, and does not have to be manually loaded into external applications each quarter, when new data is provided. This is a direct consequence of the type of interface, assuming the API itself is consistent and durable. Another added value of offering this data in the API, compared to just through the website, concerns the multidimensional aspect of the data. In the Iv3-standard, as discussed in the previous chapter, transactions are defined by functions and categories. The website offers these two taxonomies as separate, while in the original data it is structured as a matrix.<sup>85</sup> The API offers this data in the JSON-format (JavaScript Object Notation). This open-standard format is a language-independent data type, which means it can be connected with many programming languages.<sup>86</sup> The way the data is structured in the API allows for both of these dimensions (functions and categories) to be represented in each transactional value. This affords users to analyze how government spending for specific functions is divided into specific categories, something the website does not allow.

For a more technical analysis of the API, I will discuss the several endpoints in short. There are 19 endpoints to the API, which are ways for users to request specific data:

aggregations/cat/  
aggregations/documents/  
aggregations/entries/  
aggregations/main/  
aggregations/sub/  
documents/  
entries/  
governments/  
labels/  
metrics/  
transactions/columns/  
transactions/data/  
transactions/documents/  
transactions/fields/  
transactions/levels/  
transactions/pages/  
transactions/parameters/  
transactions/views/

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<sup>85</sup> “Openspending - Data”, *Open State Foundation*. [openspending.nl/pagina/data/](https://openspending.nl/pagina/data/). Accessed July 12th 2018.

<sup>86</sup> “Introducing JSON”, *JSON*. [www.json.org/](https://www.json.org/). Accessed July 12th 2018.

transactions/visualisations/

The first five endpoints, starting with ‘aggregations’ are aggregated data on categories (cat), original documents as provided by the governments (documents), amounts as found in the matrix of functions and categories (entries), main functions (main) and subfunctions (sub). These afford users to benchmark, or get an overview of government spending as a whole. Without having to request and sum all the data from each government, this data affords for users not just absolute, but relative data.

The next five endpoints contain the main data. They contain names and URI’s for the original documents (documents), the amounts by functions and categories (entries), the names and types of governments (governments), the names of the functions and categories (labels) and the metrics by which amounts can be normalized - residents, households, area or FTE (metrics). These endpoints also provide metadata, apart from the actual financial data. This affords users to only request the metadata once, and applying it to each government in their application.

Finally, the last nine endpoints, starting with ‘transactions’ provide the user the detailed data on a transactional level. This is functionally the same, with the footnote that it is not standardized in Iv3-format. As an interface, the API does not afford more than on the other endpoints, and I have already discussed the unique affordances of detailed data in the previous chapter.

### **Platform mechanisms**

Of the three platform mechanisms outlined by Van Dijck et al. I already discussed datafication and selection in the previous chapter. Datafication as such can become apparent through interfaces just as well, particularly the interpretation and prediction of behavior, but none of that is apparent in the discussed interfaces.<sup>87</sup> Selection would be an interesting mechanism to further implement in Openspending.nl, but currently it is only implemented in a limited way. There is some soft selection that guides users towards municipalities over other governments and to comparing two governments over either viewing one government or comparing budgets and realisations. Selection in the way the examples Van Dijck et al. discuss could mean an algorithmic curation of interesting data points in the larger dataset, based on statistical deviations or user interaction.<sup>88</sup> However, this can very soon become at odds with the open and transparent goals of an open data providing platform, as selection might be at odds with providing data in bulk.

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<sup>87</sup> Van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016: 39

<sup>88</sup> *ibidem*: 41.

The most interesting platform mechanism that becomes apparent in this chapter is commodification.<sup>89</sup> Through the API, durable applications can be built, and because of the national coverage of all regional governments, business cases are more solid. Although the open data is provided free, third-party applications can turn bulk data to a business case, for example for providing benchmarking and advice on economical budget cuts. However, this is more relevant to the next chapter, where I will discuss impact and potential. The interface does not show commodification, but it does create the possibility. For this chapter, it is important to note that the API affords more solid and durable business cases, providing a chance to market data and data-driven services.

### **Democracy, participation and accountability**

In the previous chapter, I discussed information as the first step in democratic participation. While information specifically relates to data, the interface is important for making the information accessible. This is both the case for the GUI as discussed and for the API, affording access to information. There is no option for citizen input included in the platform, and the process and output of participation as such is not something that is part of the interface or is afforded in the interface. Neither are there any specific affordances in the platform that support the answerability or enforcement.

These features could very well be implemented, by the previously discussed options of either having citizens draw attention to specific parts of budgets, realisations or changes in budgeting, or by focusing on the specific needs of journalists or elected representatives. These would be ways to afford enforcement through media channels or existing democratic structures, respectively. A way to support answerability would be to give government officials the opportunity to contextualize the budget, for example by annotating significant changes in the budget, allowing for a more informed understanding of the budget and its political background. Because these examples are not found, there is not much to discuss in how the interface affords accountability.

Adding to what I discussed above regarding selection of data, it is notable that there is no application of user input. There are multiple ways in which implicit user participation might be applied to selecting, curating or highlighting ‘interesting’ data. There is no way for users to directly interact with specific data points they deem interesting, other than sharing the URLs on external platforms. It is important to note that this is not a natural affordance of the interface: a previous version of Openspending.nl did not change the URL on each user action. This was modified to afford sharing.

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<sup>89</sup> Van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016: 41.

Even the most explicitly user-oriented part of the interface, openspending lists, has no explicit sharing platforms, which means it does not harness the possible added value of implicit participation. Explicit participation could take two forms: comments and suggestions or similar user input, which could be implemented as well. In the case of Openspending.nl, this could very well be aimed at a more specific user group: journalists, representatives, or government officials. None of this is afforded by the current interface of the platform. However, when it comes to the API, there is extensive attention to explicit participation in a much more engaged sense. There is feedback between the API developers at Open State and API users, most notably on Open State-organized hackathons. However, this is not part of Openspending.nl as an interface, and as such will be discussed in the next chapter, regarding impact and potential.

### **Open data and transparency**

When it comes to open data and transparency, most of what I have discussed in the previous chapter stands, the interface builds on the data and as such relates to the definitions of transparency and open data much in the same way as the data does. Opposed to what the names of the concepts might suggest, open data is worth a reevaluation in light of the interface, whereas not much has changed with regards to the characteristics of transparency. This is because transparency is mostly concerned with the processes behind disclosure, where open data also concerns the quality of disclosure.

For each of the three characteristics of open data, the interfaces, specifically the API, ensure the quality of the disclosure of the data, making it more open. Concerning availability and access, the API safeguards that the data is not only available to users of Openspending.nl, but in a durable way is available to users of any third-party applications that might make use of the API. The reuse and redistribution is ensured by the open format and, but also because openspending.nl is itself a redistribution of data made available by the CBS. Finally, universal participation is apparent in the fact that the API does not limit its access by authentication or heavy pagination. This is a lack of limitations, which I as such have not discussed as affordances, but are relevant to mention when evaluation truly open data.<sup>90</sup>

### **Interface-oriented democracy**

As I did with data in the previous chapter, I will discuss how interface-oriented democracy might ‘make things public,’ informed by the findings of this chapter. The first characteristic of Dingpolitik as I summarized it is it not being limited to humans and their limitations. This is especially relevant when considering not just the website, but the API as an interface, literally an

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<sup>90</sup> “What is open data”, *Open Data Handbook*, 2016. [opendatahandbook.org/guide/en/what-is-open-data/](https://opendatahandbook.org/guide/en/what-is-open-data/). Accessed July 12th 2018.

Application Programming Interface, expanding the reach of interfaces beyond humans and their limitations. As with data-oriented democracy, the interface mainly concerns matters of facts, and matters of concern less so, but the open infrastructure does afford ways to apply it to matters of concern - citizens are able to find the data behind their own matters of concern by starting out with their own matters of concern and searching for the corresponding data. This would not be an example of interface-oriented democracy, as the matters of concern would be given, a priori. Here, the list maker is a more relevant example of using the interface to find matters of concern. Another way in which interface-oriented democracy could work with regard to matters of concern is parallel to the list maker. By pinpointing the sections of a specific budget which differ the most from either their peers or the realisation, matters of concern could be highlighted by Openspending.nl in a way humans could not. Lastly, Dingpolitik should not be limited by state institutions, but find new public constellations.<sup>91</sup> In the light of interface-oriented democracy, this would mean actual user interaction and/or explicit participation, which is not the case in Openspending.nl. Interfaces can bring people together and create new and fluid assemblies, which Openspending.nl does not do through in what I have discussed in this chapter.<sup>92</sup>

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<sup>91</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005): 28.

<sup>92</sup> ibidem: 21.

## 6. Democratising potential

**In this chapter I will discuss the platform’s potential and what this means for democracy. First, I will discuss the apparent impact of Openspending.nl. Through these findings, I will discuss how it relates to the concepts of democracy, participation, accountability, open data and transparency and use this to illustrate and establish the potential for Openspending.nl and similar platforms. In my closing remarks, I consider the possibilities of a platform-oriented democracy, and how this ‘makes things public’. Where the two previous chapters were mostly concerned with usage on the platform itself, this chapter considers usage outside of the platform.**

### **Impact and use cases**

In this paragraph I will discuss the examples of impact and use cases provided by Tom Kunzler, program manager for Openspending.nl at the Open State Foundation.<sup>93</sup> These are the results of an interview I had with him, substantiated by sources provided by him and my own research and findings. The examples of reuse of the Openspending API are the most near to the Open State Foundation, and have already been mentioned in the previous chapter. Most recently, Open State Foundation organized the second edition of Accountability Hack, in the Dutch House of Representatives.<sup>94</sup> During this hackathon 150 developers participated in making applications related to accountability, government spending and performance. The main developer of the Openspending API was available to help the participants that were interested in reusing Openspending.nl data with requesting and implementing data. Many of the contributions used the API, most notably the teams that won first and third place.<sup>95</sup> In first place was “De GemeenteDeler” (“municipal divider”), an application that combines spending and performance of municipalities on the themes of health care, education, and safety.<sup>96</sup> In third place was the (less serious) application “Hoeveel Boeings” (“how many Boeings”) which converts government spending to more ‘tangible’ units by expressing it in cows, Boeings and other units. Both of these made use of the Openspending API. The former, De GemeenteDeler, is currently in discussion with the Dutch Ministry of the Interior to turn the hackathon submission into a durable platform.

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<sup>93</sup> “Open Spending”, *Open State Foundation*, [openstate.eu/en/projects/political-transparency/open-spending/](https://openstate.eu/en/projects/political-transparency/open-spending/). Accessed July 12th 2018.

<sup>94</sup> “Accountability Hack”, *Open State Foundation*, [accountabilityhack.nl/](https://accountabilityhack.nl/). Accessed July 12th, 2018.

<sup>95</sup> “App ‘Municipal divider’ winner Accountability Hack 2017”, *Open State Foundation*, June 10th 2017. [openstate.eu/en/2017/06/app-municipal-divider-winner-accountability-hack-2017/](https://openstate.eu/en/2017/06/app-municipal-divider-winner-accountability-hack-2017/)

<sup>96</sup> “De GemeenteDeler.nl” [degemeentedeler.nl/](https://degemeentedeler.nl/). Accessed July 12th, 2018.

Another use case is ProDemos' "BegrotingsWijzer" ("budget guide"). ProDemos is an information center for citizenship, rule of law and democracy, and its BegrotingsWijzer a tool for participatory budgeting.<sup>97</sup> It consists of two modules, informing and participatory budgeting. The first is based on Openspending data, the second builds on the first part.

A now defunct tool that was built on Openspending.nl data is Inkoopvergelijker.nl. This tool made it possible to view government purchases in comparison with the rest of their budget, comparing it with neighboring governments. This allows for accountability as well as streamlining financial processes within the organisation.

One specific use case that is not directly related to the platform in its current form is the example of the 'right to challenge'. This is often used to show the relevance of the platform, for example in the acceptance speech for the Open Government Partnership Award, with one specific example, Jaap. Jaap owns a bar in Amsterdam with a bridge next to it. He suspects the municipality responsible for having the bridge operated spends more money on it than necessary, and thinks he can do it cheaper. He challenges the government, and proposes a price for which he can operate the bridge when necessary, which is cheaper than the currently contracted business.<sup>98</sup> By finding out the amount the government spends on things like this, citizens are informed and are able to challenge the government, resulting in cheaper public service.

Other examples of ways in which Openspending data is being used is by the FNV, a federation of trade unions. They use Openspending.nl for tracking healthcare budgeting across municipalities, which helps to coordinate campaigns. Openspending.nl is also being used by banks to help determine a government's financial condition, helping them to make decisions on loans to these governments. These last two examples are not verifiable through external sources, but I mention them because in the case of open and unrestricted data, data can be reused without explicit mentions or even knowledge of the original provider of the data.

## **Democracy, participation and accountability**

Regarding the first step of participation, information, the most important impact of Openspending.nl is not anything that comes from the platform, but is the platform itself and everything that comes with it. As I have discussed, the Iv3 data was made available after lobbying and requests for data on many levels, both through the WOB and through more informal channels. Eventually, governments on national and local levels participated in the project in

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<sup>97</sup> "De Begrotingswijzer: participatief begroten", *ProDemos*. [www.prodemos.nl/voor-gemeenten/burgerparticipatie/begrotingswijzer-participatief-begroten/](http://www.prodemos.nl/voor-gemeenten/burgerparticipatie/begrotingswijzer-participatief-begroten/). Accessed July 12th, 2018.

<sup>98</sup> OGP Awards 2016 - Regional Honorable Mention, Europe: Arjan Al-Fassed [sic], OpenSpending, The Netherlands, *YouTube*, uploaded by Open Government Partnership, January 19th 2017. [www.youtube.com/watch?v=46GMsJub8-4](https://www.youtube.com/watch?v=46GMsJub8-4)

multiple roles, and the CBS opened up a dataset that was not originally viewed to be theirs. This opens up more possibilities for open data in the future, because this can be used as an example of how to open data. This all falls under the first step of democratic participation, information and shows the potential.

The second step, (citizen) input can be seen in cases like Accountability Hack, where involved citizens use the data to participate in democratic processes, specifically by making it more accessible in more and more relevant ways. The potential for input, however, is much bigger than what is currently available on Openspending.nl. The platform itself could afford explicit input by allowing users to highlight interesting information or comparisons, either on the platform itself or in the list maker.

For the third step, participation, I would like to go back to the theme of Throughput and Process, as Newton and Geissel discuss it.<sup>99</sup> The first indicator is transparency, which is absolutely the case for Openspending.nl, but the second, deliberative quality, does not seem to be applicable to the platform itself - as discussed earlier, it presents data and comparisons, but there is no deliberation of citizens within the platform. At best, it is a starting point for discussions elsewhere. Again, the potential of this type of platform to afford participation is much larger. One example is ProDemos' BegrotingsWijzer, specifically the participatory budgeting.

The fourth step, output, which Newton and Geissel relate to the identification of collective goals and the impact on debates and policies to reach goals, is more interesting to discuss.<sup>100</sup> This is where impact is most notable, however, all of the impact of Openspending.nl would be outside of the platform itself. However, if we take Accountability Hack as an event as an example, and not the applications that were submitted at the end of the day, it is an interesting place for informed and data-driven democratic dialogue.

While Civic Education and Civic Skill, as Newton and Geissel discuss it, is not a part of my five steps, it is suited to Openspending.nl as a platform.<sup>101</sup> While some indicators were not recognizable in the platform, improvement of knowledge and improvement of democratic skill are arguably two functions easily found on Openspending.nl. The only remark is that these are strongly tied to the financial aspects of Openspending.nl. By sharing and opening the financial data, knowledge is improved for any visitor, and by extension, the democratic skill of informed debate is strengthened.

In light of impact and potential, only one aspect of the fifth step, accountability, is important: accountability as a consequential activity. Answerability and the relational and

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<sup>99</sup> Newton, Kenneth, and Brigitte Geissel, eds. *Evaluating democratic innovations: curing the democratic malaise?*. Routledge, 2012: 44

<sup>100</sup> *ibidem*: 49

<sup>101</sup> *ibidem*: 44

retrospective aspects have been discussed in the previous chapters, but consequences are by their nature outside of both the data and the interface and a manifestation of impact. Most of the use cases of Openspending.nl seem to stop short of having political consequences: like the platform itself, it is an informative start point for debate, but does not facilitate political impact. The only consequential aspects I have discussed are outside of the political arena, decisions by banks or the FNV. It is entirely possible governments are being held accountable with Openspending.nl as a tool, but there is no evidence of this within the platform. When it comes to implicit versus explicit participation, I have already discussed that there is no room for explicit participation on the platform, which is also reflected in the ladder as Arnstein discusses it.<sup>102</sup> Because of this I have to look beyond the platform in this speculative and explorative chapter of my analysis.

### **Open data and transparency**

Transparency and open data, as a specific type of transparency, have already been discussed in the chapter on data, but on transparency there are still important points to make regarding the process through which Openspending.nl came to be, and points that relate specifically to transparency as defined by the Open Knowledge Foundation.<sup>103</sup>

I would like to give special attention to the process through which Openspending.nl came to be. Mandated public disclosure is the first point Fung et al. mention, which in light of Openspending.nl is the end result of a complicated process, which was not a clear mandate in the beginning, but which it now is, with the backing of the Ministry of the Interior. The second point relates to corporations, private or public organisations, which in the case of Openspending.nl is a collaborative effort between government and civic society. The data is standardized, comparable and to some degree disaggregated, as a result of the work by Open State, and with the detailed data pilot, they are working on opening even more disaggregated information, which is what the third point demands. The transparency regards specific practices to further a defined public purpose (points 4 and 5) which I have already discussed in previous chapters.<sup>104</sup>

I have already discussed open data in the previous chapter on interface, but in the light of impact the three key characteristics take on a different meaning. Availability and Access as it relates to impact highlights how technical availability and access mean nothing if it is not *being accessed*. Reuse and Redistribution are much more tangible ways of measuring the impact. The use cases, or better - reuse cases - are better ways than any to confirm the actual transparency of the platform. Universal Participation is the goal, but, like availability and access, next to

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<sup>102</sup> Arnstein, Sherry R. "A Ladder of Citizen Participation," JAIP, Vol. 35, No. 4, July 1969, pp. 219.

<sup>103</sup> "What is open data", *Open Data Handbook*, 2016. [opendatahandbook.org/guide/en/what-is-open-data/](https://opendatahandbook.org/guide/en/what-is-open-data/). Accessed July 12th 2018.

<sup>104</sup> Fung, Archon, Mary Graham, and David Weil. *Full disclosure: The perils and promise of transparency*. Cambridge University Press, 2007: 6

impossible to measure when all participation is implicit.<sup>105</sup> In general, the shortcomings of Openspending.nl are made visible in the lack of explicit participation - this makes the actual availability to a universal public impossible to gauge, and cheapens the democratic aspects of the platform by limiting the participation of citizens.

### **Platform-oriented democracy?**

If we consider Dingpolitik and how impact ‘makes things public’, the impact of Openspending.nl does not show a clear way of what a platform-oriented democracy would be.

The potential of Openspending.nl as not being limited to humans and their limitations is mostly relevant in the machine-readability. In the five star data model, linked data is the fifth and highest level.<sup>106</sup> Openspending.nl as a platform has the potential to be incorporated in platforms developed by governments or citizens, engaging with non-human actors finding anomalies or interesting changes in budgets or realizations. Combining the data with other sources has the potential to make Openspending.nl or other similar platforms towards platform-oriented democracy, a Dingpolitik where the data can inform citizens in ways that go beyond human capabilities.

The potential for matters of concern, is especially relevant, because of this same reason - matters of concern and impact are both human-oriented. Impact is not relevant where it only concerns matters of fact, but when a platform has a meaningful impact this is always in matters of concern. Openspending.nl has the potential to be a starting point by presenting matters of fact, allowing for citizens in new constellations, outside of the platform itself, to find their personal matters of concern. This can be the cost of operating a local bridge, like in the example of Jaap I discussed earlier or other personal matters of concern. If the platform and specifically the data presents these facts in an accessible way, it has the potential to allow citizens to find en figure out their matters of concern. This can go to ways: it can inform them on matters they are already concerned with, and provide them with facts and relevant comparisons, or it can inform them of new matters of fact, previously not considered, and highlight potential new matters of concern.<sup>107</sup>

The impact coming from new public constellations, not limited by state institutions, is something that goes for all of the use cases. In particular the examples coming from the Accountability Hack, as potential impact is one of the three criteria the jury used in judging the

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<sup>105</sup> “What is open data”, *Open Data Handbook*, 2016. [opendatahandbook.org/guide/en/what-is-open-data/](http://opendatahandbook.org/guide/en/what-is-open-data/). Accessed July 12th 2018.

<sup>106</sup> “Five stars of open data”, *Open Data Handbook*, 2016. <http://opendatahandbook.org/glossary/en/terms/five-stars-of-open-data/>. Accessed July 12th 2018.

<sup>107</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005): 21.

entries.<sup>108</sup> Such hackathons, technically open for anyone, but mostly aimed at engaged citizens with the necessary technical skills, are examples of these new and fluid assemblies.<sup>109</sup>

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<sup>108</sup> “Voorwaarden voor deelname”, *Open State Foundation*.

[accountabilityhack.nl/hackathon/voorwaarden-voor-deelname/](https://accountabilityhack.nl/hackathon/voorwaarden-voor-deelname/). Accessed July 12th 2018.

<sup>109</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005): 29-31.

## 7. Conclusion and discussion

**In my research question, I asked: In what ways does Openspending.nl as a platform contribute to democracy? I have discussed this on the three separate levels, and will summarize these preliminary conclusions in this chapter. After that, I will do suggestions for further possibilities in civic society and research in this area in three categories: shortcomings of open data, an empirical approach and towards open participatory platforms.**

### Conclusion

In this research I have discussed the reality and potential of deliberative democracy of Openspending.nl as a platform. On the level of the data, there are many prerequisites for democratic innovation, the openness and interoperability of the data creates many possibilities, but the process behind the data and opening it up is democratic as well. The Iv3-standard was not created with open data in mind, but it does make it easier to make a move towards open data. This in itself is proof of the democratic potential of data as a phenomenon. The data itself and its machine-readability includes non-human actors in the Dingpolitik, and as such moves towards a broader democracy than representative democracy.<sup>110</sup> However, the distinction between matters of fact and matters of concern, following Latour, is hard to make based on the data - this is specifically relevant to the Iv3 standard, which certainly affords the move from matters of fact to matters of concern.<sup>111</sup>

The GUI's and the API are prime examples of not being limited to humans and their limitations, in the same vein as the machine-readability of data. Again, the interface is a new constellation not limited by state actors, but developed by an NGO in civic society. The move from matters of fact to matters of concern is specifically made possible in the list maker, despite its limitations as I have discussed them. One major opportunity is finding data points where local governments most differ from their peers, which would afford a more involved move to matters of concern for citizens, journalists, politicians or civil servants.

Finally, in discussing the use cases and examples of Openspending.nl, I looked for impact outside of the platform itself. Despite the limitations and anecdotal character of my corpus, which I will discuss further on, the use cases I found were mostly reaffirmations of the open data and transparency. For actual deliberative democratic innovations, the example of Jaap, the bar owner,

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<sup>110</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005).

<sup>111</sup> *ibidem*: 23.

was most relevant.<sup>112</sup> However, this was a use case of the very early stages of Openspending, and not related to the standardized data or any other aspects that I discussed in the chapters on data and interface. As such, Openspending.nl as merely a digital platform in its current form is not enough: there needs to be a platform or space for assembly, a Ding.<sup>113</sup> This can be in the form of a digital platform. This falls outside of the scope of this research, which is not aimed at constellations and practices but at the platform. However, I have discussed examples that show how Openspending.nl affords new constellations, informed and powered by the platform or the API, one example of which are the contributions to Accountability Hack.

### **Shortcomings of open data**

Even though I am a believer in open data as a right, I have enough experience to know that open data does not fulfill all of its promises. Reuse of completely open data can be invisible to the supplier of the data, which might hamper the democratic values. The data can be reused by commercial actors, not interested in democratic value but in monetization. If they manage to position themselves better than the origin of the data, they might commodify the information and move towards a platform economy. In opening the data for Openspending.nl, the national and local governments have done their part in sharing the relevant information, now it is up to citizens to act and use it in deliberative democratic practices. However, this might be hampered because of a lack of interest or a lack of possibilities. If it is a lack of interest, there is a democratic gap that might be specific to budgeting. If it is a lack of possibilities, certain citizens might be unable to participate in open data platforms because of a lack of technical or fiscal knowledge, there is work to be done on civic skills, as discussed by Newton and Geissel, which I have left out of this research.<sup>114</sup> Another solution would be for advocacy groups for these groups of citizens to participate on these platforms on their behalf, or for the platform owners to communicate more accessible about fiscal issues. Herein lies a problem that might be solved in a media studies approach, finding the gaps between the information and engagement and helping citizens bridge that gap, across the digital or fiscal divide.

### **An empirical approach to impact and accountability**

The last analytical chapter on the impact of Openspending.nl was a very explorative and speculative part of the research. I strongly believe in open data, but know that its potential is

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<sup>112</sup> OGP Awards 2016 - Regional Honorable Mention, Europe: Arjan Al-Fassed [sic], OpenSpending, The Netherlands, *YouTube*, uploaded by Open Government Partnership, January 19th 2017. [www.youtube.com/watch?v=46GMSJub8-4](http://www.youtube.com/watch?v=46GMSJub8-4)

<sup>113</sup> Latour, Bruno. "From Realpolitik to Dingpolitik." *Making things public: Atmospheres of democracy* (2005).

<sup>114</sup> Newton, Kenneth, and Brigitte Geissel, eds. *Evaluating democratic innovations: curing the democratic malaise?*. Routledge, 2012.

often not realized, and transparency without impact or accountability is not transparency fully realized. The examples of impact have for some part been anecdotal, because the scope of this research as a platform analysis did not allow an empirical approach to the impact of open and participatory budgeting. The biggest impact I have been able to show is that of Openspending.nl as a project, the lobbying with national and local governments and the pilots with willing participants, but also getting the CBS to open the data of other governments. However, an empirical approach to the impact of Openspending.nl or open and participatory budgeting in a general sense would be valuable in understanding the democratic values and the degree in which these are realized. The viewpoints of main stakeholders of open and participatory budgeting such as citizens, journalists, politicians and civil servants, have not been discussed in this research. Their views on platforms such as Openspending.nl and open and participatory budgeting would be indispensable and are a topic for further research. Interviews with several of these stakeholders were in my plans for this thesis at an earlier stage, but have not made the final cut so as to better focus on the platform analysis of one specific instance on open and participatory budgeting.

### **Towards open participatory platforms**

In the analysis of my research, specifically where impact was concerned, my corpus was limited to anecdotal evidence. One of the reasons for this is the nature of open platforms. In the case of platforms like the ones Van Dijck et al. discuss, an effort is being made to keep the user on the platform to be able to track usage and use cases.<sup>115</sup> This runs counter to the idea of open and open source platforms such as Openspending.nl, where outside use is encouraged. While this creates more opportunities for usage and use cases, this also possibly obscures them from view from the point of the platform. In the same vein, API's limited in technical ways afford for more knowledge and control of usage by the platform owner, truly open API's do not.

In discussing the platform society, Van Dijck et al. discuss three roles the government can adopt: platform user, regulator and developer.<sup>116</sup> In the previous chapters on data and interface, this has not been directly applicable, but for understanding the impact of Openspending.nl it becomes more relevant. The government can be a platform user, specifically on a local level, when municipalities use it to compare their own budgets with other municipalities. Because of the localized structure of governments, the data only became available to all governments when it became available to the public, as a result of the efforts by the Open State Foundation. This shows that it is important to be mindful of the multi-leveled and fragmented structure of governments, as there is no one thing as the government as an organisation.

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<sup>115</sup> Van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016: 54.

<sup>116</sup> *ibidem*: 136.

The role of governments as regulator is not applicable to Openspending.nl, as it is the nature of open data that it is opened up, not closed off or regulated. However, because the data was closed off by default, there was a need for regulation to open the data to the general public. The fact that the Iv3 standard can also be seen as a form of regulation is not relevant to this research, as it is not a type of regulation that applies to any platform as Van Dijck et al. define it.

Finally, the role of the government as a developer is indirectly relevant, as the development of Openspending.nl was subsidized by local and national governments. However, Openspending.nl as a platform has not been developed by the government, which makes this role as explained by Van Dijck et al. not applicable to Openspending.nl, which shows a hiatus in their understanding of the development of platforms - civic society is not represented in their approach, but the goals and pitfalls of NGO's or similar organisations are distinct from governments or commercial parties.<sup>117</sup>

In this thesis, I have shied away from too many suggestions, only doing them to show the potential. However, in this regard there is something I would like to see, a move towards open platforms for participation. Platforms as Van Dijck et al. discuss them are often centered on user interaction as a business model.<sup>118</sup> Open data platforms like Openspending.nl are often aimed at supplying the data. I would like to see a marriage of these concepts, open platforms aimed at data-driven participation. A platform like Openspending.nl could make room for discussion linked to budgets, allowing users to create suggestions, find inconsistencies or other interesting data points, highlighting areas of interest for other users. Instead of user interaction as a business model, these platforms should have democratisation as their goal, which often is already the case. However, the move from democratic value in implicit participation towards democratic value in explicit participation has not often been made. This would mean a move from the first step of participation, information, to potentially all other steps: user/citizen input, an inclusive process between users, output in suggestions and eventually accountability with actual answerability and enforceability.

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<sup>117</sup> Van Dijck, José, Thomas Poell, and Martijn de Waal. *De Platformsamenleving*. Amsterdam University Press, 2016.

<sup>118</sup> *ibidem*.

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## 9. Appendix

### Screenshots

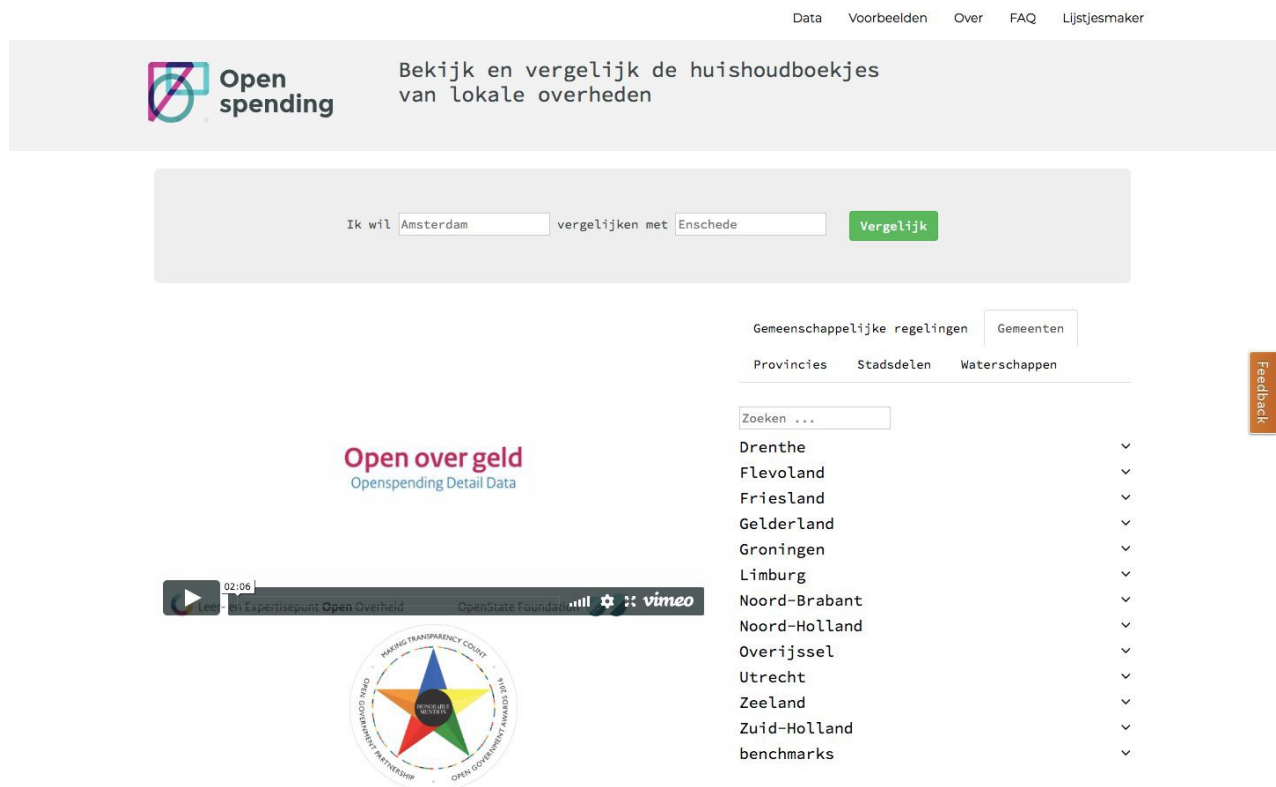


Fig. 1: Openspending.nl landing page

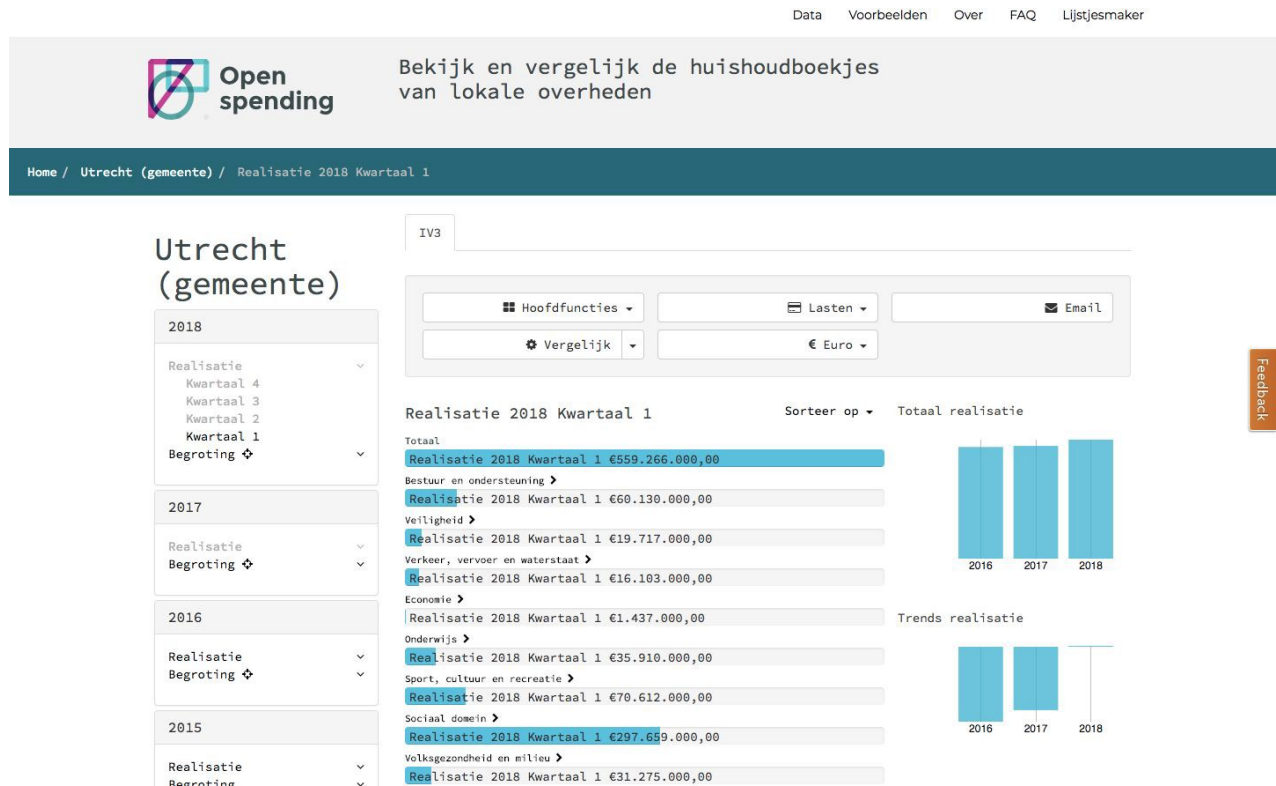


Fig. 2: Openspending.nl overview for the municipality of Utrecht.

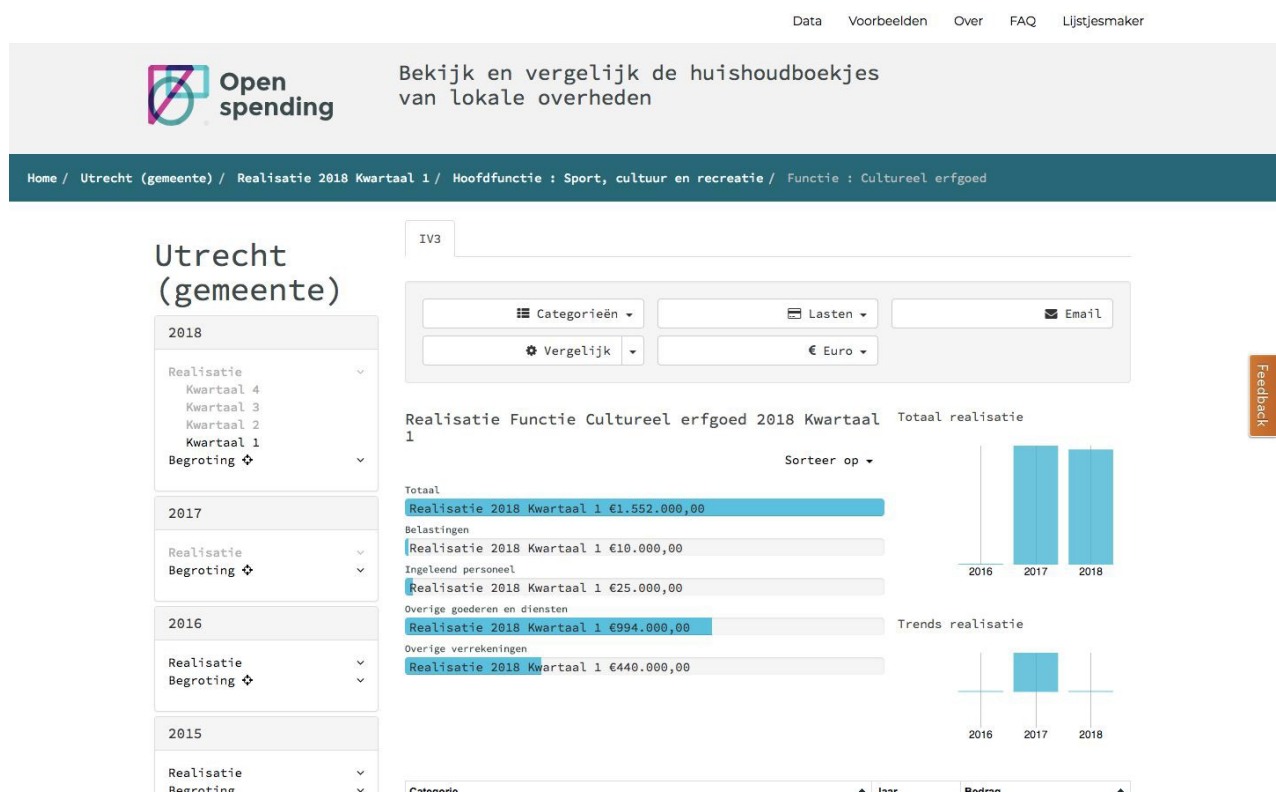


Fig. 3: Openspending.nl overview of municipality of Utrecht at a lower level.

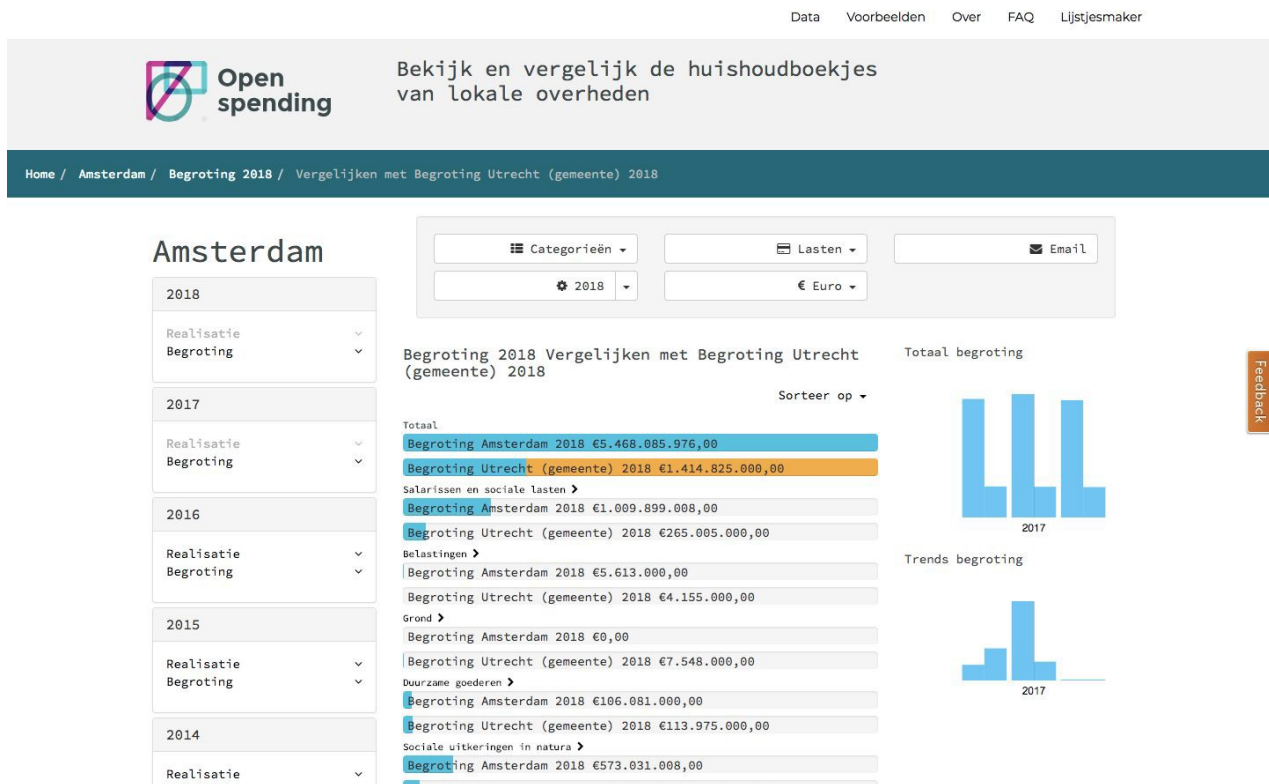


Fig. 4: Openspending.nl comparing view of the municipalities of Amsterdam en Utrecht.

OPENSENDING LIJSTJES

1 2 3 i

## IK WIL EEN LIJST VAN DE

10 HOOGSTE GEMEENTELIJKE BEGROTE UITGAVEN IN HET HELE JAAR 2016

over Verkeer en Vervoer, Sport, Sociale Voorzieningen of Parkeren...

EURO'S

Berekenen Downloaden

Wat Buzzfeed kan, kun jij nu ook. Met Openspending Lijstjes kun je zelf een lijst maken met de hoogste of laagste uitgaven van verschillende overheden. Gewoon omdat het kan. Je kunt kiezen voor een lijstje met een top 10, 20 of 50. Of je maakt een lijst met alle resultaten. Je kunt ook de volgorde kiezen, de hoogste of laagste uitgaven. Vervolgens kies je van welk type overheid je een lijst wilt samenstellen. Zo kun je kiezen uit de uitgaven van gemeenten, provincies, waterschappen of

Vervolgens kies je over welke periode je de lijst wilt, zoals voor het hele jaar of je kiest voor een kwartaal en daarna het jaar. Dan kun je in het zoekvenster invullen voor welk type je de uitgaven wilt zien. Denk aan bijvoorbeeld aan ambulancevervoer, sociale uitkeringen, sport of bij inkomsten aan baten parkeerbelasting. Vervolgens kun je bij de uitgaven van gemeenten en provincies er ook nog voor kiezen om in plaats van euro's de bedragen per inwoner of huishouden te

Fig. 5: Openspending.nl list maker landing page.

## IK WIL EEN LIJST VAN DE

⊖ 10 HOOGSTE GEMEENTE BEGROTE UITGAVEN IN HET HELE JAAR 2018

⊖ AANTAL INWONERS

Berekenen

Downloaden

1. ASSEN : €681,31 2. SCHIERMONNIKOOG : €578,33 3. HARLINGEN : €365,90 4. LELYSTAD : €356,77 5. VLIELAND : €348,94 6. AMSTERDAM : €329,87 

Fig. 6: Openspending.nl list maker example.