Global crises, democratic solutions—within days

Using Internet to empower citizens, reach popular consensus, and ensure democratic decision-making

In the last months, governments around the world have adopted public policies to promote large-scale vaccination, and covid certificates. Whether such measures are adequate or not has been largely debated. But why have such debates emerged? To this day, alternatives to centralized decision-making have been limitedly discussed.

Here, I present how an online platform could help thousands of citizens express their needs (plurality), agree on common priorities (popular consensus), and pool resources to become the protagonists of a common project, like body cells coordinate in real time to preserve life.

Building on the commons, on the free/libre and open-source movement (crowdsourcing), on short online events (hackathons), and on a method to coordinate large groups, I sketch how such a platform could help citizens build solidarity-driven solutions during three-day events.

Who should decide about the rules that affect the daily lives of millions of humans?

From early childhood, we learn that someone else – parents, teachers, employers – can better take care of our collective needs than ourselves (Miller 2015). Naturally, when a crisis occurs, we expect public authorities to make sound decisions for us.

Such top-down, centralized decision-making comes with various pitfalls: power stakes, misconception of people's realities, limited resources. Decisions made without the people affected may also face popular resistance, dividing the population into opposing groups, opening space to social conflict, mistrust, violence and other unintended consequences (Rupert 2005, Turcotte-Tremblay et al 2021).

For your own good!
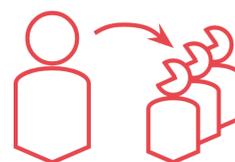
In fact, more and more democracies turned into electoral autocracies in the last ten years, and this accelerated with covid (Freedom House 2020; The Economist Intelligence Unit 2021, V-Dem Institute 2021). People starving to death multiplied by six within a year (Oxfam 2021), and mental distress (anxiety, depressions, suicides, and post-traumatic stress) multiplied as the population passively endures the situation (SwissRe 2020; US National Intelligence Council 2021). This adds to the seven humans in ten living with less than $10 a day (Kochhar 2015), and the five humans in ten excluded from medical care (World Bank and WHO 2017).

How come *executive* branches of governments make decisions that affect millions of people, when one person out of two has access to the Internet (International Telecommunication Union 2021), and potentially to collective decision-making tools?

If health improves when we are protagonists in our life, and declines when measures are imposed on us (Ng et al 2012), how come governments do not value citizen decision-making?

How to develop large-scale participation?

Elinor Ostrom, first woman awarded the Nobel in Economics (2018) demonstrated that communities of users can better preserve common resources than the state or corporations.

Free/libre and open-source pioneers showed that co-created solutions (crowdsourcing) not only guarantees the users' freedoms to use, study, modify, reproduce and redistribute a project, but also to increase the speed, quality and integrity of innovation (Raymond 1999), while cutting costs by 10 to 100 times (Pearce 2014). Open-source technologies surpassed well-funded, established closed alternatives in various domains – from GNU/Linux used in most web servers (Benkler 2017), to the hand disinfectant that avoids eight millions deaths each year (Crouzet 2014). Self-organizing movements also combine a unique workforce and flexibility: maker communities were able to produce 100,000s of face shields during the first weeks of the crisis, while the traditional industry was at rest (Aubin 2020; Open Source Medical Supply 2021). Crowdsourcing also enables individuals to put in commons their skills, so that everyone benefits from the collective effort – one million volunteers could translate Wikipedia in 80 hours, an equivalent of $50 million investment (Von Ahn 2011).

In politics, a new party entered the European parliament with 100 times less budget than its opponents, building on trust: each member could make decisions affecting the party if they reached consensus with two other members (Falkvinge 2013). A similar bottom-up model was used during an electoral crisis: citizens shared essential information on a privacy-preserving platform accessible to all (Okolloh 2009).
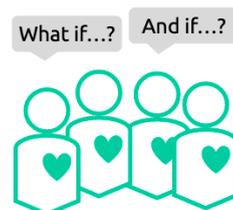
In addition, the multitude can be rapidly mobilized: early 2020, some 150,000 people participated in hackathons against covid, resulting in 17,000 projects. The five biggest events mobilized 12,000 to 28,000 people for 3 to 7 days, creating 5771 projects (Balli et al 2020).

Such experiences show us how thousands of people can join forces by valuing trust, peer support, and decentralization – commoning and collaborative crowdsourcing focusing on one long-term project; hackathons resulting in multiple projects in a matter of days.
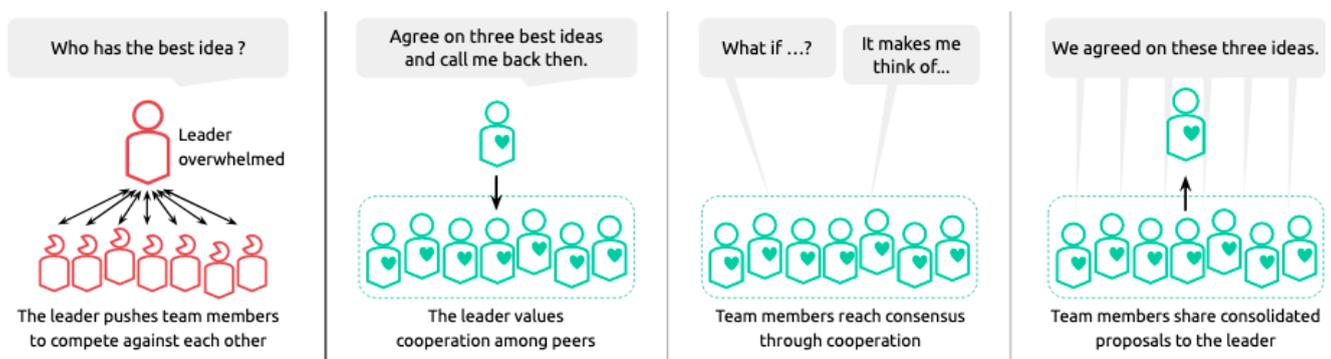
What is essential to build a congruent common project in a matter of days?

A previously unknown crisis requires the capacity to rapidly agree on priorities, and develop adequate solutions. Such an approach should

– **facilitate participation from a broad diversity of people**
to value collective intelligence, and encourage the co-creation of plural solutions that acknowledge and value various individual and cultural realities (Surowiecki 2004);

– **ensure efficient information sharing**
to limit the time needed for participants to take their rightful place in a team, and tackle challenges that correspond to their skills and interests (Csikszentmihalyi 2008);

- **foster the continuous documentation, development and testing of the work done**
  to ensure the trustworthiness and integrity of the project by reviewing what exists (literature review, environment scan) and by making decisions, designs and source codes freely accessible (agile development, research notebook, open-source licences) so that the work remains editable if initial contributors withdraw (Balli 2018);

- **ensure popular consensus within and across all teams**
  to develop social cohesion and equality in political influence, namely that each and every contributor participates in shaping the vision for one common, congruent project – the result being not only an aggregation of individual contributions, but the empowerment of full-fledge free and sovereign subjects (Vergara 2020).

For the latter, the Emerging Change model is of high interest, as it helps teams develop mutual trust, and achieve high performance just by changing how meetings are structured.

Who has the best idea ?	Agree on three best ideas and call me back then.	What if …? / It makes me think of…	We agreed on these three ideas.
Leader overwhelmed			
The leader pushes team members to compete against each other	The leader values cooperation among peers	Team members reach consensus through cooperation	Team members share consolidated proposals to the leader

While this method has been successfully used for in-person team-building in companies with hierarchies (Laugeri 2015, Blattner 2020), it can be adapted for large peer networks to coordinate by sharing information through (temporary) teams of spokespersons (Balli 2020).

Let's hear each other's ideas and agree on the three best.	Now, let's agree on who will be our voice to other teams.		Here are ideas proposed by other teams. Let's refine ours…
Each team reaches consensus through cooperation	Each team selects a spokesperson who represents them	The spokespersons put in commons the proposals of their teams	Each team reaches consensus integrating the inputs received

Spokespersons should only ease information sharing, that is to provide other spokespersons with the outcomes of their team, and inform their team from all other teams' outcomes. Indeed, social cohesion would be impaired if the spokespersons reached consensus on their own: proposals would be set aside without people sovereignly agreeing on such decisions.

Taping on the wisdom of the crowd to tackle collective crises within days

Implementing an online platform to value large-scale citizen participation, and give space for solutions and decisions to emerge from the multitude (bottom-up) could foster solidarity,

creativity, and resilience – as people would support each other in exploring how to adapt to the situation, rather than being passively submitted to constraints outside of their control.

Such a platform could help cooperation become natural and fluid across communities. To minimize barriers to participation while maximising benefits for society, the following process could take place.

Before the event

- **An open call is made for interested people to attend a three-day online event.**
  The event should allow for people speaking different languages to join, and should foster the participation of people who lack digital means (computer, Internet, skills, etc.). If a general theme can be proposed (popular solutions to hunger, poverty, climate change, diseases, migration, etc.), contents should emerge from the teams.

- **To register, people must agree to focus on consensus-based open-source projects.**
  Each and every participant dedicates themselves to the collective: this is not the time to develop competitive projects; similarly, no one is identified as an expert or mentor: participants build on their complementarities, and develop their capacity to identify and address their needs as a group of peers.

During the event

a) **Welcoming and agreeing on shared priorities.**
  Participants get to know each other, share their very own needs, actively listen to each other, and reach consensus on priorities. For example, a network of 49 participants aiming to work on seven priorities to address a crisis could adopt the following process.
  - Participants build teams of seven. Each team agrees on three best ideas, and names a spokesperson. Spokespersons gather as a temporary team.
  - The spokespersons list the 7 x 3 ideas. In parallel, each team reviews what went well and what can be improved in collaborating (active listening, constructive feedback).
  - Back to their respective teams, the spokespersons share the consolidated list of 21 ideas. Each team agrees on the six best ideas that can help reach consensus across the network. The team names a spokesperson again.
  - After a few cycles, the six ideas should be more or less similar across teams. Once this is done, team members thank each other and leave their team. New idea-based teams are created based on the six ideas collectively agreed upon. One team is added for those who feel the need to go another way (fringe innovation). Participants split out more or less equally across the seven teams to develop the ideas.
  - The same method with spokespersons is used, this time to ensure that a congruent project emerges from the network, building on cooperation across teams – each team sharing essential information about their situation (advances, issues, needs).

b) **Listing and comparing existing projects related to the priority.**
  Each team explores existing knowledge and solutions to address their priority, in particular free/libre and open-source projects that are well documented, as these can rapidly be used, and adapted with minimal efforts. Each team lists the projects in a collaborative online spreadsheet, defining a series of criteria to compare the strengths and weaknesses of the various projects.

c) **Selecting and merging projects (parts) with highest impact.**
   Building on the spreadsheet, the team selects the projects or project parts that should be used or combined to best tackle the priority. The team validates the functionalities and outcomes essential in the project, its adaptability to different contexts, and the resources required for a large number of people to adopt and contribute to it.

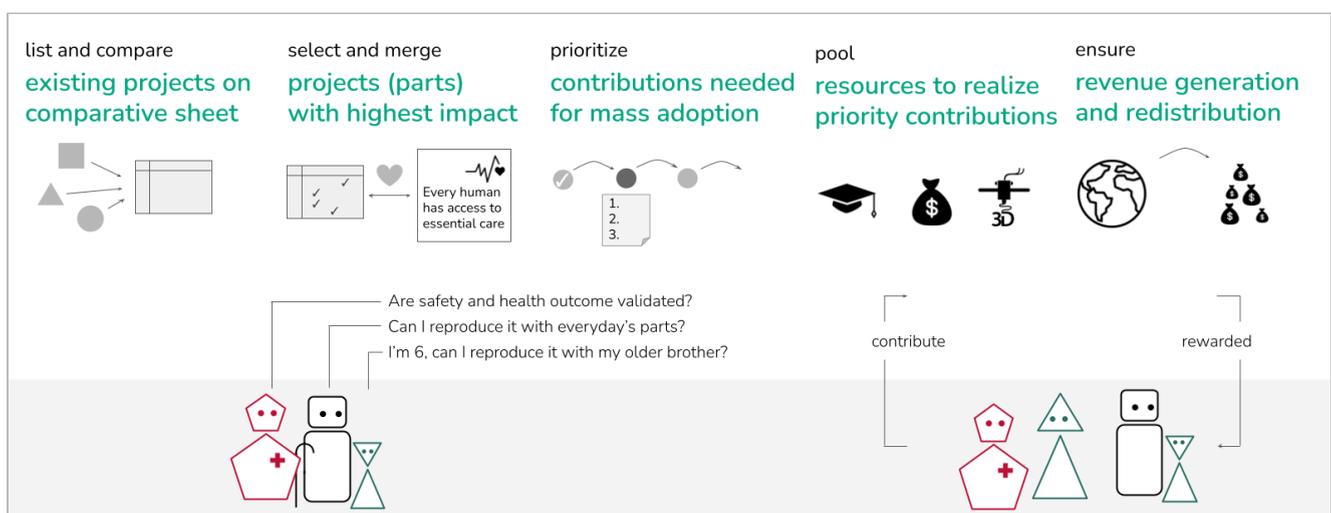d) **Prioritizing contributions needed for mass adoption.**
   The team lists the key contributions needed to ensure that the project can easily be found, reproduced and used. Each contribution is detailed with the outcomes expected, the resources required in time, material, funds or else, and the value created.

e) **Pooling and allocating resources to realize them.**
   Resources available in or through the network can be mutualized to realize the projects.

f) **Redistributing revenue generated.**
   If projects generate revenue, this will be fairly redistributed according to contributions.

list and compare
existing projects on comparative sheet

select and merge
projects (parts) with highest impact

prioritize
contributions needed for mass adoption

pool
resources to realize priority contributions

ensure
revenue generation and redistribution

Every human has access to essential care

Are safety and health outcome validated?
Can I reproduce it with everyday's parts?
I'm 6, can I reproduce it with my older brother?

contribute   rewarded

Source: Balli 2020b

Throughout the process, the recurrent times dedicated to align with other teams, and to improve the quality of cooperation within one's team enables the network to become more and more agile, enhancing both the projects and the process thanks to collective wisdom.

Thanks to such an approach, citizens could experiment – in a matter of days – ways to reach consensus and realize fulfilling projects in large groups. They would increase their capacity to collectively shape the future, taking their rightful place in society, developing digital and emotional literacy (expressing one's very needs, listening actively, giving constructive feedback, valuing mutual experiences). Coherent, freely reproducible solutions would emerge within days, faster and with less resistance than institutional processes.

Such a proposal falls within the legal paradigm of democratic constitutionalism (Bailey, Mattei 2012), reasserting the will of the population as the highest law-making authority. It promotes the institution of a plebeian, iterative process (Vergara 2020) that provides space for citizens to reach popular consensus and build solidarity-driven projects in a matter of days, autonomously from political agendas. The method contributes to the United Nations (2015) sustainable development goal 16 to "Promote peaceful and inclusive societies [...,] access to justice for all and build effective, accountable and inclusive institutions."

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Versioning

1.0   Pre-post shared online on Zenodo
1.1   Images (team dynamics) and redundant words corrected
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