DIGITAL COMMUNALITY

a permaculture ethics perspective
Digital communality:
a permaculture ethics perspective
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Special thanks to the colleges who shared their thoughts: Rubén Olivera, María de Luz Silva, Sofía Olhovich y Rodrigo Baeza. To those who build communality every day.

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Through research, reflection and analysis, we conceive Digital Communality as an approach that highlights the sociotechnical structures of power embedded in the design, extraction, production, use and disposal of digital technologies and their relationship with the environment. Based on this framework, we put into practice sociotechnical relations in community, where politics is an intricate part of social life and social life articulates with the environment. Digital commonality focuses on social, cultural and natural diversity and implies shared accountability. It picks up on circular processes where the connection between internet as a commons, internet as an inhabitant community and internet as a mode of governance is essential.
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Introduction
This research emerges as a way of expressing the concerns that link seemingly different areas like digital life and permaculture life. Why digital communality and permaculture? Is it possible to address permaculture in the digital field? What is the relationship between communality and permaculture precepts? How and why does permaculture articulate with the digital realm?

Sursiendo is an NGO committed to accompaniment work, creating and sharing digital culture knowledge and tools, as well as opening conversation and reflection around commons, hacker ethics and technoaffections. The previously mentioned perspectives have been an entry point to articulate what we end up calling digital communality.

On this occasion, through interviews, we wanted to listen and talk with people that aren’t specialized in digital technology but tend and care for nature and living ecosystems, sustaining the intention of building bridges of knowledge and narratives that re-link experience, feelings and ways of thinking.
From our point of view, the discussion around the environmental implications of technology is still at an early stage and, in many cases, reproduces development models that, despite the adjectives “green”, “sustainable” or “responsible”, are still far from taking care of life in all its forms. However, a whole range of rural and urban communities encourage many ways of caring and subsisting. Addressing permaculture from our Global South, where it unfolds alongside communality, agroecology and land defense, allows us to go beyond imposed structures and discover other lifestyles that inspire us to generate [also] other types of technology.

This research has been a good excuse to nurture our perspective with the experience of people that have a background in permaculture, both at a training/educational and a practical level. They’ve shared with us their own insight on the digital world and the challenges that emerge when interrelating natural and digital systems.

In the process of planning, co-creation, conversation and qualitative analysis, we invite ourselves to see our digital lives, not only in terms of the challenges we face online, but also as an extension of those we encounter offline. In other words, we propose to reflect on our interactions and habits online as a continuum of our relationship with the natural environment.
This research began in 2020. As questions started to bubble and brew, we switched to “COVID mode”, which, among many other shifts, has undoubtedly intensified our digital presence. In response to the mainstream Network\(^1\) model, emerges the need to question and rethink ourselves as people, as groups and communities; the need to create connections between territorial and life challenges both online and offline. This text here is just one of the many perspectives on these intersections.

We want to thank the people who offered us their time and their voice that made this low-scale research possible. We continue to learn because of this experience. Sofía Olhovich (participant of the Inlakesh Biotipo de Sanación located in Teopisca, Chiapas), Rodrigo Baeza (Tierra Plena, family project in Teopisca, Chiapas), María de Luz Silva (Mujeres y Maiz project, Chiapas) and Rubén Olivera (Crisalium, Educación Naturaleza y Transition, in San Cristóbal de Las Casas, Chiapas).

We desire to share these ever-evolving insights to open conversation from complementary points of view.

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1 Throughout the text, we use “Net”, “Network(s)” and “Internet” as interchangeable terms.
Methodology
Like a journey, this process of articulating concepts related to digital communality and permaculture has gone through crossroads, halts, a whole range of experience, knowledge and emotions.

The trail begins with the joy of meeting other walkers; allowing us the opportunity and time to reflect, exchange perceptions, discover new territories and overcome the uncertainty of not knowing where to go, opening up to the adventures yet to come.

First of all, our methodological route is based on a genuine curiosity of hearing how people from the permaculture world experience internet and digital systems. Finding cues and new questions that reframed our initial concerns sustained our curiosity during the process.

Our methodology is mainly qualitative, referenced in key situated and experiential concepts.

To mention the moments that sum up this journey, we highlight documentary research, open interviews, conceptual rethinking and analysis.

The documentary research we conducted presents two aspects: 1) key concepts of digital culture, particularly issues that Sursiendo has
worked on regarding this approach (hacker ethics, commons and biodiversity) and 2) in parallel, an investigation of the origin and evolution of permaculture, as well as its foundational twelve design principles.

The main questions that guided us were:

- What connections can we trace between permaculture and digital communality?

- What design principles can we find in the digital realm?

- How do different types of diversity – at the level of knowledge, environment and digitally – intersect?

- What type of digital habits allows us to see/rethink ourselves as humankind in a finite nature?

Open-ended interviews

After initially mapping local people willing to open conversation and share their experience and points of view, we hosted a series of informal talks to address the issues based on permaculture references and four semi-structured interviews.
Two women and two men, between 39 and 52, with more than 20 years of experience in different permaculture fields: agroecology, bioconstruction, alternative health, food sovereignty, education, ecovillages, among others.

The questions that guided the interviews were:

- How do the ethic principles of permaculture appear in the digital field?
- What are the implications of “earth care” and “people care” in our digital lives?
- How can we experience “fair share” online?

Rethinking/reconceptualization

Throughout this process entangled by pandemic contingencies, on several occasions we reflected on reframing the interview questions, as well as the concepts and categories used.
From the beginning, our qualitative framework has been centered in “digital permaculture”. Two months into the process, when we gathered to share key findings, we decided to focus our approach on digital culture and permaculture based on the references and context of Sursiendo. Through fluid conversations, we traced close connections between permaculture ethics, hacker ethics, care ethics, collective dynamics, biodiversity and ecological digital awareness. These elements began to shape a universe of concepts that we felt more and more comprehensive and full of meaning; a universe that we ended up calling “digital communality”.

In parallel, we also maintained a journal as a way of portraying insights, questions, concerns and emotions that came up through readings and conversations.
Initial concepts for further articulation
Before sharing our findings and thoughts, we consider it relevant to flesh out the different elements we seek to intersect: digital lives, permaculture and communality.

**Digital lives**

The interplay of technology, sociability and communication defines what we call “internet”. A network that has enabled us a more complex life: a digital life with all its potential and challenges.

For several decades, much has been said about the benefits of internet regarding knowledge, information, freedom of expression and connectivity; these are achievements of the "Information Society" that, however, should be examined with a critical eye that interrogates the scientific standpoint that technological optimism proclaims as a miraculous remedy for all our problems.

A wide array of initiatives dismantle technology's so-called neutrality and reveal the bias of Western Science funded on colonialism, patriarchy and development models. These initiatives envision technology beyond the dominant model that economic power presents us.
Taking all this into account, we can grasp that, just like offline life, in the digital realm, injustice and abuse can be normalized: authoritarianism and different forms of violence emerge and multiply online. As Haraway expresses in Simians, Cyborgs, and Women: The Reinvention of Nature (1995): the gender inequalities and sexist attitudes that surface offline transfer to the digital world and take on other dimension.

Internet operates through the success and failure of the cultures and societies we inhabit and, at the same time, enables new forms of relationships. In digital life, we experience patriarchy, racism, violence and extractivism; the latter is usually less visible than the rest because we tend to think that going online means not using up natural resources.

To meet internet's requirements in its current state of development, in other words, to manufacture and transport devices and infrastructure, we need to extract and transform raw materials like metals and minerals, along with labor exploitation in many parts of the world. We depend on excessive use of energy, including a huge amount of water to cool down data centers. Greenhouse gas emissions, land dispossession and electronic waste are some of the outcomes. The consequences of the current technological
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Development model are still being studied and understood since the "backstage" is deliberately opaque. However, we know that excessive competition, social polarization, attention deficit and physical and psychological conditions are far from being healthy for society.

These assertions remind us that internet is one of the areas in which we need to question, unlearn, claim our rights and revalue care.

Permaculture

Permaculture is a framework and design tool that emerges in the late 1970s. One of its main assumptions is that we need to decrease our use of energy to keep on living on this planet. It picks up on the principles of complex and systemic thinking, as well as technology at a human scale to design self-organized, self-regulated, sustainable structures where human life empathizes with the cycles of nature.

Broadly speaking, permaculture invites us to observe and learn from complex [cyclical and renewable] natural systems. Permaculture addresses the interplay of caring for others and caring for the planet. We will go back to this point later and how it relates to the digital sphere.
Because this approach emerges from studying perennial plants, their evolution and habits, it’s had a greater emphasis on agroecological and ecotechnological aspects. In part, this is why permaculture hasn’t been as explicitly developed in education, culture, health and spirituality.

It might seem that digital culture has nothing to do with permaculture and “the transition”. For many people, talking about digital permaculture sounds “strange”, even to those familiar with permaculture perspectives.

Permaculture design principles encourage the appreciation and reconstruction of cultural, social and economic diversity, since diversity helps face changes, contributes to the health and co-evolution of systems, values the marginal and works on reshaping the collective and public aspects of life.

**Communality**

As a species, we have evolved in community, from the scale of cells to whole communities. This is how we have been able to face historical challenges for centuries.
Along with capitalism came the glorification of private property, encouraged by the institutionalization of patriarchy and, recently, with neoliberalism, the promotion of extractivism. Because of these proprietary and exclusive models, the sense of community has been blurred from many aspects of life. However, the collective spirit is still very alive and present: in many parts of the planet, there’s a resistance and re-enactment of the commons. Permaculture has been nourished by many communities that work with land and environmental communal management. In fact, this communal sense has been essential in many cultures’ resilience and diverse ways of understanding the world (Holmgren, 2002).

We face the challenge of rebuilding and giving new meaning to the “commons”. Regarding the internet, this claim is urgent and complex, because using technology —generally proprietary and exclusive— invisibilizes collective rights. Communality, as one of the ways of governing the commons together, implies that we are capable of perceiving the internet as a common good and acting accordingly.
An Approach to digital communality
Technology, from a permaculture perspective, invites us to be cautious with technological optimism; and reminds us that, even though internet has helped spread and expand the permaculture movement, there is a certain distrust: the digital world reduces our connection with the slow processes of the natural world, our ability to understand them (Holmgren, 2002) and makes us more dependent on a complex technology that’s design and origin we ignore. “When we consume something that reaches us remotely, it’s hard to grasp if we’re making an acceptable use of the resource or if we are overexploiting common resources” (Olivera, interview 2020).

The permaculture approach reminds us that we also relate to nature online, we use and manage its finite resources. In environmental terms, with “our data consumption” we accelerate the consumption of materials and energy.

To outline a concept of digital communality that embeds a sense of community between humanity and nature, it’s vital to return to the question [also] raised during the Hackfeminist Meeting of ‘Technology and Affections: how do we shape policies around [co]accountability? : “What kind of internet do we want and why?” When rethinking digital life without disconnecting it from its environmental context, it’s useful to remember the characteristics of sustainable systems described by the permaculture framework: local and bioregional political structures
and economies, accessibility, reduced dependence on expensive and centralized technology, and the ability to develop gradually with feedback (Holmgren, 2002).

When addressing communality, we return to the ethical precepts of permaculture. This connection is a bridge for comprehensive understanding when defining "digital communality" because "digital" doesn't mean escaping real life, but rather integrating it.

So, first of all, we asked ourselves: what connections are there between care and the ethical principles that permaculture presents for a conscious digital life that seeks to reduce energy consumption? When do we share with equity in the digital world? Initial questions that, although utopian, were crucial for us to imagine this intertwining of concepts: are there ways to inhabit internet that allow us to care for ourselves, each other and nature, sharing with fairness?

Through a deeper look into these questions, we find a close relationship between the ethics of permaculture and hacker ethics. On the one hand, hacker ethics reminds us that we need a cultural revolution, a change in values that makes it possible to use internet to facilitate collaboration, accountability, creativity, curiosity, social equity, wellness and, ultimately, “care”. The permaculture principle “fair share” intersects with some of the hacker ethic principles: access to
technology, decentralization, redistribution, open knowledge, to name some.

Digital commonality is an integral part of the defense of digital commons, as well as creative and expressive freedom. As we say in Sursiendo, it’s a counterproposal to capitalist territorial management, that is, a perspective that highlights the sociotechnical structures of power in the design, extraction, production, use and disposal of digital technologies and their relationship with the environment.

Therefore, we conceive digital communality, hacker ethics and permaculture ethics as an interplay that asks us to scale and weave the challenges between the continuum of analog and digital life.
The Challenges of the digital world from a permaculture perspective
In this section we highlight the challenges of looking at digital life from the lens of permaculture care ethics. This deliberate focus on care, considering people, land, nature and relationships, leads us to envision some possible manifestations of the "sense of communality" in digital life and to outline the challenges of inhabiting internet as communal beings.

For this purpose, we draw upon findings from interviews with permaculturists who address, describe and bring us closer to defining digital communality. As a starting point, we share challenges identified by the people who took part in this research.

Broadly speaking, interviewees consider permaculture both as a movement and a tool for transition in their lives. It's also conceived as a "philosophical journey, a lighthouse that guides us in our path" (Baeza, interview 2020).

Coincidently, many people approach permaculture seeking to change their lifestyle and to be closer to nature. This change generally requires a shift: "conceiving ourselves as part of nature" (Olivera, interview 2020). Although it's not just about how we relate to nature: "I became interested in permaculture because of the initiatives that center nature, that involve and consider people and the balance it seeks in our lives" (Silva, interview 2020).
Some consider that following the principles in an absolute or abrupt way risks derailing the path of permaculture: “in my case, I was very radical at the beginning and over time I’ve come to realize that you can’t sustain that forever” (Baeza, interview 2020). As in other quests and endeavors, to transcend over time implies a certain amount of flexibility.

Both the people interviewed and the documentary sources agree that cyberspace is fundamental to grasp the fact that every day we are more people putting permaculture into practice. However, interrelating permaculture ethics with our digital lives makes us uncomfortable, even hopeless, revealing the challenges we face. All in all: as humanity uses technology "there is no social equity, not even towards land and nature" (Silva, interview 2020). Despite the scenario, there was also room for new questions, even exciting ones that invite us to let loose our imagination. Questions that enable us to identify some of the challenges that we share below.
The challenges of “earth care” online

We came across different standpoints in permaculture regarding the role technology has in our lives: the initial idea is that the last 200 years of technological advance has separated us from nature and living ecosystems; with each revolutionary leap we become increasingly detached from the biophysical environment (Holmgren, 2002). The digital age comes with deeper disconnection, as it influences us to experience the digital world in apparent disconnection with the physical world.

A more radical perspective suggests that:

"From an ethical point of view, internet doesn’t fit into our (permaculture) lifestyles. If we really wanted to engage with permaculture, we would distance ourselves from technology and aspire to make operate in each local area according to its own possibilities and resources. However, telecommunications are undeniably necessary for our current lifestyles; we aren’t ready to let go of that and say that we’re ok”
(Baeza, interview 2020).
This dilemma that many people encounter in their quest towards a permaculture lifestyle is perceived as a contradiction that merges with different transition processes: technological development and the use of internet are based on invisibilizing the resources that actually sustain them.

We use more and more devices that rely on submarine and satellite cables, cooling systems and server farms to make both data storage and information flow possible. Tracing the origins of digital technology makes it clear that we’re connected to other territories and realities. Despite being unaware of what resources we actually depend on, our digital life runs on raw material extracted from nature. Like all other aspects of life, internet requires water, air, earth and minerals to exist.

The current pace at which we consume information and technology implies a frenetic use of resources that encourages an alarming dissociation with nature, land and its own cycles. “We’re so disconnected that we need tools to understand what’s behind what we use; by not feeling connected at a personal level, I don’t feel directly accountable for the resources I use” (Olivera, interview 2020).
Many factors describe how far we are from creating and accessing digital technology following permaculture ethics:

“We should create our own technology and maintain it by ourselves, our own media. That’s unsustainable considering phones, computers; unsustainable in terms of infrastructure and using renewable energy”

(Baeza, interview 2020).

And we also highlight obtaining renewable energy fairly, guided by the communities that live on the land were this energy is produced.

**The challenges of “people care” online**

Those of us who live with internet daily get used to taking it for granted. Undeniably, it enables connection and exchange between people all over the world. We can communicate, work, have fun. However, if we only focus on "progress", how do we deal with issues like information overload, tech device addiction, data extraction, invasive surveillance or censorship?
Going back to the premise that internet is not neutral and that societies reflect the carelessness and abuse of our analog/non-digital lives, we can address the paradox that internet both gives us channels of communication, expression and social mobilization and, at the same time, is used for exploitation, incites violence, racism, among other issues.

Caring for people online? What does that look like? Our interviewees highlighted how rare this question seemed to them and the shared thoughts that surfaced translated the inquiry into new questions and refractions.

As one of the interviewees said: "They spy on us to find out what else they can sell us, they use data to make us better buyers, so that we purchase at whatever cost. That goes totally against taking care of ourselves as people" (Silva, interview 2020).

The invisibility of options and ways of using technology are part of this problem; the idea that digital services cover “all our needs” impacts our ability to make choices.

Tracing parallelisms between natural ecosystems and socio-digital systems, we can affirm that in the same way that “monocropping” is
problematic, so is the so-called "monoculture of the mind". According to Lucy, it’s just as dangerous:

"Part of the problem right now is that we’re educated to fit into a system that doesn’t think about the planet or people" (...) In terms of the digital world, there are many options but they are made invisible by those at the summit of power. Only one type of information based on few sources translates into a monoculture of the mind. The thought that there’s only one path is sad and risky”

(Silva, interview 2020).

In general, we spend our lives oblivious of whether or not the technology we use takes care of people. That invisibility of options leads us to unsafe habits, with scarce or no knowledge at all of spaces outside of the data industry. In other words, our digital culture is undermined.

Some of the questions participants rose related to these issues are: how do you take care of people within a system that doesn’t promote care? Is the technology we use neglecting people in other parts of the world? Clearly, the challenges to consider care are enormous.
Not only does this lead us to think about why we use what we use but it also makes us realize how technology presents a colonial, unfair, patriarchal bias revealed through the monopolization of it’s design (from the global north). Technology designed under a purely capitalist logic that leaves out other forms of what is imaginable, conceivable, that excludes a diversity of interests and needs that we can give new meaning to through our relationship with technology.

The challenges of “fair share” on the Internet

Today, as we become more aware of the energy crisis and the peak oil, many of us, to a greater or lesser extent, start to think about how we use resources. However, regarding the digital realm, what criteria do we have to share fairly? Do we know what resources we use when inhabiting internet? Are those resources finite and critical?

The third principle of permaculture ethics “fair share” is based on self-regulation and reducing consumption, in other words, decreasing our use of energy consciously. When it comes to the digital world, how do I take only what I need?
In interviewee Rubén’s words: “I can’t grasp the scale of the digital realm. We don’t know if there’s digital inequality”. While another interviewee, Rodrigo, mentions that internet and telecommunications don’t just use what they need but are growing exponentially.

Another aspect to take into account when we address digital fairness is the concept of the “digital gap” described more than 20 years ago by different theoretical frameworks, grassroot movements and international NGOs.

From a permaculture point of view, the interviewees point out other contradictions. Quoting Sofia:

“Technology makes us part of a globalized culture. Internet is closer to urban realities than to rural contexts... The digital world is elitist and access to platforms continues to be very elitist: not all people can access technological tools and understand them in-depth”

(Olhovich, interview 2020).
As we know, apart from the divide between rural and urban contexts, other inequalities intersect such as gender, ethnicity, education and social status:

“Although we know that internet, by principle, should be fair, in rural areas, internet and technology tend to be an imposition by institutions. Technology is still not freely accessible, there’s censorship, it’s influenced by particular interests like discretionary management and patriarchal structures”
(Olhovich, interview 2020).

In addition, if fair sharing also implies nature and land as a subject of rights (as in some constitutional frameworks of the Andean region), we are far from this mark at many levels:

“There are double standards. Overall, we’re not closing cycles, we’re not able to return to the planet what we take... In opposition to permaculture, electronic technology doesn’t utilize everything in the system but follows the mandates of the industry that produces waste”
(Silva, interview 2020).
Another risk of inhabiting the digital world is the constant exposure to a growing number of proprietary software and platforms that profit from our data. As our digital lives intensify, it becomes more obvious that the dominant industry makes us conceive internet far from being communal or a place of sharing.
Challenges facing and collective accountability
After addressing the concerns, questions and challenges that surfaced as we created connections between digital life and permaculture ethics, now we dive into some initiatives from the interviews that hint out ways of transforming our digital lifestyle.

First of all, we want to share some questions that came up in conversations throughout our writing process. We frame these questions, not as a way of finding answers but as a starting point for further reflection and insight on how we engage online. In this sense, they exercise our imagination and enable us to consider other realities as possibilities, other narratives of internet. Quoting an interviewee (Lucy): “technology at the service of communication and learning offers many opportunities that should be taken advantage of and promoted” (Silva, interview 2020).

These questions are for you to think about but we know that most of them only make sense at a collective level.

- Can we envision permaculture in practice in our digital lives?
- What does a “digital transition” actually mean? How do we become accountable? Are we ready to start now?
- What does it mean to "degrow"/"slow down" in the digital realm? What aspects does voluntary digital frugality present?
- Is it possible/desirable to put limits on digital use? What are the implications in my communication, interactions and needs?

- What dominant narratives about internet influence us to not care for ourselves and nature? What alternatives do we have?

- What would having a balanced energy use look like online? Is it realistic and feasible?

- Is it possible to talk and aim for digital sovereignty? What would it be like?

- What type of interactions do we want to have online?

- What type of dynamics can we start having beyond the dominant model of internet?

- Can we imagine a Network that encourages communication and care?

To outline possible initiatives around the notion of digital commonality, we present some precepts that the people we interviewed shared us. They urge us to review our perceptions and define an attainable “digital transition”. Some ideas may feel like indirect answers to the above questions.
Understanding the technology we use

One of the principles of permaculture is to know what we use, the implications of doing so and assuming responsibility for all of it. Inhabiting internet from a communality approach implies asking ourselves questions about the technology we use, how it originates, what logics underline its design and production, about the platforms we use. We’re invited to a “critical digital literacy”.

The slogans that Rubén Olivera shares with us come from perspectives of “technology at a human scale”: “you will not use technology that you cannot repair in your local area, nor will you use technology that you cannot understand”. If we actually were to follow these precepts, according to Olivera, “we wouldn’t use anything!” (interview 2020).

Our understanding of the devices we use should also consider health implications in a broad sense, not only the effects on our body but what happens with our social interactions, with the quality of our communication.
Without advocating conservationist standpoints, the invitation is to consider our interaction with technology as part of the interaction with nature because nature and its commons allow and sustain our life including the digital aspects.

**Grasping the extent of our digital consumption**

Permaculture, as a perspective that’s based on decreasing our energy use, is related to the “degrowth” movement, a movement that seeks to decolonize and dismantle the logic of unlimited growth. As mentioned before, there’s still a long way to go if we want to decolonize internet. At a sociopolitical level, the challenge is huge: the global white north continues to have power over digital systems.

We are accountable for this planet. That’s irrefutable. The way we consume technology makes us an important part of the problem: its footprint exacerbates climate crisis. Quoting Albert Fert (Nobel Prize in Physics): “the energy it takes to perform thirty Google searches

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2 We conceive conservationism as an approach that advocates for managing and controlling natural spaces by separating the people and communities that depend on them. The NGOs, companies and government agencies that promote this perspective «were key in building the neoliberal vision that nature will only be saved if it offers “services” and has a price label» (World Rainforest Movement, 2019). Conservationism supports green capitalism without questioning the excessive consumption patterns or the social inequities that it reproduces.
would boil a liter of water”. He adds: “20% of the world’s electricity consumption in 2030 will come from the digital transmission of data.” Another example: a Google data center in the United States uses as much energy as the city of San Francisco. It’s also worth mentioning the backstage of the manufacturing process: mining (deforestation, pollution, dispossession), using water to cool servers, more pollution (a data center can generate pollution equivalent to that of a city of 250,000 inhabitants) (Nobbot, 2020). It’s advisable that we understand this, not from a place of guilt, but a permaculture lens that invites us to interact with nature.

This adverse scenario set by technological giants like GAFAM (Google, Apple, Facebook, Amazon, Microsoft) can disappoint, stagger or freeze us, it can make us feel powerless or not good enough.

From a “transition” perspective, we can start by becoming aware of what autonomy and digital sovereignty imply. To access a sustainable network and its benefits seems like a utopia, says Rodrigo “I see it as an interesting option to have your own energy source.” (interview, 2020). It’s a joy to know that there are many experiences of community networks out there. These collective initiatives of social management open the possibility of expanding transition towards other aspects of alternative connectivity.
Without a doubt, this challenge goes beyond the individual aspect. However, before creating an economically sustainable autonomous network, in the more immediate short term, we can assess how much energy we each use in our daily lives. In the same way we calculate the environmental footprint associated with our food habits, can we estimate the resources we use through the bytes and kilobytes of information (texts, music, images, videos) we generate and circulate?

If we can’t obtain these calculations, can we freely opt for self-regulation and reduce our consumption of digital information? It’s easy to distinguish how some data flows, such as videos, use up more resources than others, such as audio or text, or that downloading our favorite music and playing it offline on our devices is more sustainable than streaming it over and over online.

Rubén asserts: “just by consuming less, we generate less waste and surpluses are redistributed.” Perhaps the almost empirical knowledge of grasping the scale of things can lead us to choose our information consumption, both in quantity and quality. To make this happen, we’d like to briefly mention one more aspect: even though nowadays there are so many infrastructure projects, servers, social networks or other types of free platforms that, one way or another, address some of the issues stated in this text, part of that “not knowing/being able to
choose” is related to the suffocating presence of transnational service platforms that we use to communicate. They give the impression that there’s no technological development possible beyond them. And if there is, “there aren’t enough people involved” or “it doesn’t work well”.

Becoming familiar with other options, other platforms and technological experiments inspired by non-capitalist guidelines will enable us to explore the idea of strengthening these alternatives. From a permaculture perspective, if we don’t want to lose the perspective on our consumption, technological progress shouldn’t be disconnected from nature and land.

**Opting for biodiversity from the digital realm**

Nurturing our digital culture, in the sense of expanding the spectrum beyond what is known, is essential in moving towards a biodiverse Network. This implies considering the evolutionary advantages of diversity in multiple aspects of life, “remembering that ecosystems and their health rely on diversity”, which is what monopolies, such as large platforms, avoid with their “walled gardens” and addictive traps.
It’s worth pointing out that, despite the discouraging scenario of homogenizing and totalizing internet policies, the defense of internet is a movement with multiple voices around the world. There are many organizations out there dedicated to promoting free digital systems, designing and programming non-proprietary technology. Also tech cooperatives, applications and sites that work outside of the data mining logic. In this sense, technological biodiversity is a growing universe of options (technological, systems, free networks, autonomous and also human infrastructures) (Sursiendo, 2017).

Being aware of our options helps us regain a sense of agency over our digital consumption. Quoting Lucy:

“To opt for sites that allow us to access different types of information; to open ourselves so we can search and find spaces that allow us to diversify online. There aren’t many spaces but they do exist and we must continue to nurture them. For example, more and more people join small agroecological initiatives. As goes the saying: many people in many small places doing many things” (Silva, interview 2020).
Biodiversity invites us to pinpoint contexts where the mind is not seen as a monoculture, where we are free to build diverse narratives of the internet. Rubén tells us: “identify the platforms that don’t serve the system and value those that are at the margins of the digital world”, in a practical sense we can start by acknowledging that, beyond the tech that’s preloaded on our devices, there are other systems that broaden our horizons.

**Inhabiting networks, fostering communality**

Digital communality invites us to “really inhabit the internet, without relying on extractive corporations and spying governments” (Lechón-Gómez, D.M., 2018). Living in tune with communality leads us to rethink our lives together online and to be aware of the sociotechnical and environmental impacts that it entails; hence the importance of intersecting hacker ethics and permaculture ethics.

Both perspectives consider sharing as a foundational value. In fact, sharing is intrinsic to our species. As Lucy points out: “in times like these, we should go back to the essence of life, to the ethics and principles of co-evolution: mutualism, collaboration, symbiosis”.
At the end of this journey of concerns and challenges, we ask ourselves: are there other ways of using and developing technology and the internet to strengthen ties for collective care? Assessing communication in its original sense is a relevant point of reflection. Sofía, a participant in this research, invites us to “not forget that communication skills through technology are part of our own communication skills”.

So, looking after our “digital lives” from a communal perspective implies:

“Feeling that we’re part of something broader that isn’t merely anthropocentric, but biocentric, where internet is conceived for collaboration, exchange, sharing knowledge, cultivating collective care, fostering interpersonal communication, recreating communities of peace, promoting inclusive and resilient cultures, a sense of community with other beings on this planet”

(Olhovich, interview 2020).
Final thoughts
The results of this research hold the purpose of conceiving digital and analog life as a continuum that challenges us to change, to shift, to investigate the aspects of internet that we use in our everyday lives yet we still know so little about. We say a free, inclusive and diverse internet, but also, based on permaculture, biodiversity and communality.

In the last years, Sursiendo has given quite a lot of thought about the internet, how different aspects interrelate, the concepts that lead to digital communality where hacker ethics and technological sovereignty intersect with permaculture to imagine how we actually inhabit this mode of living. If we intertwine its ethical principles to this fabric as one more tool for our digital transition, this approach helps us face with confidence and co-accountability the challenges of both analog and digital life.

Internet tends to obscure the cultural, environmental and even spiritual aspects of the relationship between technology and nature. We encourage you, after all these pages presenting concerns and issues, to reappropriate those forgotten aspects of the digital realm. We invite you to articulate conscious collective action that dismantles the normalization of an open cycle technology that deeply harms the
planet, bodies, entire communities and, at large, the way we experience and interact with nature.

In Suriendo, we believe that we should act at many levels (as individuals, as groups and as communities) to make changes in our habits, our relationships, our choices and the ways we provide support. This is the backbone of a world in transition. However, we must maintain the enforceability of our government systems so that they promote and facilitate real steps towards fairer societies with our environment. From laws that support small industries, local businesses and working conditions instead of monopolies, to making improvements in waste regulation, planned obsolescence, reducing/reusing/repairing/recycling electronic components, as well as free software and collective access.

We conducted this research seeking inspiration and energy: different ways of inhabiting this world. To connect and learn from other experiences and initiatives. Because we believe that success lies in being accountable together and what it takes to get there. Because there aren’t easy answers but there are actions and gestures based on care.
Digital communality reminds us that we’re communal beings, both culturally and biologically, and invites us to interweave the two worlds, digital and non-digital, through collective care. In the decisions we make on a daily basis, these principles bring us closer to taking care of internet as a territory. Can deciding to experience digital communality become a way of living?
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