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Redesigning governance – a call for design across three orders of governance

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Abstract:

Designers are increasingly engaged in solving large-scale societal issues and the interest in the potentially activist role of design is growing. These new roles call for judicious approaches to designing and, importantly, for designers to be critically aware of how their work influences, not only our physical, but also our social worlds. This paper explores how designers can take part in rethinking governance structures by facilitating a process of questioning and re-imagining how, for example, public services are governed and importantly - by whom. This involves articulating people's day-to-day experiences of governance and making explicit the institutional arrangements and the often embedded and unarticulated societal values that govern these experiences. This paper shares preliminary findings from an on-going research project, in which low-income communities and government stakeholders in Indonesia are involved in critically rethinking wastewater governance and their deeply held assumptions about how public services should be governed.

Keywords: design; governance; politics; activism

Introduction

The role of design in society is rapidly changing. Designers are increasingly involved in finding practical solutions to large-scale societal issues, such as climate change, poverty alleviation or rethinking public service delivery. When Victor Papanek, 40 years ago published his seminal book *Design for the Real World*, the design discipline was different (Papanek, 1971). Designers were mainly concerned with shaping our physical world, while today emerging fields of design such as service design, social design and political design, means designers to at a larger extent are influencing social realities. Hence, Papanek's call for more morally and socially responsibility designers is still relevant today. The new role of



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designers not only calls for new approaches to designing or new forms, it also urges designers to be critically aware of how their work influences, not only our physical world, but also our social world and within this society's inherent and often invisible power (im)balances.

The role of government is also changing. Governments are today increasingly under pressure to deliver better and more cost-effective public services (Bason, 2014). Many governments are therefore considering how citizens might take part in co-producing public services. The idea of co-production is that citizens, rather than being viewed as recipients of public services, should be conceived as potential resources and take part in the production and delivery of services (Brandsen & Pestoff, 2006; Ostrom, 1996). Co-production experiments have been conducted in several countries, including Finland (Botero, Paterson, & Saad-Sulonen, 2012), Wales (Public Health Wales & Co-production Wales, 2012), Australia (Briggs, 2011) and UK (Design Commission, 2013). In many developing countries, co-production has a longer history and in this context is often considered crucial for achieving higher levels of welfare - particularly for the poor (Ostrom, 1996). Government's increasing attempt at 'downloading' responsibility for service delivery onto citizens, can according to Julier (2011) be seen as an opportunity for designers.

This paper explores how designers can and to some extent maybe should, go beyond (re)designing services and artefacts and question how public services and even society more generally is governed and by whom. It draws learning from the Governing Futures – Voices and Wastewater project, which seeks to engage communities and local government stakeholders in questioning and rethinking how urban wastewater services for poor urban communities in Indonesia are governed. The project is part of a trans-disciplinary PhD project, which combines the fields of design, international development and public administration.

This paper has four sections. In the first section the three orders of governance (Kooiman, Bavinck, Chuenpagdee, Mahon, & Pullin, 2008) and their relationship with design are introduced. This is followed by an introduction to wastewater governance in Indonesia, and a description of the three initial phases of the Governing Futures – Voices and Wastewater project; and a discussion section suggesting that the redesign of governance could be a new space for exploring a broader notion of design activism. The paper ends with a short conclusion.

Design and Values in Public Service Governance

Design and governance are intrinsically intertwined. Ultimately both are about solving problems and creating opportunities. For example, Kooiman defines governance as:

“All those interactive arrangements in which public as well as private actors participate aimed at solving societal problems, or creating societal opportunities and attending to the institutions within which these governing activities take place.” (Kooiman, 1999)

It is through the design of artefacts, experiences and environments that citizens meet their government (Tunstall, 2007) and other institutions that govern their everyday. How such artefacts, experiences and environments are designed is therefore no trivial matter. As suggested by Tunstall, these designs hold the power to mediate the trust citizens’ hold in the practices of government (Tunstall, 2007). Design can therefore be said to make the governance tangible to people (Tunstall, 2007). This leads Tunstall to argue, that design also opens governance up to the potential redesign by those people.

Designers, be that interaction designers, service designers or people who would not characterise themselves as designers, such as policy makers, embed their vision of the world into their designs. Akrich termed this process ‘inscribing’ and the result a ‘script’ (1992). While Akrich was concerned with the design of technological objects, the concept of ‘inscription’ is also relevant for other types of design. For example, when community-scale wastewater systems in Indonesia are designed to be easy to maintain by unskilled operators, this can be seen as an inscription of a vision of urban communities as ideally self-reliant. The design of all artefacts, experiences and environments through which citizens meet their government, hold such scripts, inscribed visions of the world as seen by their designers, whom most often are policy makers or civil servants.

In the governance literature, visions are considered governed by values. According to Kooiman and Jentoft and the idea of Interactive Governance, norms, principles and values “underpin all decisions since they inspire those who govern how to think and make judgements” (Kooiman & Jentoft, 2009). These norms, principles and values sit at what they term ‘third order governance’ or ‘meta-governance’, which governs the governance activities that happen at first and second order. First order governance deals with day-to-day affairs. This is where problems are solved and opportunities created (Kooiman et al., 2008). The designed artefacts, experiences and environments through which citizens meet their government can therefore be seen as part of first order of governance. Second order governance includes the institutional arrangements in which day-to-day affairs (first order governance) take place (Kooiman et al., 2008). It is here the visions and rules that govern first order governance are formed and where roles and responsibilities of the institutions that take part in governing are defined. The visions of the world, inscribed in the artefacts, experiences and environments through which citizens meet governments, can therefore be said to lie within the second order of governance. Importantly, both artefacts, experiences and environments at the first order and the institutional arrangements at the second order are governed by meta-governance, which “deals with the principles which ‘govern’ governance itself” (Kooiman, 1999).

First	Second	Third
Artefacts	Visions	Values
Experiences	Rules	Principles
Environments	Institutions	Norms

Figure 3 The relationship between design and governance

Designing how public services or other elements of society are governed, means moving beyond designing the artefacts, experiences and environments citizens meet. While Turnstall argues, that design, by making governance tangible to everyday people, also opens governance up to participatory redesign by people, the notion of meta-governance suggests that the possible solution space will be restricted by what is reasonable within the values found at the meta-governance level. Redesigning artefacts, experiences and environments, might therefore lead to changes in the day-to-day affairs of governance, but will only indirectly influence what happens at second and third order. If designers seek to create more fundamental change in governance structures, they could consider engaging more directly at second and third order. However, these orders of governance are highly invisible, which prompts the question – how might designers make the elements found at these orders of governance more explicit and thus open them up for collaborative re-design by citizens and their government?

The State of Wastewater Governance in Indonesia

In Indonesia, domestic wastewater has historically been considered a private matter (BAPPENAS & WSP, 2007). Public investments in wastewater services have been limited (Wibowo & Legowo, 2010) and today only 2% of Indonesia's 250 million people are connected to centralised sewerage (WSP, 2013). The lack of government initiative has left households to find their own solutions and the majority of urban dwellers today rely on household-based *tangki septik* (septic tanks). These are often poorly constructed and do not prevent wastewater from seeping into and polluting nearby water bodies used for drinking and cooking. The poor sanitation conditions in Indonesia currently result in approximately 6 million cases of diarrhoea, 20.000 deaths and the loss of 2,3% of GDP every single year (WSP, 2008a) (WSP, 2008b).

There has in recent years been an increasing push on Government of Indonesia to improve access to wastewater services. International donors have specifically urged Indonesia to improve the institutional arrangements for wastewater, which currently lacks a clear institutional home at both national and local government level (WSP, 2011). While local governments officially gained responsibility for wastewater services in 2001, the new responsibility was not followed by sufficient changes to the regulatory framework (Djojosoekarto et al., 2013), clear service delivery standards (WSP, 2009) or sufficient capacity building (WSP, 2009). Many local governments therefore today remain unsure what their responsibility is and how they might fulfil it (Winters, Karim, & Martawardaya, 2014).

Despite the remaining challenges at local government level, the political prioritisation of wastewater in Indonesia has increased. There has been a massive increase in funding from both national and local governments (World Bank & AusAID, 2013) and Indonesia today has a clear political commitment to ensure 100% wastewater service coverage by 2019 (BAPPENAS, 2015). Part of the strategy to reach full coverage, is to provide 7.5% of the Indonesian population access to *community-scale wastewater systems*. These systems and how they are governed is the topic of this paper.

2.1. Community-scale wastewater systems

Community-scale wastewater systems are a fairly recent phenomenon in Indonesia. The first systems were implemented in 2002 as part of a pilot program under the name SANIMAS (*Sanitasi Berbasis Masyarakat* – Sanitation Based in the Community). In following years, the Government of Indonesia funded the implementation of 50-100 systems per year. By 2009 Indonesia had 420 community scale systems (WSP, 2013) and by 2012 a total of 1700 (Mitchell, Ross, Abey Suriya, Puspowardoyo, & Wedahuditama, 2015). Funding has since continued to increase and by 2015 13.600 systems had been funded for implementation (Mitchell et al., 2015). To reach the planned 7.5% of the population an additional 100.000 community-scale systems are however needed (Mitchell et al., 2015).

The systems typically provide wastewater services for 50 to 100 households and are generally implemented in densely populated low-income urban and peri-urban communities (WSP, 2013). Three types of systems are found in Indonesia; MCK, SSS and mixed systems. MCK's (mandi, cuci, kakus or bathing, washing, toilet) consist of a communal toilet, bathing and washing facility and an underground treatment system. SSS stands for simplified sewerage systems. These systems have a pipe network, which connects household bathroom and toilets to an underground treatment system. Mixed systems combine the qualities of MCK and SSS systems and therefore have both a communal toilets and a pipe network.

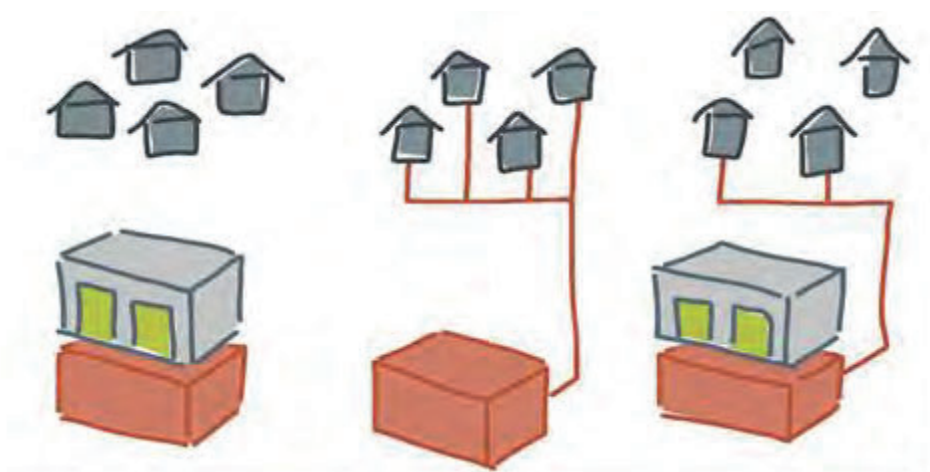


Figure 1 From left: MCK; SSS; mixed system. Red parts are below the ground.

The systems are funded by aid donors or national and local government, while community-based organisations (CBOs) are expected to take full responsibility for their ongoing operation, maintenance as well as regular user fee collection.

2.2. Community-management and long-term sustainability

A recent study has questioned the long-term sustainability of community-scale wastewater services under community management. CBOs often do not function as assumed. Members loose enthusiasm and struggle to collect enough user fees to fund major repairs or

desludging (WSP, 2013). The study therefore concluded, that the assumption that communities can and will manage community-scale sanitation systems without external support has been overstated (WSP, 2013).

Several local governments are currently rethinking wastewater governance. They specifically explore how roles and responsibility among government agencies can be organised and are developing new wastewater by-laws. These changes will however only affect household-based and centralised services, while community-scale services will remain fully managed by CBOs. This is largely due to a dominant paradigm brought in by donors through the SANIMAS pilot program – i.e. that communities can and should be empowered to take on full responsibility for ongoing service provision.

2.3. Institutional arrangements in community-scale wastewater

Bogor, a city of nearly one million people about 60 kilometres south of Jakarta, is one of the cities where local government is currently rethinking wastewater governance. The Governing Futures – Voices and Wastewater project follows this process and attempts to inspire local government to think of alternative governance models for community-scale wastewater services. Below is a short introduction to the current institutional arrangement in Bogor.

The implementation of a community-scale wastewater system in Bogor is initiated when the *Planning* department applies for funding. There are several funding paths, which differ in the details, but generally the *Implementation* department receives funding to build systems from the national government budget. The *Implementation* department selects which communities will receive funding. This decision should officially be based on a detailed *City Sanitation Strategy*, prepared through collaboration between the *Planning* and *Implementation* departments. The *City Sanitation Strategy* prioritises communities ranked high in an *Environmental Health Risk Assessment* performed by the *Health department*. When communities have been selected, the *Implementation* department hires and trains *Social and technical facilitators* to support the selected communities while implementing the system. The facilitators arrange community meetings to give community members information about the health benefits and the technical functionality of the system and also provide ongoing support during the design and construction of the system. After the system has been installed and inaugurated, the facilitators are no longer involved and the full responsibility is handed over to the community. To handle operation, maintenance and user fee collection, the community selects 3-4 people to form a CBO and appoints an operator.

In Bogor, three additional stakeholders are involved in community-scale wastewater service governance. *Health City Forum* (HCF) was established by a mayoral degree in 2005 as part of larger program funded by national government to improve health condition across Indonesia (Director of Bogor HCF, personal communication, 2015). The national association of community-based organisations, *AKSANSI*, was established in 2006 and supports its members (the CBOs) to sustain community-scale wastewater services. For example, *AKSANSI* monitors new systems one year after commissioning, facilitates communication between

CBOs and local governments and provides capacity development opportunities for CBOs. The *District* government is a sub-level of local government, structurally located between community and local government. In practice the District government has no specific responsibility in relation to wastewater, but can generally be seen as a mediator between communities and local government.

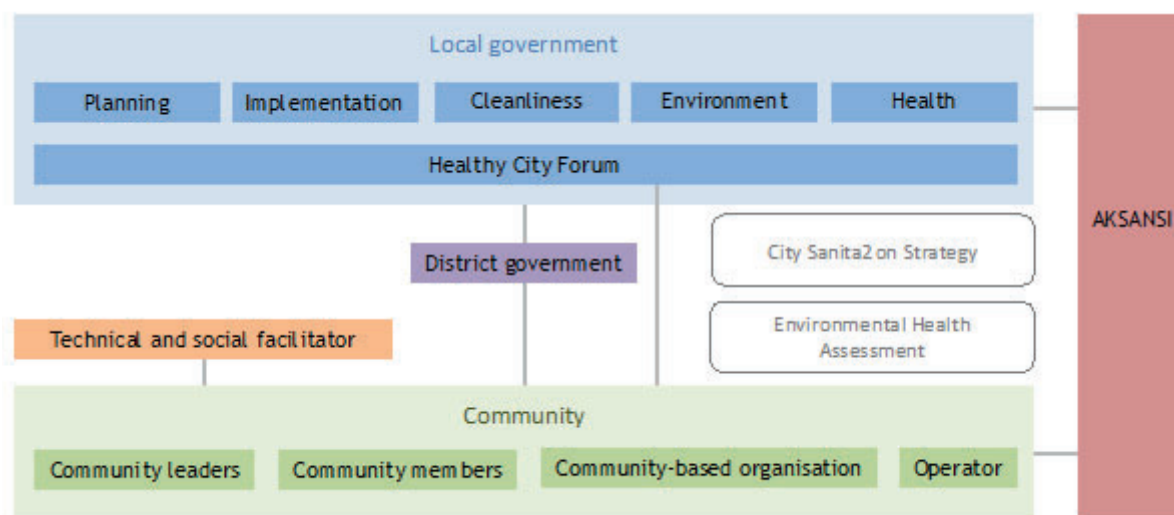


Figure 2 Simplified overview of the institutional arrangement for community-scale wastewater service provision in Bogor.

The Governing Futures – Voices and Wastewater project explores how designers might engage communities and local government stakeholders in questioning and rethinking institutional arrangements for public service provision such as the ones described above.

Governing Futures – Voices and Wastewater

The Governing Futures – Voices and Wastewater project explores how to make the institutional arrangements for community-scale wastewater service provision in Bogor explicit and open for redesign. The project specifically seeks to question the assumption that communities can and should be responsible for ongoing service provision and provide low-income communities the opportunity to take part in co-designing alternative futures together with local government stakeholders. The project draws from the fields of participatory design and service design. Participatory design has an explicit emancipatory commitment to ensure the voice of marginalised groups are being heard and involved in decision-making (Simonsen & Robertson, 2012) and since it emerged in Scandinavia in the 1970s a wide range of tools and methods have been developed to fulfil this particular purpose. The Governing Futures – Voices and Wastewater project specifically draws on the concept of design games (Brandt & Messeter, 2004; Brandt, 2006; Møllebæk Larsen & Lindegaard, 2009), a form of collaborative design activity which by shifting focus to a game can help downplay power relations (Brandt & Messeter, 2004). Service design is concerned with how people experience services and relationships between people, specifically the

relationship between service user and service provider (Polaind, Lovlie, & Reason, 2013). The concept of service blueprints, a tool for mapping relationship as they happen over the course of the service journey and influence peoples service experience, is central to service design (Moritz, 2005; Shostack, 1984). By combining the two fields of design, a range of design games have been developed to facilitate the engagement of low-income communities and local government stakeholders in rethinking service governance.

The participants are engaged in questioning one order of governance at a time. In the first phase, community-members were invited to map their experiences designing, implementing, operating and maintaining community-scale systems. The focus was on the day-to-day elements of governance at the first order. In the second phase, community members mapped the current institutional arrangements for community-scale wastewater service provision and envisioned alternative arrangements. In the third stage, stakeholders from local government were invited to map the ideal institutional arrangements as seen from their perspective. To explore which values at the meta-governance level governed their visions, the researcher suggested an alternative future, prompting strong reactions from the stakeholders. These three phases were recently finalised. In the coming months, the last phase of the project will be completed. In this phase community leaders and local government stakeholders will be engaged in co-designing new governance models for community-scale wastewater service provision.

Three communities are involved in the project. Two of these implemented mixed systems in 2010 and the third community is currently waiting for funding to begin implementation.



Figure 4 From left: Location of MCK in two communities and the future location of an MCK in the third community.

4.1. Mapping community experiences at the first order

In the first phase, community-members mapped their day-to-day experiences of community-scale wastewater governance. This was done through a tool turning the concept of service blueprints (Parker & Heapy, 2006) into a design game (Brandt, 2006). It consisted of: a timeline, a range of cards describing different plausible events such as ‘meeting with local government staff’ and a collection of random pictures participants could use to describe an experience. It allowed community-members to map the process of implementing, operating and maintaining community-scale wastewater services and consider how they experienced each separate event. The mapping was performed either individually or in groups up to five participants and took place in participant’s own homes or in community meeting places.



Figure 5 A community leader maps his experience of designing, implementing, operating and maintaining the community's community-scale wastewater systems.

The mapping exercise made explicit influential power dynamics. For example, from one community it became clear that the Healthy City Forum has a powerful position and is able to decide when they receive the funding and whether it is enough for a small or large system. Officially such responsibilities sit with the Implementation department, and decisions should be based on the City Sanitation Strategy and Environmental Health Risk Assessment. In practice, the Healthy City Forum seems to have significant influence and possibly even some degree of control over the process, despite not having line responsibility and staff not being public servants.

The mapping exercise also made explicit the importance of personal relationships with people working within or close to government. One of the communities recently received funding to extend their pipe network, because of close personal relationship with the local AKSANSI representative. The community leader mapped how funding had come from an international donor, who had asked the local AKSANSI representative to select the receiving community.

The exercise furthermore made explicit that local government departments can be inaccessible for low-income communities. Leaders from two communities mapped how they previously have asked for support from local government to maintain infrastructure. They went to District government, but never received any reply on their inquiries. The leaders of both communities thought their request had never moved on to the relevant local government agency. As one leader said: "I already told the kelurahan (District office), but

they haven't told Wasbangkim (the Implementation department). So far kelurahan hasn't said anything yet".

In another community, the mapping exercise led to a conversation about how community leaders felt government projects became a burden for them as leaders. They felt stuck maintaining the government-funded infrastructure without support from either government or their communities. In the last community, the exercise led to the community leader revealing his frustration and impatience after waiting nearly two years to receive funding to implement the system they have been promised.

4.2. Mapping and questioning institutional arrangements at the second order

In the second phase of the project community members were invited to map the institutional arrangements for community-scale wastewater as seen from their perspective and suggest potential alternative arrangements. For this purpose they were provided with a design game consisting of 10 coloured game pieces, each with the name of stakeholder involved with wastewater. They were first asked to organise the stakeholders into current arrangements and afterwards re-organise them into more desired arrangements.



Figure 5 A community leader is mapping the institutional arrangements for community-scale wastewater service provision in Bogor as seen from his perspective.

Through the mapping exercise, it became clear that community leaders were seeking easier access to local government agencies. For example, community leaders mapped District offices and Healthy City Forum as roadblocks, slowing down or completely obstructing application and funding processes. When mapping alternative arrangements community members suggested circumventing the District office and Healthy City Forum by establishing more direct lines of communication between them and local government departments,

specifically the Implementation department. One community leader specifically suggested a direct phone number to the Implementation department, while a leader in another community suggested an assistant at the District office could be responsible for bringing community members to relevant local government agencies in person.

4.3. Influencing local government stakeholders' intrinsic norms and values

In the third phase of the project, local government stakeholders were engaged in mapping the institutional arrangements for community-scale wastewater service provision. This was done one by one and took place in their offices or in a nearby café. In addition to the 10 coloured game pieces given to community-members, they were also given 17 pieces symbolising specific responsibilities. They were asked to place each of these responsibilities on the stakeholder they thought ideally would take this on. All government stakeholders placed all day-to-day responsibilities, such as 'user fee collection' on the CBO, but maintained a few responsibilities, such as 'health campaigns' among government agencies.

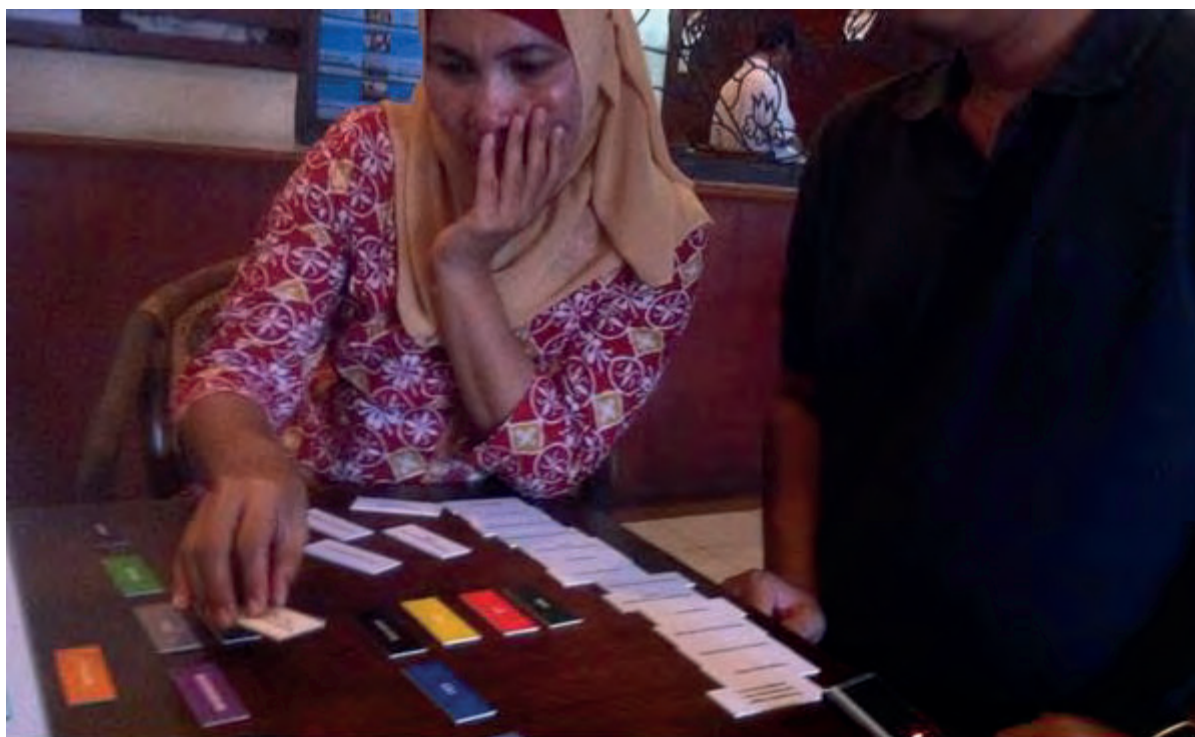


Figure 6 A member of local government is mapping current institutional arrangements for community-scale wastewater service provision in Bogor as seen from her perspective.

When a participant had organised the responsibilities, the researcher suggested an alternative set of arrangements, by moving the game pieces around. The researcher took the majority of responsibilities placed on the CBO and relocated them onto various appropriate local government agencies. The purpose was to provoke the local government stakeholder and start a conversation about why such arrangements would not be feasible. In other

words, explore which values and norms at the meta-governance level govern the current arrangements.

From this exercise the strength of the values supporting the notion of community-management became explicit. One stakeholder referred to it as the 'spirit of SANIMAS' - the foundation of the entire SANIMAS program. All engaged government stakeholders categorically refused the potential of seeing the suggested government-led arrangements implemented. They instead suggested that community awareness should be increased through 'socialisation' to ensure they understand the importance of collecting user fees and sufficiently operate and maintain the systems.

A call for design across orders of governance

Designers, consciously as well as unconsciously, can take part in reinforcing how society is governed and by whom. For example, when designers are involved in ensuring public services can be co-produced by citizens, they might unintentionally be promoting a 'neoliberal hype' as suggested by Brandsen & Pestoff (2006). Designers inscribe their visions into artefacts, experiences or environments, and thereby can implicitly reinforce or even construct values and norms at the meta-governance level; for example, the idea that low-income communities should deliver their own wastewater services. If designers (both trained and untrained) do not critically reflect on the impact of their work, they might inadvertently promote unintended values and norms.

Designers can, if they are aware of the three orders of governance, actively use their practice to question and redesign governance. As exemplified by the Governing Futures – Voices and Wastewater project, designers can play an important role in uncovering elements of first, second or third order governance and open them up for participatory redesign. Through the use of design games hidden power dynamics, the importance of personal relationships and the inaccessibility of local government agencies were in this project revealed. By making the institutional arrangements for wastewater services visual and changeable, these became open to the participatory redesign by community-members, who suggested circumventing HCF and district government to get direct access to local government agencies. Lastly, by mapping how a shift of responsibilities from communities to local government may look, the underlying values and norms associated with the 'spirit of SANIMAS' were made explicit. This exemplifies how, by uncovering the elements of the three orders of governance, designers can help explore how some of the most fundamental structures of society, such as the roles and responsibilities of state vis a vis citizens, are configured and could be reconfigured.

While designers have little training in the functioning of government or the structure of political systems, it could be argued that they not only have a unique opportunity, but also a moral and social responsibility, to go beyond (re)designing our everyday, to facilitating the expression and inclusion of citizens' voices in the process of deciding how public services and in fact society more generally is governed. Designers, with their ability to make the invisible

explicit and their vast field of emancipatory tools, are well placed to open up the three orders of governance for the potential redesign by people whose voices are most often not heard in governing decision-making. They might even take on an activist role and in designerly ways, such as through design games, present the voice of disadvantaged groups to decision-makers and begin to influence the norms and values at the meta-governance level.

Governance redesign might provide a new space for activist designers to explore a wider notion of design activism and bring it closer to decision-makers. While designers are increasingly involved in solving large-scale and complex societal issues, design activism is still mainly focusing on the design of 'things'. For example, Markussen describes design activism as the introduction of material objects and artefacts into the urban field of perception and sees design activism as a 'disruptive aesthetic practice' (Markussen, 2013). This form of activism, sits at the first order of governance. Activist designers could consider expanding the notion of design activism and explore it across all three orders of governance. Design activists today mainly speak to other activists (Fuad-Luke 2009) and design activism is often reduced to exhibition material and thereby held back from bringing about meaningful change (Kaygan & Julier, 2013). Bringing design activism directly into the second and third order could bring it out of the galleries and into governments. This would mean exploring the potentially activist role of the variety of objects and artefacts designers employ throughout the design process. Fuad-Luke (2009) has already suggested, that the typology of artefacts for design activism is not sufficiently understood and further research is needed. Exploring the potential use of design activism across the three orders of governance could be useful in this regard.

Conclusions

Designers can play an important role in questioning and redesigning how public services and even society more generally is governed. This role might, as was the case in the Governing Futures – Voices and Wastewater project, involve helping citizens reveal hidden power dynamics or the inaccessibility of government agencies. It could also involve making normally invisible institutional arrangements explicit, especially to disadvantaged groups, to allow them to engage in exploring alternative governing futures. Designers, with their ability to make the invisible explicit and a range of emancipatory tools and methods, such as the design games explored in the Governing Futures – Voices and Wastewater project, have a unique opportunity to take on this role.

Redesigning governance can provide activist designers a new space to explore a wider notion of design activism and bring their activist practice closer to decision-makers. Further research is however needed into the use of design activism across the three orders of governance and the potentially activist nature of the range of objects and artefacts designers apply throughout the design process.

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