Seeding just transition

Introducing: semente immersion in Ubatuba

Semente is a toolkit to promote in-depth collective action at a local scale. It considers communities simultaneously as protagonists, beneficiaries, and the very setting for positive change. Through exercises that promote a systemic perspective, semente enables stakeholders to recognise themselves as part of local systems, visualise common resources and challenges, agree on desirable future scenarios, and establish ways to govern collective efforts on the long term. Instead of adopting the usual take of merely attempting to include human groups into predefined visions of a better life, semente proposes to weave through diverse perspectives, engage with present conditions in material and symbolic terms, and create futures togehter.

This text positions concepts and reflections to ground future developments of semente. It describes a series of activities planned to be developed collaboratively in 2024 and 2025 by the semente team and the local context of Ubatuba, in south-east Brazil. In particular, the cooperation with nonprofits working with youth and climate action in low-income neighbourhoods in that region. The expectation is that by mid 2025, a group of local organisations and groups will have understood better their own activities under a broader framing, and used semente to reflect upon their main strengths and challenges. By its turn, the semente team will have improved the toolkit and documented pilot uses of its methods in the same period.

Setting: contemporary issues

The United Nations posits digital transformation and climate change as the two core challenges of contemporary times, and calls for a Global Compact addressing those pressing issues. Recognition of the centrality of such topics in high-level discussions is a necessary step to ensure that they influence national policies and the plans of development organisations. On the other hand, there is a pressing need to innovate on how to bring such discussions to the ground level and act upon them from the edges, engaging communities and their everyday concerns.

The scale of change brought about by accelerated digitalisation and the climate events now reaching tipping point (or possibly surpassed it already) frequently seems to remove agency from humans at a local scale. The high complexity of such conditions is often formulated as a yes/no question: will you submit to using these digital technologies, or try to avoid them? Will you keep purchasing unsustainable products, or stop buying things at all?

To most of the world’s population, those questions are tricky at best. Acquiring devices and consuming media are – unfortunately too much – embedded in culture, often representing inclusion and aspirations for a better future. For matters so complex, then, the discussion shouldn’t be only about refusing things or embracing them acritically. We should rather be asking, for instance, what kinds of digital technologies will be positive and under which conditions: for this group of individuals, for those communities, for those social demands. And what possible uses of such technologies will promote the common good. Likewise, climate action should not be about adopting a predefined set of behaviours coming from the fringes of wealthy nations, but instead attempting to establish dialogues with traditional practices, modes of living and power dynamics to co-create sustainable and thriving futures.

It is clear that the world won't stop moving towards digitally-driven societies in the foreseeable future. That movement should lead to environmentally appropriated modes of producing, understanding, and living. The transition, though, has to be inclusive, fair, and regenerative. This project concept contributes to such vision by promoting a deep dive into the particular context of one locality in Brazil. The expectation is to generate insights that will inspire similar efforts in other parts of the world.

Local impacts of digital technologies

This concept proposal builds on lessons learnt on previous projects, and is designed in prior consultation with partners in the municipality of Ubatuba, in Brazil. Firstly, it recognises the perception that the way technologies reach communities is often disrespectful of local societal values. In a study conducted by the team called ID21, experienced leaders of Brazilian community-oriented digital inclusion projects were asked about the current significance of technologies for the groups they worked with. Along with a shared concern with the lack of dependable policies, the usual absence of engagement with territory and culture was mentioned as a central obstacle for appropriate uses of technologies. In other words, technologies are perceived as imposed realities, colonial and monolithic. That however is not determined by objective characteristics of the digital. Rather, it is a consequence of seldom questioned ideological assumptions which deserve to be unpacked.

The majority of programs promoting the adoption of digital technologies among excluded populations subscribe to a quite narrow worldview. They often focus on equipping and training individuals to compete in an abstract labour market – which often does not even exist formally outside of the computer room. One side effect noted by participants of the ID21 study is the accelerated brain drain: youngsters educated on competition-oriented grounds and focused on individual professional success will usually leave their communities, seeking opportunities to grow, learn, and earn more in urban centres. In other words, instead of improving living conditions in communities, projects that adopt that vision end up removing some of the most talented, creative and dedicated young people from their places of origin. It is a phenomenon akin to the effects of mass education depicted in the documentary "Schooling the World - the white man's last burden" by Carol Black: the aspiration of a mono-dimensional idea of progress causes accelerated and precarious migration of younger generations to larger urban centres, and in consequence a generational gap in knowledge and work capacity in their communities of origin.

The dissemination of digital communication technologies is changing the world radically. Such technologies certainly bring obvious and immense advantages. Families living apart can keep closer contact through messaging platforms and video calls. People in communities distant from urban centres can find educational and economic opportunities. Groups that some decades ago could not afford equipment to document the growth of their kids, the fruits of their labour or expressions of their culture can now use devices to record, photograph and film their realities. Minorities and underprivileged groups can find support and care among remote peers to face bullying and exclusion on their everyday lives. In some fields of activity, talented newcomers are able to find better paying work without leaving their homes.

On the other hand, as is widely known, there are multiple negative consequences of digital technologies. The intentional spread of false information, along with hyper-targeting based on design failures of social media, interfere with democratic processes worldwide. The space for public discussion easily turns into a toxic environment, leaving little hope for conversations conducive to building bridges between divergent positions. Mobile communications are used in unmonitored parts of the world to empower criminal activity such as illegal mining and deforestation. Unchecked gig platforms naturalise sub-optimal working conditions and create new layers of labour precarity. Children, teenagers and young adults are exposed to an immense volume of unhealthy contents, which

sometimes drives them to harmful behaviour onto themselves and others. Low awareness on the risks of data leaking make people – especially the elder – prey to new and dangerous criminal scams. Not to mention the immense negative effects of the production of digital devices and infrastructure, and their inevitable discard some years in.

For children and youngsters, the wide adoption of digital social media, particularly in localities and cultures with little awareness of the depth of the change, leads to remarkable distortions. It is not uncommon to see parents posting images and videos of their own children, ignoring that such media will be online, potentially forever. Unaware that such images can be used to train large language models, or be used for even worse intentions. Furthermore, general acceptance of a culture of spectacular exposition brings confusion to youngsters' hopes for the future. The image of "social media influencer" is already considered a desirable professional activity by many children and teenagers. In Brazil alone, there is an estimate of over 500,000 people considered digital influencers, and the number keeps growing.

As mentioned above, the proposal here is not one of refusing young people the right to access, learn about, and use digital technologies. There is however an urgent need to promote the critical appropriation of technologies with eyes on the common social good and collective building of regenerative futures. The question is not whether to use technologies, but which technologies, and when, and how. Furthermore, it is important to reflect on the extent to which an emphasis on preformatted images of individual success have a psychological influence on youngsters and influences them to break ties with their community and their ancestors' culture.

Understanding the potential harms and disadvantages of a passive and acritical adoption of technologies is the first step to start addressing their harms. But we also need to go further, and find socially-aware and environmentally apt ways of creating and using such technologies. Semente enables stakeholders to reframe the conversation – from a superficial check of who has access to technologies and who doesn't to a more nuanced open reflection focused on care, communities, alliances, and time cycles.

Work, poverty, technology

Access to digital technologies is often associated with economic inclusion for youngsters. In other words, there is the understanding that a young person can acquire technological skills that will help them find a position in the labour market. They are, as some will say, working to increase their "employability". That assumption is arguably true in comparative terms: if two competing individuals have different levels of technological skills and are similar in all else, it is likely that the one possessing the most familiarity with digital means will have an advantage. But there are many more factors to consider.

In many parts of the world, aspiring to find a stable work position is a distant dream. A high proportion of the labour offer is based on informal, temporary or seasonal arrangements. The emergence of platform work has further accelerated and naturalised that instability. Rather than a particularity of developing nations, the trend of increasing insecurity at work seems to be taking place everywhere. Under such unstable conditions, survival requires indeed some proficiency in the use of technologies. In particular for marginalised groups, people coming from low-income families and neighbourhoods, but also migrant communities in wealthy nations. A working smartphone with a data plan is not only a means of communicating with relatives and friends, but a way – sometimes the only way – to get offers for gig work.

That scenario paints a picture quite different from the aspirations expressed by many digital inclusion programmes. It is not that youngsters from marginalised communities will be able to use technologies to participate as innovators in a global information economy. Most of them are not becoming agents of change that will transform their realities by becoming knowledge workers. Rather, they usually get chained to an

exploitation machine that requires individuals to invest whatever scarce resources they have on usable devices and data plans. And that is only the first investment to enter a marketplace where they will sometimes need to buy a motorcycle or a car, or even rent one from an intermediary under questionable conditions. So much for stable employability, one could say.

Poverty is an uncomfortable topic, as it tends to drive our attention to what is missing, to what is absent. In such superficial meaning, poverty is largely defined by scarcity. Of course, in recent decades, the academic and institutional conversation about poverty and social justice has evolved significantly. No longer only a question of earning enough to go through the month, the notion of poverty is being gradually reframed to include considerations about access to housing, health services, decent food, education. International agencies and governments are adopting indexes such as HDI and Gini to go deeper into understanding the living conditions of populations beyond what they are paid. In some policy circles, culture and entertainment are gradually being considered as part of the basic human needs and incorporated in policies for poverty mitigation.

And yet, the public opinion seems to adopt a quite narrow understanding of poverty. Many equate poverty with low income. It is typically understood as an individual issue, at best a household-level thing. Parts of society will blame poor people for being poor, or treat such condition as an accident, never discussing the reasons for systemic poverty. Then, when it comes to elaborate on ways to use technology to overcome poverty, the assumption will frequently be about increasing individuals' ability to get better-paying jobs. The jobs alluded to in such conversations, however – knowledge work with higher salaries – are usually not there. Particularly in small towns, rural areas, or in the impoverished peripheries and slums of mega-cities.

In parallel, there is another trend in education circles – different in terms, but essentially similar in world-view. What if, some organisations ask, we use technology to promote entrepreneurship? Accepting that there are not enough jobs, and agreeing that every person in the world can be creative and innovate, why not educate those who need on how to start their own businesses? The idea makes sense in many cases. But there are obstacles as well, and one of them is not different from access to jobs. Using technologies is only part of what makes a venture succeed. If you are not considered adequate – if you have the wrong accent, the wrong clothes, the wrong skin colour, the wrong postal code, the wrong network of contacts – technology can perhaps temporarily conceal those aspects. They will be there nonetheless. There are exceptions, of course. But that's what they are: exceptions. Especially in places that feature a high concentration of wealth and power around dominant elites, entrepreneurship feels quite similar than looking for non-existing jobs. Frequently even worse, in fact.

For the perspective adopted in this text, the problematic issue on the above approaches is promoting entrepreneurship or employment as an individual action, as a matter of joining a competitive game without questioning its underlying assumptions. It's often about teaching young people that they should attempt to climb up the social-economic ladder by outcompeting their peers. Indeed, a great deal of youngsters' creativity, work time, and energy put into individual attempts of overcoming exploitation will transform themselves into exploiters, to echo Paulo Freire's take on oppression. That type of entrepreneurship does not reduce scarcity. It may at best change roles, making a few victims of scarcity into novel perpetrators.

Work is a constitutive aspect of the humankind. As a species, we are hardwired to undertake efforts to effect change in the world. Work is understood to be the most effective way out of poverty. But we should ask ourselves: what kinds of work can build brighter futures for the majority of the world? And starting from that, wonder how can that work take place promoting cooperation and inclusion.

Purpose

Over the centuries, the meaning of work has been analysed from diverse perspectives – political, psychological, cultural, and many others. Work has been described as the continuous effort to improve the human living conditions, to master nature, to serve the will of deities, to overcome scarcity, to survive, to create meaning in the world. For the objectives of this initial proposal, though, let's stay at a relatively superficial level and treat work as a combination of acting in the world and understanding it. Those two aspects are simultaneous, not sequential, and take place within a scenario that combines society and nature.

Even though work is central to the human experience, a large part of the world's population can not afford to ask themselves a simple question: why do we work? On an individual level, it sounds rather banal to be asking. And yet, that line of reflection may seem dangerous to those in power. If workers could satisfy their basic survival needs, would they submit to everyday precarity and oppression? The answer is quite obvious. At a systemic level, then, it is urgent to raise that kind of question.

David Graeber talks about bullshit jobs, in which people accumulate layers and layers of tasks that are performative at best. Many young people succeed in getting a job will tell stories of how pretending to be working is often more important than achieving concrete goals. Rather than innocuous, though, a great part of work in fact has an effect. It is often about destroying, or sustaining the destruction, of basic living conditions for humans and other species. That is true to a considerable part of industrial work, whose consequences include the environmental and political impacts of mining, the displacement of populations, the accelerated migration to urban centres, and the growing generation of waste. Further, many professional activities contribute to justify and support a culture of consumption with no attention to its social and environmental effects.

The way the world has organised around industrial production over the last few centuries is criticised by Ivan Illich. He proposes to counter a productivity-oriented industrial era with the notion of a convivial one. Conviviality would be the basis for redesigning society under just and regenerative principles. In such a scenario, one can say that entrepreneurship – the ability to reorganise work towards a distinct goal – is still necessary. There is, after all, a lot of work to do if we are to improve the quality of life for the world population under convivial terms. But it has to be an entrepreneurship aware of its environmental impacts, and which replaces individual competition for community cooperation.

The economist Mariana Mazzucato proposes a mission-driven economy, oriented towards purpose rather than profit. And there are a multitude of potentially laudable purposes to concentrate efforts on. Any honest account of the present conditions will agree with the UN assessment mentioned earlier in this text: the digital transformation and the effects of climate change are an unavoidable reality. How to shape them under convivial and purpose-oriented terms?

Berlin-based nonprofit Tactical Tech has developed an initiative called "What the Future Wants". Their project partners conducted workshops with youngsters from 51 countries, co-creating resources that discuss critically the reality and effects of digital technologies on their lives. One of the outcomes of the project was the creation of an openly replicable exhibition for teenagers that draws attention to some of the harms and dangers of using digital technologies. It succeeds in bringing such conditions a bit closer to the everyday reality of children and teenagers in very diverse localities. Can a similar effort be made that connects to the effects of climate change as well? Further, can we think of new forms of being tactical that go beyond identifying and protecting from harms, and advance on creating more convivial futures?

This concept proposal feeds from past and present initiatives that successfully combine local sensibility and social embededness with a translocal systemic world-view. There are many examples of such: the Brazilian Waste Pickers movement (MNCR), the network of Pontos de Cultura, the global movements of social innovation and critical making, organised social movements in cities and rural areas, the World Social Forum and its proposal of another possible world, the Zapatistas, among others. They all combine acute awareness of territory, society and culture with the ability to prefigure better realities and to communicate them.

Even though the climate crisis is a result of complex global dynamics, its effects over society are often hyperlocal. Rivers dry out, fires spread, smoke covers the sky. Three days of heavy rain make cities drown, cars float, destroy homes and schools. Landslides block the roads and stall the economy. Disappearing fishing stock makes it impossible to earn a living off the sea. The summer is too hot, or sometimes cold. The winter is too cold, or sometimes hot. Crops are lost and grocery prices go up. Populations are displaced fleeing from drought and war, ending up in big cities that can not assimilate them.

Wherever those impacts are felt, young people are always there. Even as more information is available and reaching public discussion, though, there is a sense of inaction among them. There are emerging studies about the notion of climate fatigue, the feeling that anything one can do won't impact the pace of change for worse. That account is arguably true: no individual action will improve the state of things. That is one more reason to insist on community-oriented action, on cooperative purpose-driven entrepreneurship rooted in social relationships.

To combat digital passiveness and climate fatigue, we need to start from challenging other kinds of poverty than just income inequality. We need of course to overcome the poverty of chances: young people need to have access to opportunities. There is here an important parallel to be made with the notion of functional literacy. More than decoding forms of letters, reading should be about making sense, understanding the world critically, creating autonomous views and courses of action. The same is true to opportunity literacy: people need to learn how to identify opportunities, decide if they are interested in them, and how to act. And we need also to challenge the poverty of imagination. In other words, opportunities are not only job ads or small business funding. It should not only be about potential ways to generate profit. One has to dare of dreaming with other futures. Inclusive, just, collective, fun, and regenerative ones. With a critical yet convivial appropriation of living conditions.

Climate-related work is inevitable for the coming generations. Be it converting and retrofitting infrastructure, building for resilience, identifying and improving bioregional dynamics, manufacturing ecodesign products, or other future-oriented tasks. The same is true for the unfortunately growing need for past-oriented activities such as rebuilding neighbourhoods destroyed by fire, water or war, handling the immense volumes of things discarded everyday, keeping materials in use for as long as possible, and others. The underlying question is whether society can change from a disaster relief mentality towards a disaster prevention one. Sisyphean repair or convivial regeneration?

To be clear: a considerable part of currently underrated work is crucial climate action, albeit largely unrecognised as such. It is easy to see how reforestation, organic farming and environmental education are climate-related work. But preventative maintenance is so, too. Smartphone repair is climate work. Even construction and renovation can be climate work, if principles of building for energy efficiency, circularity and resilience are adopted. It is necessary to raise awareness about that fact, opening up to the imagination of future workers, and helping them organising their desires. Further, we need to create the tools to educate them based on regenerative and convivial worldviews. Digital tools

are part of the puzzle, not the ultimate solution. In fact, networked technologies will arguably be more effective as they disappear in the background. As they turn ordinary, as described by David Nemer.

Sustainable social justice and poverty alleviation require long-term systemic commitment, local awareness of community needs, and translocal exchange. Potential solutions will have to come from awareness, critical engagement, and caring for social ties and culture. Communities need patience to grow roots, adapt to changes in the environment, and expect to bear fruits over time. Those metaphors are precisely what semente proposes for sustainable community initiatives.

Semente in Ubatuba

The choice of Ubatuba for this experiment is in part due to the personal history of semente members. The three of them have engaged with that particular context in the past. Maira once brought a group of her Master students to offer workshops of GIS (geographic information systems) during the 2016 edition of the Tropixel Festival, focused on open science. Bernardo worked with Instituto Neos to develop the first iteration of the semente canvas, and conducted co-design sessions during the 2022 edition of Tropixel. Felipe lived in Ubatuba for more than a decade, where he founded and led the Tropixel Festival, the ninho co-working space, the action-research project Ciência Aberta Ubatuba, the social-environmental programme inc.ubalab, among many other initiatives.

Ubatuba can be understod as a micro-scale portrait of contemporary conditions also present in other parts of Brazil. It is situated in a region with an impressive natural environment, being the municipality with the largest proportion of atlantic forest preserved in the state of São Paulo. The atlantic rainforest, or mata atlântica in Portuguese, is a biome intrinsically related to Brazilian history. Over centuries of colonial exploration, nutrients from its soil were massively extracted and exported to Europe and the world in the form of redwood, sugarcane, coffee beans. As a result, more than 90% of mata atlântica were replaced by homogeneous plantations and grazing for cattle, as well as the concrete and tarmac of roads and buildings. Most of the Brazilian population lives in dense cities where this thick and diverse forest of old times is nowhere to be seen.

Being surrounded by protected areas and benefitting from their wealth in biodiversity, clean water and stunning views, Ubatuba is not without its development tensions. With eyes on short-term profit-making, local economic elites are constantly attempting to change legislation and allow larger areas of the forest to be replaced by concrete. Left with little choice, the local working classes struggle to find meaning in their lives amid the wonders of easy consumerism, the embodied everyday oppression of work, and what some of them perceive as restrictions imposed by environmental legislation.

At the same time, Ubatuba is a culturally rich social setting. The centuries have added new characteristics to the local caiçara population, initially a mix of the silenced remnants of original Tupinambá with colonial European invaders – mainly Portuguese but also French and others. The forced displacement of enslaved African people is also part of the demographic mosaic. As well as in many parts of Brazil, further waves of economic migration brought people from other regions and countries for work: on the harbour, on coffee production, on the fishing industry, on construction and tourism. Ubatuba has five recognised quilombo communities, composed of the descendants of enslaved people. Its territory has two indigenous areas with four small villages speaking their language and professing their faith. In recent decades, the region has also attracted creative workers and digital nomads seeking a life closer to nature.

It is in that scenario that semente is establishing alliances with nonprofits, communities, activists, schools, and social enterprises. Between the end of 2024 and the first half of 2025, participatory processes will contribute decisively to better define the communities

and activities of partner organisations. Semente will help them visualise their shared dreams and agree on concrete actions. In turn, the semente team will collect feedback to improve the method and its tools.

At this pont – September 2024 –, this project has agreed on alliances with two local partners. Instituto Neos is an organisation dedicated to the promotion of socio-biodiversity on the northern part of Ubatuba, working with local communities through cultural and environmental actions. GAIATO offers play-centred activities for children and teenagers in Ipiranguinha, the most densely populated working-class neighbourhood in the city. Both organisations have engaged previously with creative perspectives over digital media, as partners of the Tactical Technology Collective and other initiatives. There are also ongoing conversations with other organisations and stakeholders to join the processes in coming phases.

For this new phase of collaborations, semente expects to explore possibilities for community-focused and climate-aware entrepreneurship. It will promote the critical appropriation of technologies and convivial climate action. The goal is of generating insight to address climate fatigue and superficial consumerism with actions considered relevant by local youth. It will engage with diverse social groups and incorporate the awareness of territory and social characteristics brought by project partners.

As usual, semente will publish research data, analyses and outputs on open repositories with permissive licenses. Processual documentation will be shared on a research wiki.