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*The Design of Policy, Governance
and Public Service*

Title of the paper

*Going beyond quick fixes and compromises:
what design enables when people tailor places to their needs
in collaboration*

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Introduction

Many Western societies are employing and adjusting their space continuously. People live and work in, and travel through different places, landscapes and cities every day. To counteract the problems they experience in using the space, and to anticipate changes that we foresee in the future, or to adjust the physical situation to specific needs and wishes, physical spaces are continuously adapted. That is what spatial planning is about (e.g. Van der Valk and Van Dijk 2009). When the quality of a place is regarded suboptimal, it may 'itch' for some time and then, at some point, a choice is made to intervene and adjust it in a certain way. For example, cars or through traffic may be banned from a historical district, a lightrail may be built between the airport and the CBD, a busy intersection turned into a lush roundabout, a university reallocated from down town to a peripheral campus, a container terminal may be expanded.

Changes, or optimisations of spaces only satisfy the needs of a society for a certain amount of time. The reason for this is that both a place and its community of users are in flux. The community transforms demographically and its needs, expectations and preferences change. The place then is felt to be in need of adjustment by human interventions. Therefore, a good place serves its user community well, but always temporarily: until the community changes too much and place and community run out of sync.

After an era in which technical rationality, capital and centralized power dominated the transformation of the cities, regions and spaces, collaborative planning has become a dominant planning paradigm in many Western planning cultures. This means a strong belief is attached to the idea that when all who have a stake in a certain problem get together, egalitarian and free deliberation among them will lead to good decisions (Innes and Booher, 2010). An attractive and feasible perspective that fits with democratic values and the current trend of decentralization and shared responsibilities between governmental and societal actors in adjusting the spatial situation. Elegantly put by Couclelis (2005, p. 1358): 'Planning



for the people is obviously no longer acceptable and planning with the people proved to be too complex, so planning by the people has become the rallying cry’.

However, getting together with stakeholders and discussing solutions for spatial problems could easily lead to quick fixes and easy compromises. This raises the question how to push the deliberation between stakeholders beyond this point. Or in other words: how to make sure they develop a broad and deep understanding of the problem(s) at hand, and explore all possible options and solutions including their consequences, before reaching a decision? In this paper we explore via three inspiring examples, what a design based approach can add to these processes to enable ‘rich’ or thorough and broad decisions leading to high-quality spatial adjustments. Moreover, we search to identify which process properties in this approach are critical to go beyond quick fixes and easy compromises.

This paper presents a basic anatomy of the process that leads up to a certain choice on how to adjust a place. In the light of this anatomy, cases are then described where rich choices were made. We conclude by discussing the characteristics of rich choices and what process-characteristics related to a design-based approach could increase the chance of rich choices being made.

Anatomy of making places

Given the challenges our cities and regions face, we ideally make smart investments to improve our places. The act of investing in a place is rooted in principles from the classics about decision-making. As Simon (1957) and Cyert and March (1963) revealed, the actors engaging in a problem-solving process do not work in a shared objective reality, but rather see things from their specific incompatible bounded rationalities. An actor’s bounded rationality (any department, organisation, policy domain, discipline, nation, etc. may have its own) steers the scarce attention of the actor to certain information, ignoring other



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information. It causes a self-referential process of constructing narrative of what should be done.

Thus, action, attention and information are bounded by the actor's inclination in a path-dependent way. Rich choices will require ways to unfreeze the actor's bounds and admit new angles.

As was shown later by Cohen, March and Olsen (1972), actions (being the execution of choices made into acts with social or physical impact) are only loosely connected to problems. More often than not, the action is conceived first and the problems are fabricated to justify the action. Either the action-advocate constructs the justifying problem, or the actions are just chosen and the public assumes what problem it is a response to. Also Hewitt and Hall (1973) showed that problem frame and, what they call, 'cure frame' grow iteratively, even temporarily building a specific jargon to discuss problem and cure that evaporates after the decision is made. 'Cures' can make aspects of reality visible, that because of the appeal of the 'cure' become experienced as being problematic. Maher and Poon expanded on this co-evolution of problem and 'cure' or solution in 1997, and Dorst and Cross (2001) indentified it as an important element in design processes.

Decision making in reflective practice situations (Schön 1983), whether in medicine, planning, engineering, business, sports coaching or computer programming, incorporates three components that relate to three phases in design thinking. The key components consider 1) a (re)definitieon of the core of the problem at hand, 2) the exploration of options on what to do, or allegedly actionable pathways, and 3) choices of what should be, of what is smart to do. The first component relates to the inspiration phase of the design cycle (Kelley and Kelley 2016), the second to the ideation phase and the third to the implementation phase. We have summarized this in table 1.

Table 1:

Process component	Focus	Design cycle phase*
Narrative about the core of the problem at hand	What is?	Inspiration
Range of allegedly actionable pathways	What could be?	Ideation
Dominant storyline about what is smart to do	What should be?	Implementation

* According to Kelley and Kelley (2016) Creative Confidence, but many variations on this set of concepts exist throughout design studies, policy sciences and management literature

Adjusting our cities and regions in order to cope with the challenges of the future is a reflective practice in which each of these components are taken into account in decision-making. There is an existing situation that forms the basis for the future situation. It is impossible to completely (re-)construct a new situation from scratch. Hence the question of 'what is' is very relevant in spatial planning. This 'what is' situation does not only include the existing physical situation but also the perceived problems, issues and challenges that feed the need or desire to intervene and adjust the physical situation.

Spatial problems/issues are 'wicked problems' (Rittel and Webber, 1973), in the sense that they are so entangled in webs of interdependent interests, that they are impossible to solve completely. There are multiple solutions and it is unclear when a proper solution is reached. This calls for (re-)framing of the problem in hand, part of what is, in combination with exploring possible solutions, until a satisfying problem and solution pair is found (Cross 2006).

Exploring problem and solutions space beyond the obvious is at the heart of a design led approach (Schon, 1983). Designers are specifically trained in the exploration of problem and solutions spaces in order to come up with novel and innovative ideas. Design led approaches



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are focussed on both interrogating the existing situation (what is) and abductive reasoning, on what could be. It broadens and deepens the *narrative about the core of the problem at hand* and the *range of allegedly actionable pathways*. In some situations, where no discussion arises between the involved stakeholders, it add components to the *dominant storyline about what is smart to do* (Kempenaar et al. 2016). On the points where no consensus exists or arises on what to do, a design approach can clarify things and point out critical choices and their consequences by developing multiple alternatives (ibid).

Spatial planning in many Western countries nowadays is a collaborative effort. In collaborative spatial planning various governmental and non-governmental actors work together on the development and implementation of physical adjustments in our cities and regions (Healey 2006, Innes and Booher 1999). It emerged with the idea to make spatial planning a more inclusive endeavour and is hugely influenced by scholars focussing on how to seek for consensus in such collaborations (e.g. Brand and Graffikin 2007, Innés and Booher 2015, Tewdwr-Jones and Allmendinger 1998). We argue that this has pushed the search for highest quality of places to the background in spatial planning processes.

Collaboration and making high quality places, however, do not exclude each other. Much depends on how in collaboration the full exploration of 'what is', 'what could be' and 'what should be' takes place. The result of each of these three design phases, whether explicitly conducted or implicitly, and their cumulative outcome, is highly dependent on:

- the actors who are involved in coming up with a plan or strategy (and who are left out), because their frames, knowledge, assumptions, and ambitions defines what is seen in every phase
- how these actors interact with eachother, in terms of facilitation, phasing, direction of attention, time and effort spent, access to the discussion.

We argue that design involvement in, or design-based collaborative planning processes enrich how the set of actors and their interaction influence the richness of a strategy. The push to explore problem and solution space extensively, before creating consensus, makes the decision making process richer. Every actor brings a unique perspectives to the table.

Depending on the process, such ideas are suppressed or highlighted parts of in that ecosystem of ideas. Design oriented processes tend to appreciate a variation of ideas as it enriches and broadens both the problem and solution spaces, instead of letting one narrow idea become dominant and waste the richness of multiple perspectives. Table 2 shows what we consider the characteristics of broad and rich choices can encapsulate compared to mediocre choices.

Table 2 Characteristics of rich and mediocre choices

Rich Choices	Mediocre Choices
Thorough reinvention	Quick fix
Multifunctional	Monofunctional
By provocative range of relevant actors	By usual problem holders
Novel perspectives	Off the shelf solutions
Potentiality of the situation is key	Problem is key
True learning through dialogue	Reinforcing existing mindset
Synergy	Compromise
Sense making	Problem solving
Power symmetrical actor network	Power asymmetrical actor network
Focus on creativity	Focus on agreement

The next section discusses cases where a good exploration of possibilities was done with high-performing outcomes. A good exploration, and a broad actor coalition make places that score high on a wide set of quality criteria. Let's look into examples of what that looks like in practice.



Telling examples

We present three cases of rich interventions in cities to demonstrate what kind of processes made them happen.

River widening at Lent (NL)

The Dutch upstream river section of the Waal is the first part where the Rhine watershed transports up to 12,000 m³ of water per second into the Netherlands. The dikes containing the river and its floodplains were considered too narrow in the tight curve the river makes between Lent and Nijmegen. The water management agency said it would need widening in the face of climate change.

It could have been easily treated as a technical monofunctional project. The floodplains needed widening so the water management agency acquires land outside the floodplains, realigns the dike outward, extends the bridges and thus allow better through flow of the river. And it started that way.

But the widening project became contested because it would include a reduction of the space around the town of Lent. Moreover, the widening was part of the Room for the River program. This program had installed a Quality Team that would see to it that the basic principle would be honoured: the project leads to better high water safety, in such a way that the site becomes more interesting than it was before.

The local politicians, acting on the resistance of the residents, and the Q-team managed to make the water management agency rethink the widening project and put it in a wider perspective. The project was reframed into a quality impulse for the surrounding towns. This new perspective led to the creation of a water recreation site, banks that allow for recreational co-usage, cycling facilities, a residential peninsula and architecturally outstanding bridge extensions.

Today, the widening is internationally acclaimed as an example of how to enrich the quality of life of an area while executing an essentially civil engineering project.



Living Streets in Gent (B)

The Belgian city of Gent became aware that its car-dependent mobility model would not be sustainable for the future. It would run into its limits of air quality but also of accessibility: parking shortage and congestion would grind the city to a halt.

It could have been easily treated as a technical problem, requiring more parking structures and smarter traffic circulation. Instead, in 2012 Gent founded a Transition Arena: a 25 member group of partly civil servants (from departments of environment and of mobility) and key persons from business, residents and mobility. Together, after many intensive sessions of brainstorming, they presented their Fiets van Troye ('bicycle of Troy') vision, proposing a number of concrete innovative perspectives on how to see mobility for the future. And they advised Gent to experiment as much as possible, and make fundamental choices later.

One of their ideas was the Living Street. Streets could ask for a temporary re-fitting. During summer months, street parked cars would be relocated to supermarket parking lots and grass, bicycle racks, trees in pots, climbing castles, picnic benches, even fire pits would be places on the street. Their idea was to make people aware that the bicycle is a good alternative for the car.

Every year since, dozens of streets have experienced their Living Street weeks. Residents meet more, children learned to play outside, a new social dynamics emerges, and yes: alternative modes of transportation are used much more. Partly because of that, Gent has radically extended its network of dedicated bicycle lanes and is clearing more and more parts of the inner city from cars.

Today, Gent is one of the bike friendliest cities in Belgium.



Rotterdam Kop van Zuid (NL)

Today, Rotterdam is heralded as an architecturally bold city, that rose from its post-industrial ashes with a spectacular skyline created by the world's finest architects. It has a form and a reputation that few could imagine back in the 1980s. It was a time where the city centre was just about to be rediscovered. The Dutch spatial policy had favoured suburban development for a long time, assuming the city centre would be unable to accommodate high population densities and the accompanying traffic flows. But that had been at the detriment of the city centres.

The newly appointed head of the planning department saw the potentiality of the abandoned warehouse docks across the Meuse river. The docks were poorly connected to the city and clearly unattractive. But Riek Bakker proposed to use them for a radical real estate program: high rises overlooking the old city and providing it with a dramatic backdrop. The ambition was bold and many thought it unfeasible, un-Rotterdam, un-Dutch even to think in these densities.

Riek Bakker and Teun Koolhaas presented their vision in 1984 with help of a photo-montage showing big white blocks and a brand-new bridge on the old docks. It took especially Riek Bakker's persistent communication and persuasion (Sulsters, 1993) to advocate this discourse on the new Rotterdam. Some would say she just wouldn't let go and ignored the objections. If she instead would have concentrated on the objections, Rotterdam's fate may have been very different.

Hypothesising on the conditions that increase the chance of making rich decisions

In a perfect world, all places are the best version of what is possible and every investment in transforming a place brings maximum performance improvement. We argue that the likeliness of high-performing places can be deliberately increased through making rich decisions. Based on the examples described before we argue that rich decisions are fuelled



by taking a design based approach to planning issues. Meaning that 'what is', 'what could be' and 'what should be' is broadly explored before decisions have been taken and investments are done.

Looking at our examples we derive the following process-characteristics that strongly contribute to a full exploration of 'what is', 'what could be' and 'what should be'. These are:

Inclusion of resistance, troublemakers and dissidents

The inclusion of resistance, troublemakers or dissidents can deepen and enrich the discussion. In the river widening case, the Q-teams were the troublemakers for the civil engineers, because they looked differently at the project and expanded the scope from the functional quality to a wider quality for the surrounding community. In the Living Streets project, an unlikely coalition of actors approached mobility and environment issues in ways never explored before. In Rotterdam, Bakker and Koolhaas were influential troublemakers who redefined people's thoughts about the future of the city.

It can be tempting for quick decision-making to invite like-minded people into the process, but academic research into decision-making shows troublemakers are valuable (Nemeth, 2018). Dissidents and troublemakers cause friction, destabilise seemingly straightforward assumptions and insert unexpected perspectives. Nemeth discovered that the conventional truth of avoiding criticism during brainstorming is a myth. Because of critics, the search process becomes richer, often yielding more innovative results.

The idea of Deep Democracy (Mindell, 1995; Lewis, 2008) also pleads for embracing diversity and conflict. It argues that a disagreeing minority should not be overruled but rather invited to enrich the majority decision. The minority's objections can help the majority identify pitfalls or easily avoidable imperfections in their idea. Similarly, using the input of unlikely actors can help improve the choices made.



Balance of power

The agency overseeing the river widening was dependent on the municipality to cooperate in rezoning and purchasing the land next to the river. This brought a useful power balance to the project, and an interdependency between the main actors. In the Living Streets case, behaviour of residents and adaptations to traffic circulation is politically hard to achieve. This required more experimental and sympathetic initiatives to be selected. Part of the solution was found in the temporariness of the new street design.

Choices become enriched when no one actor can dominate the decision. When one actor is in a position to dominate, the decision-making process narrows. The problem-frame and consideration-set of that one actor will define the choice. When a highway agency, for example, dominates a highway reconstruction project, the focus will be on the road only and other considerations may be treated as irrelevant or as a risk to be contained. When other actors are strong, however, the debate will have to be about the area that surrounds and includes that road.

In other words, legislation that gives residents and ngo's a strong position will make sure the choice will need to fit and serve them all. On the one hand, this complicates processes and takes more time, but it will also mobilise creativity and deliver high-performing solutions. Moreover, a rich joint process will also build more mutual respect and strong relations within and around the area.

Involvement of professional designers

The involvement of professional designers and designerly practices and attitudes were clearly visible in all three cases. The Q-team members intervening in the river widening project and the people who redefined Rotterdam's future were designers themselves. And the group proposing and implementing the Living Street concept worked in a clearly designerly way.



Power-symmetrical and contested situations need creativity as a catalyst for progress. Conventional logics need to be revised. Only relative outsiders are granted the influence to do so. As De Jonge (2009), Van Assche *et al* (2012) and Hajer *et al* (2006) showed, landscape architects are ever more intensively hired to play this role, for this reason. The designer as the facilitator in a collaborative design process has become more important. As Kempenaar *et al* (2016) and Kempenaar and Van der Brink (2018) show, they are trained to expand the view on the matter, to deepen and question seemingly obvious assumptions and connect unexpected matters. This way, congruent stories (Throgmorton, 2003) can be found in situations where fragmentation otherwise would stall decision-making (Sorensen and Torfing, 2009). This is often referred to as a Research by Design practice (for examples see Brand *et al*, 2014; De Waal and Stremke, 2014; Stremke and Koh, 2010; Van Schaick and Klaassen, 2011).

Open commissioning

A decision-making process is typically set in a wider commission brief. The commission brief specifies what the actors are expected to deliver. A brief can be more or less directive. If the brief already specifies a narrow technical monofunctional take on the problem, suppressing innovation, it is not always possible or appreciated that actors widen the brief. Good commissioning requires an open attitude towards any reframing of the situation. All problems are nested, Cyert, Simon and Trow showed in 1956 already. The wish for a certain piece of infrastructure reveals a desire for accessibility, assumed to be positive for economic growth, in turn raising the happiness of residents. Anywhere in that chain of nested desires, unexpected ways to act may emerge. A commissioner ideally is able to reframe the curatoriality explaining their brief.

The cases described all exhibit governments and agencies willing to engage in an 'agonistic', that is: intrinsically conflictual, process (Mouffe, 1999) with respect to the 'how' things be achieved, while being clear on the 'why' in terms of the values they want to be achieved. Agonism acknowledges the plural nature of democracy, and promotes the struggle between



passions because it leads to growth. Mouffe (1999) contrasts this to deliberative democracies that would try to 'eliminate passions in order to render rational consensus possible' (Ibidem, 755-756), a consensus that could be suboptimal.

Catharsis

The identification of, and choice for, rich solutions can be expedited by a situation of crisis. When a crisis has happened, there can be a heightened willingness and ability to leave routine ways of thinking. When crisis gives way to a leap in an organisation's performance, it has become catharsis.

The river widening case sits against a background of near floodings and a public critical about interventions in the river landscape. New determination to preventing flooding while obeying quality-inducing routines emerged. Gent was facing congestion and EU air quality norms that needed innovative ways of approaching mobility policies. Rotterdam's centre was in a bad shape when Bakker's story of hope was conceived and promoted.

Discussion

In making spatial investment choices, like other public policies, there are multiple ways to come to agreements about what should be done. Traditionally, experts were in the driving seat in proposing spatial decisions, operating from their own domain, sometimes in a copy-paste or off-the-shelf manner. In that mode of policy making, the idea was that the expert knew, understood the system completely and knew what the problem is and what would work as a cure.

That is the technical-rational model has been criticised for decades. The result of the critique has been the opposite model: a collaborative planning paradigm in which consensus amongst stakeholders is considered the 'holy grale'. Does this mean that any place that people like is good? And even more, does that mean any investment that people agree on is good? Who are 'the people' whose opinion matters? What subset of the people is eligible to



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Speak out? Are that the place's residents today or those who may live their tomorrow? What about future visitors of the place? And are these residents and prospective visitors well-informed about what is possible and necessary? And will they know what they will appreciate tomorrow? Are their expectations about a certain investment justified? What about ecological values and environmental restorative properties of the place?

In a time where public debate is dominated by neoliberalism (the customer knows best what he needs), relativism (every truth is just a personal opinion) and postmodernism (science will not be able to find universal laws anymore), consensus can easily become the lowest common denominator leading to mediocre or low quality of places. Yet despite these settings, we must admit places are intensely appreciated, cherished, intensively visited, well taken care of – in short: passionately loved by a majority of people. A central station may be such a place, a maze of shopping streets, a popular park or a scenic region. Good places like these are there because they were made. Some places have an accidental emerging charm (for example the neighbourhoods along Amsterdam's canals, or Venice), others are the result of one intentional construction (Singapore's Gardens by the Bay) or intentional retrofitting of a place that had lost its original quality (Highline Park in New York).

The examples we presented in this paper show that taking a design-based perspective, in which deepening the exploration of both problem and solution spaces is central, leads to rich choices.

We argue that an important factor is how much time and skill is spent on truly exploring *all* possible ways to improve the place. It is not easy to see a place's true nature ('what is') and potential ('what could').

'Jumping to solutions' by resorting to a monofunctional perspective, adopting off the shelf ('evidence based') solutions and continue the familiar pattern is often easier and faster, particularly when everything seems clear and straightforward for the experts as long as they stick to their discipline. However, a deep exploration of problem and solution frame can lead to innovations (ref), and improves the richness of choices. Such an exploration requires zooming out, reconsidering one's expectations or preferences, taking a different angle,



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delving behind actors' apparent wishes and finding their deeper desires. Through a cyclic process of social learning, actors reach a joint understanding of what the best new version of a place should be.

A rich exploration of problem and solution spaces only happens when skills are put to work. A smart process architecture based on design thinking principles can help to deepen the exploration of 'what is', 'what could be', and 'what should be' leading to rich choices. Furthermore, the involvement of designers or creative professionals who understand the value of exploration and the risks of underinvesting in this process, deepens the richness of choices. Further research in these processes could enlighten more details on the factors and mechanisms that hinder or enhance to push spatial planning processes beyond quick fixes and compromises. More insights in creating rich choices are needed because our cities and landscapes are too precious to be subjected to mediocre decisions.

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The history of paper started just after the start of the Gregorian calendar. Paper is derived from the Greek word *papyrus*, the name for the papyrus plant. This plant grows only on the shore lines of streams in the Middle East, like the river Nile (a river in Africa which flows into the Mediterranean Sea in Egypt). The "paper" from the papyrus plant was first used by the Babylonians and thereafter by the Egyptians (around 3000 B.C.). Also the Greeks and Romans used papyrus, amongst others for Paper is a thin, flat material produced by the compression of fibers. The fibers are usually derived from pulp made from pulpwood trees (such as spruce), but they may also be prepared from such sources as cotton, hemp, linen, and rice. As a means of communicating and storing ideas, knowledge, art, and culture, paper is one of the most important and consequential artifacts of human civilization. It has played an enormous role in the rise of literacy, the expansion of artistic expression, and the