



# Augmented Democracy

How to maximise collective intelligence to solve pressing issues more effectively

**Policy Paper**

January 11, 2018 - Stephen Boucher

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# Executive Summary

- **Democracy is in danger.** Mistrust in democracy calls for renewed thinking.
- This can be addressed by **tapping into our collective intelligence** more effectively, as doing so can both **enhance our democracies' legitimacy and effectiveness.**
- While we have moved on for a pure model of representative democracy, the complementary approaches developed to date do not maximise the potential of collective intelligence to solve pressing issues more effectively, for six reasons at least:
  1. **Lack of trust in collective intelligence.**
  2. Public officials believe that the **direct cost of convening stakeholders properly** is too high and don't invest in quality processes.
  3. **Fragmented conversations** throughout the political cycle, involving a narrow set of actors and in silos.
  4. The technologies meant to address these shortcomings **do not build on one another.**
  5. **Insufficient integration of opposing parties.**
  6. Deliberation most often does not ask of the participants external to decision-making structures to co-build new solutions. Therefore **we do not fully tap into the cognitive diversity of relevant populations.** The lessons learnt in terms of how to foster creativity and innovation in other fields have only been applied marginally in the public sphere.
- Yet, however limited and insufficient, experience to date tells us some useful lessons. Combining those, **we know how** to involve a diverse set of stakeholders, from citizens to lobby groups to public officials, to come up faster with new, better and less resource-intensive solutions, that are welcomed by the people affected.
- We therefore propose an **original combination of governance technologies that have proven their effectiveness** and to **apply it to emerging societal issues which will unfold over the coming years** and have not yet resulted in solidified lines of fracture in society.
- We call this approach – as a working title – **'Augmented Democracy'** to convey the notion that it **builds on representative democracy** and is **thinking in progress that deserves to be tested.**
- We sketch out how the approach could be applied to an upcoming policy challenge: the multidimensional impacts that autonomous mobility will have on our cities, economies, lifestyles.

# Introduction

**Democracy** is, in theory, **the political regime best able to tap into collective intelligence**.<sup>1</sup> Yet today it is **under threat**, as our ability to solve problems is hindered by a wide range of obstacles and we are still far from the ideal of a political system that is truly democratic, i.e. that fosters “the equal opportunity for everyone to influence the decision”.<sup>2</sup>

In fact, **people are increasingly wary of democracy**<sup>3</sup>. They are disappointed not to be heard and to see their problems solved efficiently. On the other hand, **policy makers’ own mistrust of their electorate**<sup>4</sup> and **their lack of training in dialogue with citizens**<sup>5</sup> hamper their ability to work hand-in-hand with them to develop better policies. This leads to great frustration and is a threat to democracy.

Meanwhile, a number of major challenges are looming large over our democracies. They will for sure test further our political systems’ legitimacy and ability to deliver. For instance, the advent of new technologies based on artificial intelligence or the impact of demographic decline on developed countries call for new solutions now and in the near future. These are some of the “hard nuts” we want to crack.

On so many fronts, we need to rethink more than ever how to **enhance our democracies’ legitimacy and effectiveness**, by drastically improving their ability to **tackle major challenges better, more cheaply, in time and with people’s endorsement**.

We aim to do so **through a technology of collective inquiry, deliberation, ideation and communication**, and to apply this technology to facilitate **productive collective conversations on key societal issues with long-term consequences**.

## This note outlines:

1. Why we need to go beyond current supplements to representative democracy
2. How we can take democracy to the next stage and “augment” it
3. How our proposed approach could be beneficial to issues with a long-term dimension
4. How this approach can be applied to an upcoming policy challenge, autonomous mobility

<sup>1</sup> Hélène Landemore, *Democratic Reason – Politics, Collective Intelligence and the Rule of the Many*, Princeton University Press, 2017

<sup>2</sup> Robert Dahl, *On Democracy*, 2d edition, Yale University Press, 2015

<sup>3</sup> World Values Survey, <http://www.worldvaluessurvey.org/WVSPublicationsPapers.jsp?PUB=9>

<sup>4</sup> Peter Kanne, *Gedoogetdemocratie. Heeft stemmen eigenlijk wel zin?* Amsterdam, 2011

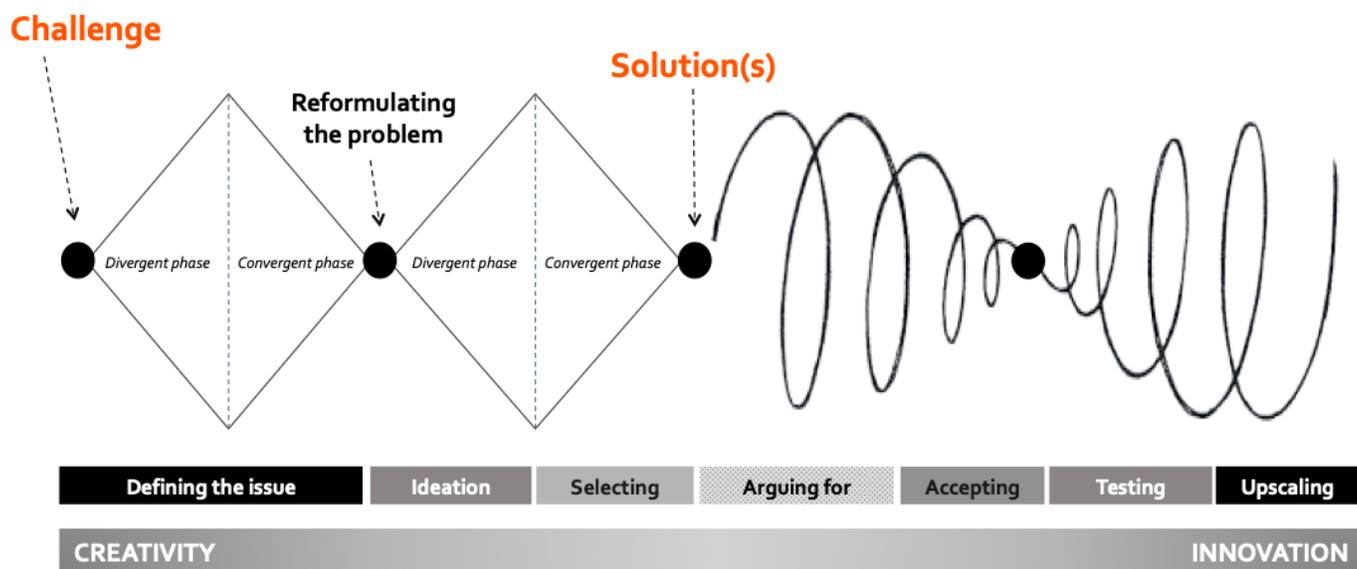
<sup>5</sup> According to the July 2017 WPP report, *The future of government communications*, spanning 40 countries, 31% of officials responded that citizen engagement is a priority for their government, but that 85% of them had had no training on citizen engagement.

# 1. We have become better at harnessing collective intelligence, yet...

The dissatisfaction with representative democracy's limitations is not new. Many thinkers have tried to crack this nut of insufficient democracy over the past three decades,<sup>6</sup> developing **worthwhile methodologies**.

## This is what the policy cycle should ideally look like

Ideally, the policy cycle would include all **relevant stakeholders** in a given community at all seven **steps** required to elicit the best possible solution to any challenge that a community faces.



New approaches to democracy thus try to foster better decision-making throughout this cycle. Just citing a few:

### Definition of issues:

Policy-making has benefited from design thinking and other user-centric approaches to better answer people's needs. Otto Scharmer's Theory U has been adopted in various contexts, structuring a deep journey into participants' core values and aspirations. The Appreciative Inquiry methodology builds on groups' understanding of their strengths to sketch a path to achieve the vision of the future they aspire to. Systems thinking, behavioral science and other analytical approaches have helped see problems afresh.

### Consulting citizens about their priorities and/or informing them:

Participatory and deliberative democracy approaches are no longer fringe endeavours. Many initiatives have been implemented with success, not least participatory budgeting. New methodologies, enhanced now by online tools, have proven their worth, such as Deliberative Polling,<sup>7</sup> consensus conferences and citizen juries. They show that citizens can be exposed to a range of opinions and produce meaningful input, as demonstrate Ontario, British Columbia, Iceland and Ireland.

### Involving stakeholders in the design and implementation of policies:

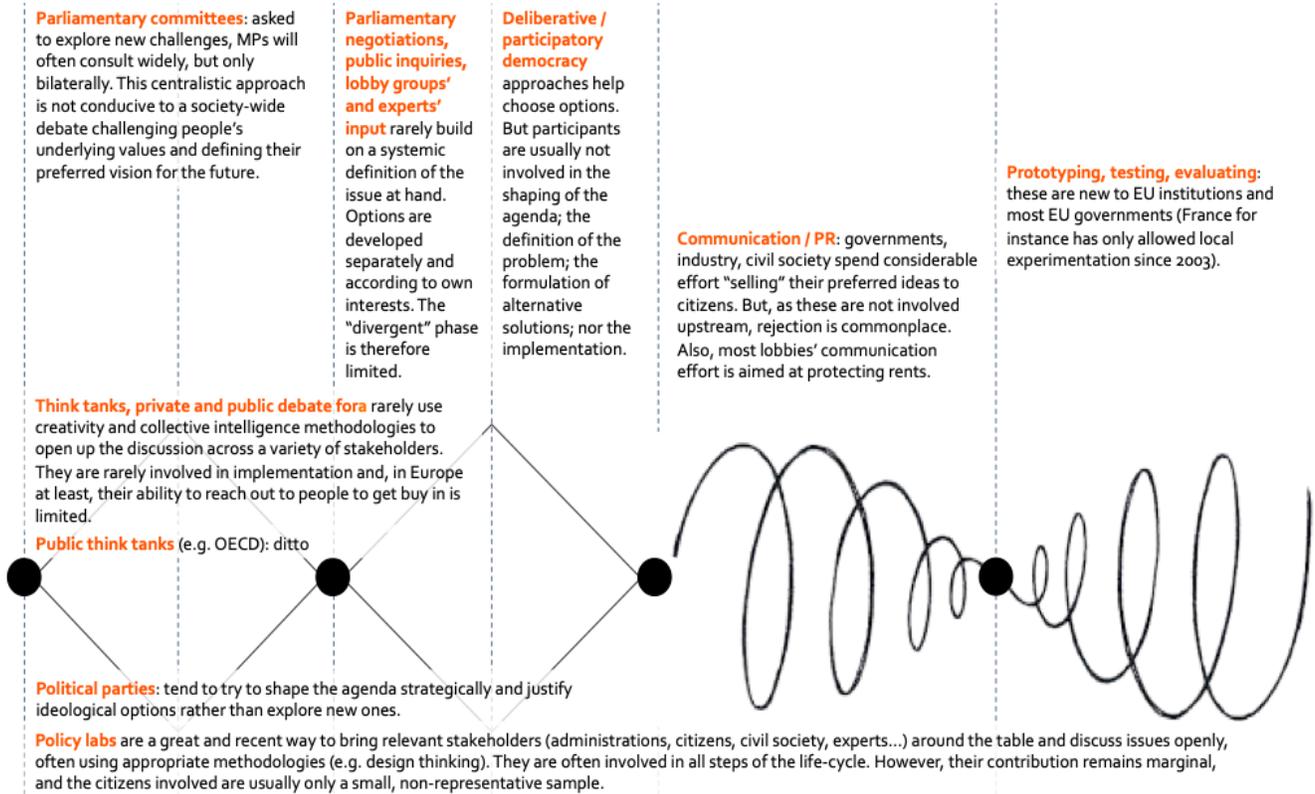
The policy lab format has evolved to bring experts, stakeholders and authorities together to solve pressing problems, to design solutions and to support their implementation, e.g. the Sustainable Food Lab or the Agora Energiewende and the Agora Verkehrswende. They have been very effective at overcoming technical and political issues and to tap into the technical expertise of industry, civil society and government jointly.

<sup>6</sup> Ever since at least James Fishkin published "Washington: The Case for a New Caucus" in The Atlantic Monthly in August 1988.

<sup>7</sup> Deemed by many to be the "the gold standard of citizen deliberation", as it involves a balanced debate that doesn't seek to close the discussion around a consensus, among a representative sample of the population, alternating small-group discussions moderated professionally, and plenary sessions. The DP also has tremendous communications value.

## But this is what the policy cycle usually looks like

So, the democratic lab is buzzing with creativity. Yet, our way of tackling challenges is overall fragmented, resistant to change and does not draw upon our collective resources adequately. Too often does indeed does it look like this:



Collective wisdom? A typical problem of poor coordination © Drew Dau



## 6 key obstacles to collective intelligence

In fact, the extent to which the approaches listed above are applied is still **limited**. Furthermore, Western democracies face at least the following **issues**:

### 1. **Lack of trust in collective intelligence**

By and large, policy makers and citizens believe, as Winston Churchill did, that “The best argument against democracy is a 5-minute conversation with the average voter”. We do not have faith in people’s ability to be intelligent collectively and are therefore reluctant to invest fully in collective intelligence technologies. As a result, the conversation usually remains ill-informed, unbalanced, unproductive, and indeed no better than a “5-minute conversation”. And, most importantly, public authorities rarely go very high up the “participation scale”.<sup>8</sup> The “consultation” often has little bearing on official decision-making process, when it is not outright disregarded.

### 2. **Fragmented conversation**

The conversation is structured today around the political cycle (of elections, specific policy battles...) and a narrow set of actors (institutions, lobby groups, media...), often working in silos, when we need a sustained effort to mobilize creativity throughout the policy cycle. Too often it fails to consider matters over the long-term.

### 3. **Disjointed technologies**

Separate tools tackle different aspects of the challenge of bringing large communities together. They are fragmented in terms of geographies (how do we join the conversation up between cities, regions, countries and beyond), issues (the approach is rarely systemic) and throughout the life cycle of public debate (from defining the nature of an issue, to setting priorities, developing alternative solutions, testing them, getting them accepted and scaling them up).

### 4. **Insufficient integration of opposing parties**

Truly modifying power structures and inducing change requires more than a neat deliberation. Co-working processes need to be embedded in the political realities in a given context, i.e. stepping out of the trenches built by lobby groups, by political parties, credible experts and other relevant stakeholders, and bringing them together in a partnership mode.

### 5. **Deliberation leaves the participants on the sideline**

Most often, we ask the public what it thinks of policy options developed by others. Rarely do we ask the public to co-develop new solutions.<sup>9</sup> Public consultation exercises rarely truly seek to tap into the whole group’s ideation faculties at different stages of the policy cycle.

### 6. **The direct cost of managing a proper convening of stakeholders will always be higher than letting things unfold without structure**<sup>10</sup>

Therefore, many quality methodologies seem too expensive. Public authorities, also afraid to lose control, thus revert to known procedures. Thought needs to be given how to lower costs and increase acceptability for policy makers.

The remedies we have found so far for our anaemic representative democracies – Citizens’ Assemblies, National Issues Forums, occasional consensus conferences, participatory budgeting... – are **welcome supplements in the diet of a poorly nourished political body**. They help sustain a level of civic education, engagement and a public sphere. They are not yet sufficient however to counter demagogues and other threats to democracy. In order to ensure more legitimate and effective policies, we need **a structurally healthy diet of democracy**.

<sup>8</sup> S.Arnstein’s participation ladder includes 8 levels, ranging from outright manipulation to full sharing of decision-making power.

<sup>9</sup> “Deliberation seeks the formation of a consensus view of shared interests and common goods”, argue for instance Mark Button and David Ryfe in “What can we learn from the practice of deliberative democracy”, in *The Deliberative Democracy Handbook*, 2005. Or, as Jürgen Habermas argued in *Legitimation Crisis* (1975), deliberation has value per se because it is intended to allow “no force except that of the better argument” to be exercised.

<sup>10</sup> It can be argued, however, that the indirect cost of poorly-managed society-wide conversations is considerably larger, though difficult to estimate.

## 2. It's time for Augmented Democracy

Beyond representative and deliberative democracy, now is the time for new approaches. And perhaps for what we call 'Augmented Democracy'.

### The challenge: greater legitimacy and effectiveness

Can we design a **process that taps into collective intelligence** to address pressing issues more effectively, in a timely fashion, at a reasonable cost and that generates public support?

Can we introduce **improvements to the democratic system that go beyond current remedies without having to completely tear down the system of representation**,<sup>11</sup> which powers in place have a vested interest in maintaining?

We believe so, because we know what works.

### Building on what we know works for more collectively intelligent democracies

In particular, we know from the experience gained in the fields of **participatory and deliberative democracy**, **creativity**, and, more generally, **collective intelligence**, that:

1. **Relevant public authorities should be involved closely**: without them, the impact of any collective thinking endeavour is much reduced and the costs increased. This involvement needs to be calibrated so as to benefit from independent external views and should be founded on a clear commitment by the public authorities as to how they treat the outputs of the process. The higher up the participation ladder they go, the more likely they are to generate interest and a positive outcome.<sup>12</sup>
2. **Quality deliberation requires at least five ingredients**:<sup>13</sup>
  - Participants should be given access to reasonably **accurate information** that they believe to be relevant to the issue
  - A **diversity of opinions**: participants in the discussion represent the major positions in the public. The benefits of cognitive diversity and the legitimacy of the process are best ensured by a sufficiently large and truly representative sample of a given population.
  - Arguments offered by one side or from one perspective are answered by considerations offered by those who hold other perspectives. External parties are involved to ensure that the material provided and the process allow this **substantive balance**.
  - **Equal consideration**: the extent to which arguments offered by all participants are considered on the merits regardless of which participants offer them

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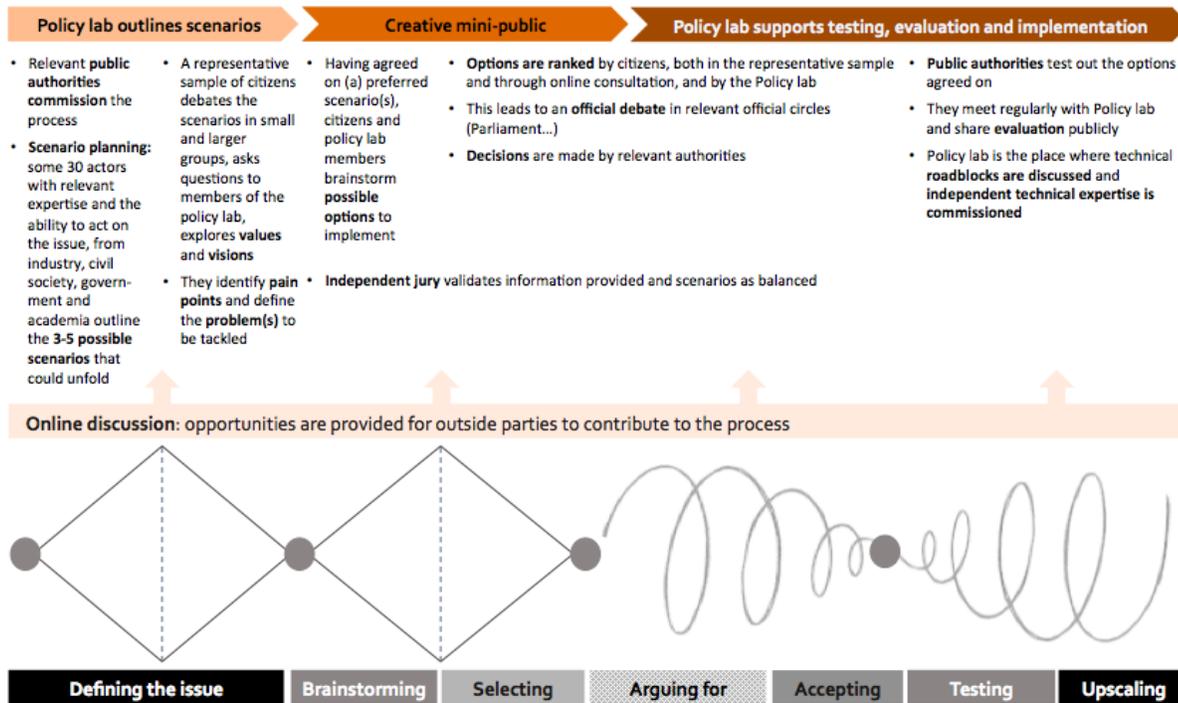
<sup>11</sup> Some recommend that we do without elections, for instance Belgian writer David Van Reybrouck in *Against Elections: The Case for Democracy*. This line of thinking poses however some serious issues: first, as he acknowledges, how do we replace our current system with a totally different one? We propose here an approach that can be quite revolutionary without having to amend our Constitutions. Second, how do we ensure the input of deep expertise in a sortition system? Creativity experts highlight how mixing generalist thinking and deep expertise is essential to generate new approaches. D.Van Reybrouck outlines a 4-step process suggested by US academic Terrill Bouricius that includes a call for input by self-appointed outside expert groups, but this seems an important weakness. Finally, where does accountability for bad decisions rest in such a system?

<sup>12</sup> Ireland's Citizen Assembly brings together for instance 66 citizens chosen by lot, 33 politicians and its president is appointed by the government.

<sup>13</sup> As spelled out by James Fishkin, the academic behind Deliberative Polling.

- **Conscientiousness**, i.e. the extent to which participants sincerely weigh the merits of the arguments
3. Tapping into our collective creative potential requires a **T-shaped approach**, combining deep, **technical expertise with cross-cutting and user perspectives**. This calls for a combination of a policy lab approach – bringing together a carefully selected and diversified group of informed actors that have the ability to support implementation of identified solutions and the knowledge required to widen the range of possibilities – with a random sample of users or citizens – providing the user-centric perspective.<sup>14</sup>
  4. **The process should be transparent**, through the **media and on- and offline interaction** with a wider public in order to increase the legitimacy of the solutions proposed and to tap into wider cognitive diversity.<sup>15</sup>

Combining these insights and drawing upon the various methodologies at hand, we propose the following approach:



This “Augmented Democracy” approach does not pretend to be a one-size-fits-all solution to all issues. It would be particularly well suited, we believe, to **issues that require a combination of technical expertise, ethical debates and long-term vision**, as explained in the next section.

It could be implemented at **different levels of government** (city, region, country, or groups of countries such as the European Union).

<sup>14</sup> The lab should support the process at all stages, exploring and sketching out options for the future, thinking through possible solutions, and helping with testing and implementation; extending its core qualities to (a) first exploring deeper values and the scenarios for the future sketched by the policy lab; (b) then co-producing solutions; (c) and finally expressing its preferences among those.

<sup>15</sup> A platform such as *Parlement & Citoyens* in France has demonstrated how this combination of forces between parliamentarians, lobby groups, other expert groups and the wider public can be orchestrated thanks to online tools. The drafting of the crowdsourced draft Constitution in Iceland did so too, as well as other processes around the world.

### 3. Applying Augmented Democracy to long-term societal issues

We believe the approach outlined above would be particularly well suited for issues that have a long-term dimension.

#### For instance, we can and should discuss now:

- What future do we want for our cities, societies and industries with partially and then fully autonomous vehicles?
- What level of privacy will we accept in the years to come to allow a European Artificial Intelligence (AI) industry to develop?
- What trade off do we accept between machines affecting our free-will and greater security (policing) or better health services?
- How do we manage the combined pressure of demographic ageing and immigration?
- Should we consider geo-engineering measures to lower the levels of carbon in the atmosphere faster?

Unlike current issues, different stakeholders will be less resistant to change, industry will have flexibility to discuss business models, lobby groups may not be trying so much to defend pre-defined positions, and citizens may be interested without being immediately affected.

There is the potential for such issues to initiate a pro-active conversation, before positions gel and trenches are dug.<sup>16</sup>

#### Theory of change - What we want to achieve

- ✓ **Create a blueprint** for a range of societal debates. This model is applied to other debates and it...
- ✓ ... generates **consensus-led public action**: stakeholders are aligned; the process is the place where the motivation to act together is created (through the identification of values and a shared vision); obstacles are ironed out jointly (in contrast with defensive lobbying when stakeholders are not involved in the different stages of the process). Thus we help...
- ✓ ... accelerate the transition to new forms of organisation that **maximise the benefits for all**: wider awareness and a structured debate accelerate the transition to a future where benefits are maximized and the negative consequences are avoided or mitigated preemptively. This is allowed by the fact that the participants understand better the complexity of the issue at a systems-wide scale, and accept the trade-offs. In turn, this...
- ✓ ... increases the **legitimacy and effectiveness** of representative democracies with a “bottom up” approach through an informed combination of technologies that work.

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<sup>16</sup> The benefits of such an approach were visible in the European paper and pulp industry's “Two Team Project” examining how the industry could reduce carbon emissions by 2050.

# Leveraging the potential of Autonomous Vehicles to improve life in our cities and boost Europe's industry

What issues could Augmented Democracy be applied to in practice? There are many examples, from scaling up the circular economy, to fighting deforestation, tackling the challenges of 5G on Europe's industry, or preparing for the development of genomics in our health systems. All these are issues with profound ethical choices, deep impacts on our economies, lifestyles, and, for some, environmental footprint, and where the complexity of the ecosystem of stakeholders involved leaves room for rich deliberations. We take one example here: the advent of autonomous mobility.

Some fantasize that autonomous vehicles (AVs) will soon replace gas-guzzling cars<sup>17</sup>, and thereby allow us to regain space in cities, lower the cost of transport and carbon emissions, save time, as well as reduce the number of accidents and pollution-related diseases. Others see the potential for large job losses. Some warn that AVs could add to clogged cities rather than lower congestion. Others that new business models could threaten retail shops and the fabric of city centers. And, of course, many worry about the data collected about our private lives alongside many other problems.

While the shape of the future is unclear, what proponents and opponents agree on is that AVs herald huge changes in the near to medium-term future. While the debate is strong among a relatively small set of specialists, the contrast between the magnitude of the foreseen changes, whether positive or negative, and the lack of debate between citizens, industry, civil society and governments is striking.

It is still possible to have a constructive conversation.

The debate shows that much is unresolved and positions are still open:

- Different industry groups (automakers, software developers, AI experts, insurance groups, logistics and transport companies, retailers...) are actively positioning themselves according to possible business models favoring their own interests. Positions are taking shape fast and may not necessarily converge and maximize society's overall interests.
- Some professions (e.g. taxi and truck drivers, small retail industry...) are clearly not seeing the opportunities and threats and seizing the issue.
- Policy makers are responding differently. Some cities (Paris, London...) are at the forefront, preparing for different models. Others (EU institutions) are thinking about it, but arguably not in a very proactive fashion. And others still (many EU governments) remain very passive.
- Citizens, through the media and political debates, are only exposed to a very limited picture of opportunities and threats. The issue of AVs does not yet feature on the political agenda, opening up the possibility for a forward-looking and constructive conversation. The public so far appears to be largely optimistic about the potential contribution of AI generally, while identifying certain threats clearly.<sup>18</sup>

## For instance, we can and should discuss now the following questions and their complex implications:

- What future do we want for our cities? Organised around dense, rich neighbourhoods, or decentralised, relying on fleets of autonomous vehicles?
- Can Europe's industry lead in the global race to develop the next generation of AVs, while maintaining or improving the quality of its urban fabric?
- What fiscal, regulatory, economic, societal, choices do we need to make today to set us on that track?
- How do we anticipate unemployment of people left jobless by AVs?

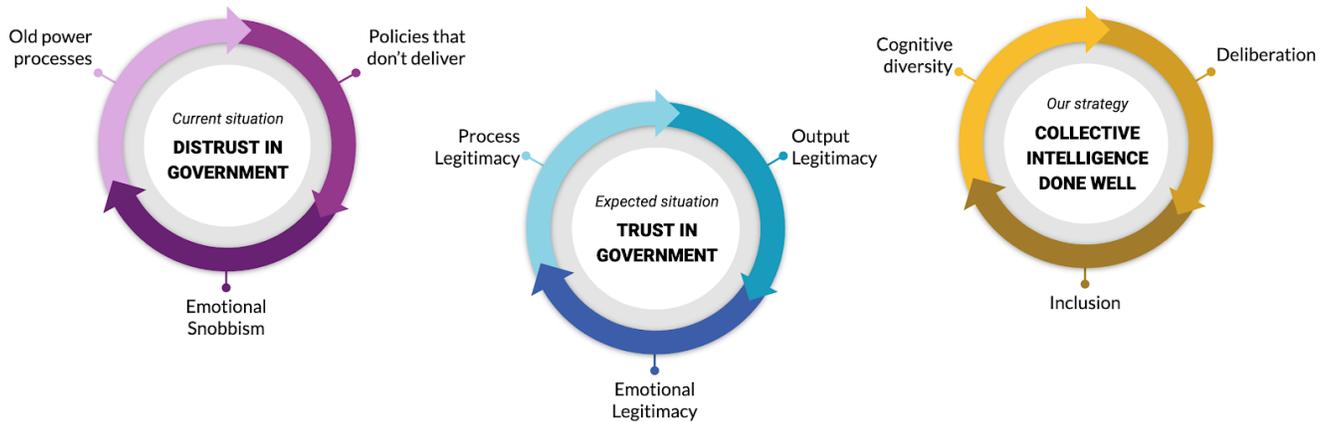
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<sup>17</sup> The MIT has estimated that 3,000 AVs could replace all 13,000 New York cabs. Study: Carpooling apps could reduce taxi traffic 75%, <http://bit.ly/2hOmhc>

<sup>18</sup> *Machine learning: what do the public think?* The Royal Society's dialogue on machine learning, April 2017, <http://bit.ly/2AmzTnt>

# About Dreamocracy

Dreamocracy is a think-and-do-tank that fosters collective intelligence and collective creativity for the common good through analysis, advice to organizations, and by developing and implementing innovative stakeholder management experiments. Through adequate collaboration methods, public authorities in democratic regimes can, if they are serious about it, harness the collective intelligence and creativity of many individuals. Collective intelligence and creativity done well provides the following three key ingredients of trust in government:

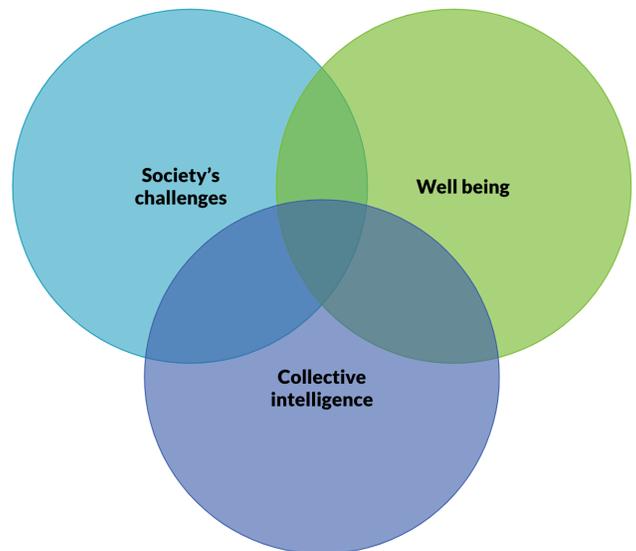


Collective intelligence done well can thus counter the imminent danger of [democratic deconsolidation](#) stressed by Harvard scholar Yascha Mounk.

## Mission Statement

We aim at Dreamocracy to:

- Help public authorities and stakeholders address pressing challenges faster and more effectively...
- ...through cutting edge collective intelligence and creativity methods...
- ...that enhance collective and individual well-being, foster creative public solutions and mobilize positive collective energies.





MAKE  
GREAT

GREAT

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**dreamocracy**<sup>®</sup>



Brussels, Belgium

+32 493 123 718

[info@dreamocracy.eu](mailto:info@dreamocracy.eu)