Hacking Maintenance with Care

Reflections on the self-administered survival
of digital solidarity networks

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"More and more of us looked up one day and realized that the emperor had no clothes. It is in this dilemma that new tools for noticing seem so important."

— Anna Tsing, *The Mushroom at the End of the World*

Introduction

In this thesis I will explore how self-organized cultural initiatives find ways of maintaining themselves, while at the same time trying to sustain some form of collective care. In particular, I will dedicate special attention to those groups whose artistic, cultural and activist practice heavily relies on FLOSS (Free Libre Open Source) software and self-hosted (community) infrastructure, for a series of reasons. Firstly their technological choices and their ways of organizing are often formalized into collective guidelines (e.g. Codes of conduct but not only) which avowedly critique capitalist modes of cultural production, and its consequent commodification (Wark, 2019). Secondly, I think they might provide realistic examples of alternatives to proprietary software, hierarchical and exploitative organizational models, and poor or alienating working conditions in the arts and cultures. And thirdly, through my studies and personal experience I got close to these kind of practices myself, and I sadly started to observe the many difficulties and burnouts that these groups are facing due to the pressures coming from the drastic rise of the costs of life.

A condition of generalized precarity seems to be depleting all sort of resources necessary to keep running projects of these kinds, which often count on a good amount of generosity of their internal community for an extra, vital, spin. In this context of permanent crisis the issue of maintenance becomes a really delicate one, especially for forms of organization whose autonomy and freedom is gradually threatened by tighter relations of dependency with capitalism through its socio-technical infrastructure. These groups might inadvertently replicate toxic dynamics and poor working conditions, whenever their same socio-technical infrastructure turns out to be highly demanding, and even unsustainable, in terms of energy costs, voluntary and affective labour, and spare time consumption.

Through the thesis I will therefore try to address and unpack the following dilemma: How to practice maintenance while trying to include practices of collective care, in self-organized cultural initiatives that work in solidarity with free software and self-hosted technology? Through field research, the exercise of maintenance is inquired as a situated and collective form of knowledge that on one hand pragmatically points towards the how-to's of collaborative survival, and on the other hand it addresses the status quo as the whole of the systemic relations of dependency.

The research is conducted through a series of conversations, interviews and collective evaluations that I will metaphorically frame as "Boiler inspection". The thesis is the result of a process of journaling along with the inspections, collecting some anecdotes and reflections on ways of maintaining.

After a necessary contextualization of the research, maintenance is explored as a conflicting practice through which principles and strategies of radical administration are tried and tested out, in the attempt of conciliating the need for a gentler survival and the urgency of a more unapologetic exercise of care. I will then refer to maintenance as caring labour, that often remains invisible within the community/organization itself. Lastly, maintenance is discussed as an issue of autonomy and cooperation in relation to hacking practices.

Clumsy legs

March 10th, 2023.

A friend just sent a message in the group chat — Soupboat[1] has now legs. And then: — 4x faster now.
I can't stop laughing.
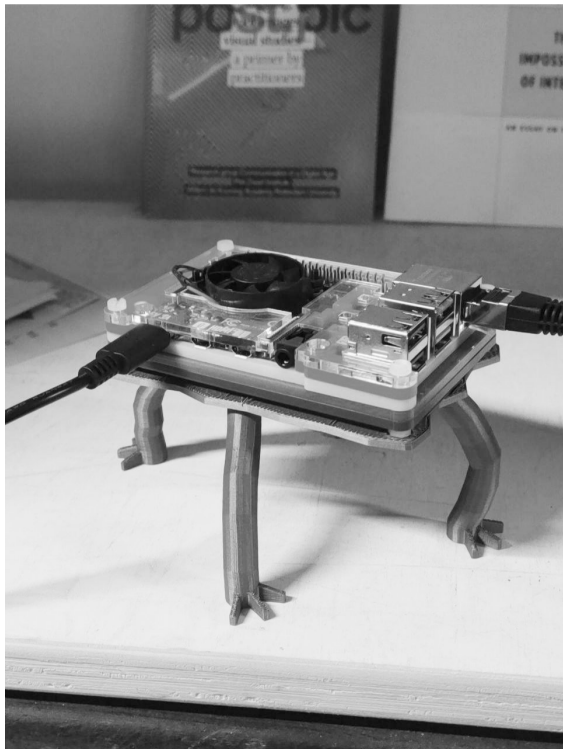
[ ] Photo of the Soupboat

Back in September 2021, when at the beginning of my masters I had the very first experience of setting up a web server on a raspberry pi 4, which then became "the Soupboat", I admit I could barely understand how digital networks worked in practice. I could only see in front of me a small single board computer attached to the network of the school via an Ethernet cable. The setup was accompanied by a so-called "infra-tour" that mapped the technological infrastructure to which Soupboat was connected. This included another much bigger server located in a datacenter in Rotterdam, which also hosted a Wiki, a Jitsi, an Etherpad[2] and the VPN (Virtual Private Network) through which our local web server could be visible from the rest of the internet, bypassing the protected network of the school. I've been told not to worry if all of that wouldn't make sense on the spot. What was essential to understand in that moment was that the little palm-sized printed circuit board was in fact a shared computer which we (my classmates and I) could make use of collectively, that it could be fragile and that it would need to be taken care of by us as a group.
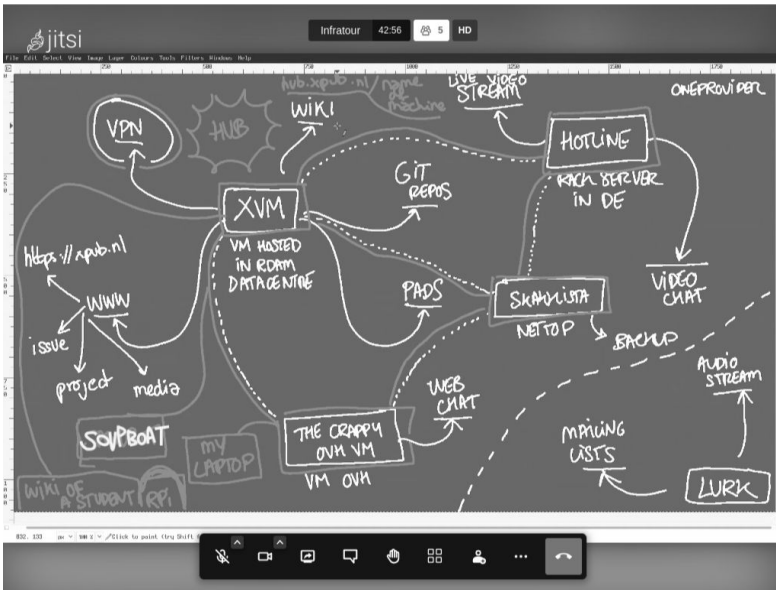
Later on, by learning and practicing some basics of programming, it gradually became clear to me that the answer to the question "what is a server?", would actually call into question the subject-object relation that the use of a server entails, generating more and more questions, tongue twists, and brain teasers like "what is the server for and who decides it?", "who creates the services inside the server and which other services the server relies on in turn?", "who can be served?", and "who makes sure that the server keeps serving?". In relation to such questions the ideas of "collective use", "fragility", and "need of care" began to assume concrete weight and meaning beyond the material dimension of a web infrastructure made of motherboards, cables and fragile electric switches. I slowly recognized how both self-hosting and the use of FLOSS (Free Libre Open Source) software in education, and in the cultural field in general, are also a political choice encompassing the continuous negotiation of collaboration, freedoms and power dynamics. Take for example the massive use in education of proprietary and commercial software like Microsoft and Adobe. Meant to be used in business-oriented working environments or creative industries, they shape a type of learning calibrated on values like optimization, competition, and hyper specialization among others. It should be well known how these huge trans global companies transform schools into markets where "Software as a Service" (SaaS) [3] can be sold as necessary productive tools, going far beyond the scope of pedagogy and learning. Providing totalizing quick solutions to its users, GMAFIA [4] legitimate their products as the best competing innovation. Saas is a model which prevents its users from articulating a systemic and more critical perspective on its digital infrastructure, much less imagining how the latter could be collectively inhabited without having to compromise on the security, the surveillance and the commodification of the users' flow of data.

[3] Software as a Service (Saas) is a centralized model of software distribution based on the Cloud

[4] GMAFIA is an acronym used to refer to the Big Tech: Google, Microsoft, Amazon, Facebook, IBM, Apple

Self-hosting and free software could be a great pedagogical challenge instead. I'm not only talking about the technical knowledge required to run and maintain a web server. When I think for instance of the Soupboat, which now looks like a slow, trouble-making and goofy little critter with its 3d printed clumsy legs, I think of it as a learning and exploratory tool. Yes, it's a very specific type of learning based on code and software, but it is capable of questioning, validating or completely cracking the social reality that

gathers around it, even, and especially, if such reality is not entirely made by individuals with a computer science background or other geeks.

With a bit of attention, the web server is able to reveal and activate the extremely delicate ecosystem of infrastructural relations entangling communities, institutions, and economies on different scales, where power dynamics are constantly negotiated. Differently than SaaS, whenever Soupboat is down, — because of software updates, because the network of the school changed its IP address, because someone would modify its .config file with some errors, because it simply crashed with no apparent reason and the "Is-anyone-in-studio-to-check-if-Soupboat-has-been-unplugged?" would be the SOS message in case of emergency, seeking for the activation of the whole group in order to verify what was the cause of malfunctioning — it would bring visibility not only to its demanding infrastructure, but also to anything else in its surroundings that has established relations of co-dependency with it. When things break and interrupt the flow, it is necessary to slow down, which brings into question the need to take accountability for such relations.

From my standpoint, several important take aways arise from the act of running and, most of all, maintaining independent digital infrastructures. On one level, they have the potential for mediating community awareness through the collective maintenance of such infrastructure as a social shared space, and as a common resource. On another level, the collaborative maintenance of self-hosted free software altogether would facilitate a practical hands-on critique of individualizing commercial tools for a commodified education, thus valorizing a learning process re-calibrated on matters like free cooperation, repair, attention for infrastructural and social well-being, and the practice of agency through constraints. But how to sustain the modus operandi of such critique beyond pedagogy and beyond the boundaries of the educational institution?

Issues of this kind have been largely discussed by artist and researcher Femke Snelting who voices, among others, the urgency of opposing fairer, solidary and feminist technologies to the predatory logic of an internet hegemonized by GMAFIA. In her essay "Infrastructure solidarity" she writes:

"We are trained to expect smooth and seamless on-line experiences that require the kind of deep pockets, longevity and vision that politics chose not to engage with and public institutions fail to provide. It has become near impossible to imagine a different type of life with digital tools, let alone to dream of solidary digital infrastructures that can be collectively owned, maintained and used [...] Infrastructural solidarity only starts with [...][developing] relationships with technology that acknowledge vulnerability, mutual dependency and care-taking." (2019, p, 45-47)
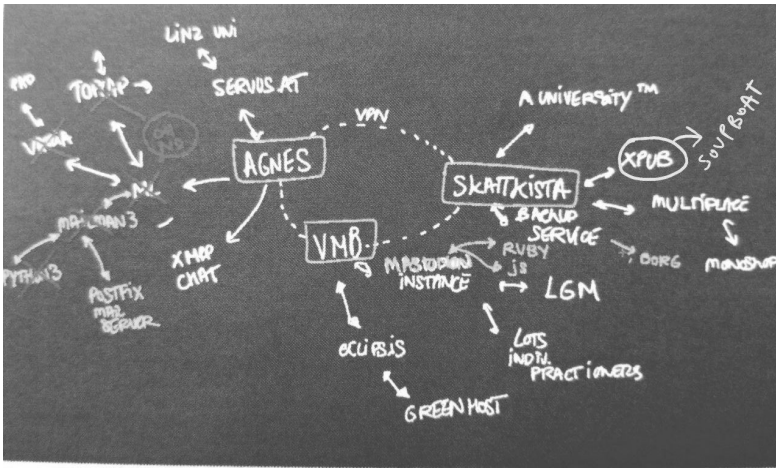
Zooming out from the Soupboat's infrastructure a series of other cultural initiatives appear on the map through their web servers. Running and maintaining independent internet infrastructure in the cultural field is certainly a niche practice, nonetheless there are numerous cultural initiatives who decided to engage in such activity. Their genealogy is the result of different histories from FLOSS (Free Libre Open Source) software to hack labs, from artist-run autonomous spaces to Cyber feminist groups, to name a few; they constitute such a rich and extremely heterogeneous constellation, that grouping them under a commonly accepted umbrella term would be already a great endeavor. Some of the recurring terms used to refer to them are: community network, collective infrastructure, feminist servers, art server, cultural datacenter or even community software. These may be inhabited by figures like activists, programmers, artists, designers, teachers, learners, amateurs, enthusiasts and other cultural workers who try to self-organize in solidarity around the "delicate balance, between becoming a service provider and providing much needed space for other experiences with technology." (Snelting, 2021). Among these initiatives, for example, several Feminist Server Manifestos [5] have been published with the idea of articulating a series of fundamental principles calling in for the creation of safer, situated, and more sustainable digital spaces, like "A feminist server [… T]ries hard not to apologize when she is sometimes not available" (2015)

Yet the effective implementation of these principles more than often conflicts with the actual possibility of being implemented. In practice, it seems really hard to introduce vulnerability, mutual dependency and care-taking as fundamental values for a working environment that is self-organized in the cultural field. These initiatives are embedded into a larger socio-political and economical context characterized by a general rise of the costs of life and by precarious working conditions. Within such reality, the livelihood of solidary digital infrastructure altogether is deeply affected by tighter and gradually more unsustainable relations with cultural funds promoting the financiarization of not-for-profit cultural projects, on top of a huge amount of affective and voluntary labor coming from their already overworked community. Nonetheless, the Feminist Server Manifestos inspired several cultural organization to gather in order to problematize the issues of maintenance and administration, and share practical knowledge around how to self-organize in solidarity without perishing.

Projects of these kinds include, for example, the initiative Digital Solidarity Networks, which "is an online shared listing of tools, practices and readings for digital solidarity"

(Varia, 2020). The Transversal Network Of Feminist Servers (ATNOFS), which "engage with questions of autonomy community and sovereignty in relation to network services data storage and computational infrastructures" (ATNOFS, 2022). And other conversations about "Hosting with the others", like the one that happened in the context of AMRO festival 2022 (Linz), and whose documentation has been published and redistributed in the format of a zine.

In the past months, these works have been of great inspiration for imagining a series of realistic examples of how the little world developed around the Soupboat could exist beyond its institutional and educational bubble. However, the socio-technical realism of those cultural initiatives seems to contradict their good intentions, revealing much of their vulnerability to burnouts and neglect, due to inadequate, if not complete lack of resources to sustain a satisfying infrastructural and social well-being. This brought me to contact some of the cultural initiatives mentioned above, and to join their ongoing conversations with the question: how to practice maintenance while trying to include practices of collective care, in forms of self-organization that deal with free, open source and self-hosted technologies?

Under the guide of Shannon Mattern's writings, I embraced maintenance as "a theoretical framework, an ethos, a methodology, and a political cause" (Mattern, 2018). I started to organize a series of interviews, conversation and collective evaluations, playfully calling them "Boiler inspections", in order to problematize the many difficulties and contradictions emerging from working in solidarity with self-hosting and free software in the cultural field.

The following pages are part of the journal I've been writing along the ongoing process of prototyping and testing different formats of boiler inspection. Taking into consideration the contextuality of each organization as well as the intimate and subjective view that each individual brings to the organization they participate in. The observations collected during the inspections are hereby summarized and organized on the basis of common tropes that I suggest for a more specific zoom-in onto the issue of maintenance: radical administration, caregiving and hacking.

Maintenance as radical administration

27th January, 2023

Only few days ago I was delving into Kate Rich and Angela Piccinini's idea of radical and experimental administration, expressed in the contracted form "radmin". In the introduction to their RADMIN reader (2020), they write about administration and bureaucracy as a central space in participatory art practices, but also as a creative — although boring — and meaningful — although exhausting — work that brings together the struggles of all organizers, accountants, maintainers, administrators and makers. Rich and Piccinini's understanding of radmin "it's not in the workflows or the reporting [... but in] the extra effort implicit in subliminal processes". And while prototyping an initial version of the boiler inspection, I was thinking it would be interesting to capture some of those invisible moments that are so often taken for granted.

As luck would have it, today I have the chance to talk with D., who since very recently has become the administrator of a cultural association in Linz (Austria) called Servus.at, or just Servus, which is involved in different activities including hosting, server maintenance, tech support, artistic research and the organization of festivals.

Servus's digital infrastructure starts from a so called "cultural datacenter" grafted onto the first floor of the Stadtwerkstatt (STWST) [6], also known as "The House", and growing through the whole building where a radio station, a club and a cafè are hosted as well, interconnecting a whole ecosystem of singular users (120), other associations (70), FLOSS software and services developed over time since 1996 (27 years!). Given the circumstances, and the role of my generous interlocutor, this first pilot of the boiler inspection takes the format of a drawing. I ask D to map Servus's technological infrastructure, and to situate the figure of the admin in relation to it, in order to visualize and understand how the "boiler" functions in the first place.

[6] https://stwst.at/
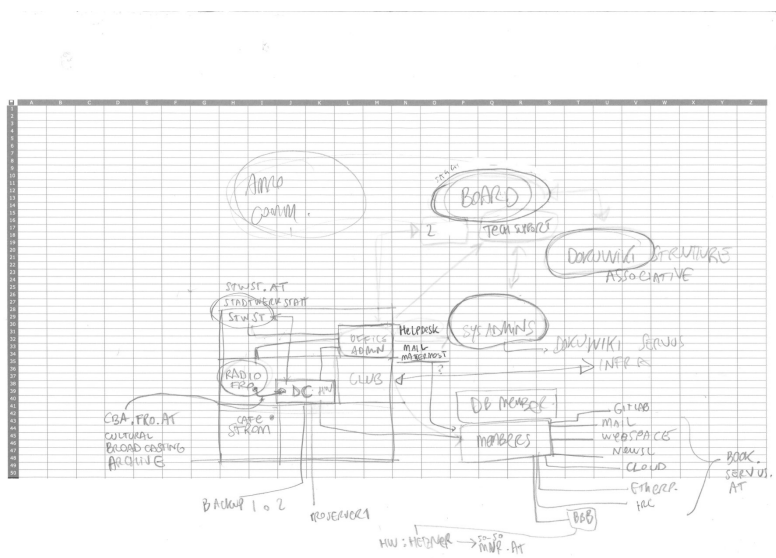
[ ] Map of Servus's "boiler"

While drawing, D comments on how the numbers mentioned above are actually quite impressive for a small independent datacenter — and scary at the same time — especially considering that there are only two sys-admins [7]

[7] A system administrator, or sys-admin, is responsible for the

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taking care of the whole digital infrastrucure. But it is also important to mention that, in parallel to the core team and the Board [8], a series of temporary guests circulating in and out of the building in guise of technicians, residents, collaborators and/or simply friends, are also playing an important role when it comes to determining Servus's actual capacity and workforce. And indeed the map seems to explode in all directions, as if to express the dynamic overcrowding of the datacenter, indicated by a tiny box with the abbreviation "DC".

In the same drawing, the green color indicates the admin's movements through the infrastructure: from the center, the admin's office, it spreads across the whole STWST in a continuous attempt to interface the many and different parties of the whole ecosystem.

Typical dynamics of this role may look like [9]: user member X sends an email to the admin office concerning the malfunctioning of a web service provided by Servus ⟶ the admin attempts to establish a connection through helpdesk with the first sys-admin ⟶ the first sys-admin is currently unavailable for working hours exhaustion ⟶ first attempt of connection failed ⟶ second attempt ⟶ the board is invoked to establish a new connection with the second sys-admin, whom is the only guardian of the keys of the datacenter together with the first sys-admin ⟶ the second sys-admin seems to be responsive and executes a first analysis of the problem ⟶ its resolution is apparently not possible ⟶ the issue is sent back to the admin via helpdesk, where in the meantime other issues have been queued as well ⟶ the admin receives the information ⟶ after a consultation with the board the admin asserts that further action is required ⟶ the second sys-admin proceeds to a second analysis of the issue, this time with an on-site inspection of the datacenter ⟶ a series of switches appear to be broken following an anomaly in the electricity system ⟶ there is a water leakage ⟶ the water leakage comes from a flooded apartment above the datacenter ⟶ and so on and so forth...

After losing track of the endless spiral of queued issues and communication tasks, I ask D if he could tell something about the budgeting process and he replicates the spreadsheet he generally uses to record Servus's entrances and expenses. Even if in this reconstruction the numbers are fictional, they immediately materialize several financial disproportions and related survival difficulties.

For instance, it might happen that cultural grants and public funds dedicated to cultural programs need to be cleverly redistributed in order to secure 1) the coverage of infrastructural costs, 2) an almost-fair-fee [10] for collaborators and participants, 2) and the almost-unfair-wages [11] of the organization's members. It follows that the realization of festivals and other cultural programs is often undertaken in a deliberate condition of scarce resources [12] and financial support.

On top of this, the current rise of energy costs is adding up a good dose of extra worries, and jousting with gray zones between bureaucratic requirements and informal agreements becomes a necessity, in order to make all the loose ends meet at the end of the year. The financial situation could be improved by either increasing the membership fee coming from the users of the datacenter, or increasing the number of users. But in this case the dilemma is that on one hand Servus wants to limit the

management of servers

[8] My personal interpretation of the board is a more or less informal esoteric committee that holds the ancient knowledge of both the organization and the datacenter since their very origins. It is at times contacted in order to seek for consultancy and wisdom in difficult moments or tasks. The core team, instead, is composed by those who are more formally running Servus.at and its digital infrastructure as a cultural association.

[9] Disclaimer: the following description has been dramatized for argumentative purposes, nonetheless it is based on the account of real difficulties that Servus had to face in the past.

[10] Admin jargon

[11] Admin jargon

[12] Admin jargon

excessive rise of fee costs, and on the other hand a bigger amount of users would further contribute to the overwork of its core team.

It seems that independent web infrastructures, in the cultural field, are often embedded within an economy of subsidies and recuperation, which in combination with the uneven distribution of knowledge, obstructs both long term plans and changes in scale. This last point, is indeed another aspect concerning radical administration as a place for experimenting with alternative forms of organization.

Not always it is possible to evenly distribute and circulate knowledge and responsibilities: the use of free software and self-hosting sometimes contribute to crystallize internal roles and power dynamics. For example for the lack of code documentation and the disproportion of technical knowledge among the members of an organization prevents from sharing responsibilities about technical issues, which makes turnover impossible. At times, some members of the organization feel obliged to keep working on the same tasks and, furthermore, the dependency of the organization on their presence and knowledge forces them to volunteer even after they had formally terminated their work at the organization.

In summary, maintaining independent web infrastructures enables an overview on the interweaving of intricate relations of co-dependency and inter-dependency forming their ecosystems. From the point of view of an admin, maintenance has to respond to specific concerns related to the continuous disorganization and re-organization of information and resources in order to better support the survival of the whole organization. And finally, it is worth noticing how the descriptions above only narrate in a procedural way the adding up of a sequence of contingent complications, excluding the emotional side of the admin's experience. And indeed escaping such administrational inertia without burning out seems to be one of the biggest challenges of survival in the cultural field.

I'd like to pay more attention to the neglect of wellbeing in the next boiler inspection, but for now I will close today's journal with a small excerpt from the open letter that artists Salvatore Iaconesi and Oriana Persico wrote last year. Here they report the need of contacting a professional psychologist in order to observe in a systemic way their relational and communicative work:

"For a year we only talked about work: not about ts precarity nor of its absence, but about the struggle of dealing with bureaucracy, calculation, administration, and the violence of cultural farm-like planners, which organizations are pushed to become in their race to grants and funds. Our psychologist was a business cost. For this reason, in our experience the first sustainability to care of is the psychological one. In doing so, we will be compelled to deal with the raw nerves of our societies, down to the marrows" [13] (2022)

[13] my translation from Italian. Original: "Per un anno abbiamo parlato solo di lavoro: non della precarietà o della sua assenza, ma della sofferenza di avere a che fare con la burocrazia, il calcolo, l'amministrazione e la violenza dei progettifici della cultura in cui le organizzazioni sono spinte a trasformarsi nella corsa a bandi e finanziamenti. Il nostro psicologo era un costo aziendale. Per questo,nella nostra esperienza la prima sostenibilità di cui prendersi cura è quella psicologica. Facendolo, saremo costretti ad occuparci dei nervi scoperti delle nostre società, fino ai midolli." (Iaconesi Persico, 2022)

Maintenance as caregiving

March 24th, 2023

Varia is a collective space in the south of Rotterdam that is self-run by a group of artists, designers and programmers dealing with "everyday technology", someone once said, and it is closely connected to the master Experimental Publishing through many of past and present students and tutors of the course. This morning several members of the collective and other friends joined me for a public version of the boiler inspection and now eight people are crumped together inside the small kitchen of Varia, looking at the small storage space where the real boiler is located. We all try to fill up a form without a comfortable surface. The form addresses Varia's socio-technical infrastructure as "the boiler" — wait, which boiler? — which creates a series of funny misunderstandings between the metaphorical and literal meaning of the word every time it is pronounced. A yellow vacuum cleaner is also looking astonished at the whole situation, with its eyes made of paper, as if it would have never expected the presence of other human beings in such a committed proximity to that one square meter, which is normally used to rest in the dark together with other boxes, shopping bags and fermentation jars.

[ ] Boiler inspection at Varia

After a brief introduction, the inspection starts with an initial indexing of the facilities and infrastructural elements in Varia, which allows external people to get acquainted with the space and the kind of activities the collective is involved in.

The form recites:
"The organization uses the following infrastructural elements collectively (select multiple):"
— web server — check;
— meeting/working table — check;
— kitchen — check;

— toilet — check;

— printers — check;

— DIY tools — check;

— open source admin tools (budgeting software, email, spreadsheets…) — check;

— other: zine-rack, cleaning tools, physical and digital library, collective guidelines, electronics depot [14] — check, check, check, check, check and check.

Then the inspection proceeds with questions that gradually concern the verification of sustainability issues eventually present in the collective. For this part, we all move to a more comfortable setup made of a couple of couches around a small table with snacks on it, to better release the tension provoked by the questionnaire.

"Is the current funding model/schema collectively sustainable? (please elaborate)" — no. —
— nope. —
— mmmmmm NO * 1 of the biggest trauma point —
— no, maybe too much relying on public funding? !!! p r e s s u r e p o i n t !!!—
— No. maybe? too much relying on public funding, episode 2 —
— Remains to be seen. Too reliant on public funding. ALERT TRAUMA POINT —
— NO too relying on to public funding ... the biggest pressure point —
— NO. too reliant on public funds... TRAUMA ALERT! ⚠️ —

The full consensus among the answers triggers further conversation on financial sustainability and on how it seems to be the most feared wicked problem. What emerges from the discussion is that the idea of sustainability is not only related to economic survival but also to the extra time needed to support the whole apparatus of specific infrastructural choices, from ways of organizing and collaborating to the refusal of commercial tools and software, which also needs extra time and resources. On top, the time dedicated to the collective is also competing with the one required by the multiple, and often voluntee jobs that members of the collective have, bringing neglect to personal needs as a consequence. This last reflection is emphasized even more by the answers given in the last section of the form, in which it is asked to evaluate some aspects of personal well-being and reciprocal care among other things. The results reported moderate levels of frustration, anxiety and burnout, and high degree of "mental load". The latter, in particular, is a definition that loomed in a previous conversation with one of Varia's members. It indicates the feeling of saturation and overload derived from the adding up of worries and extra time dedicated to work outside of designated hours. In parallel, another previous interview, reported how working with friends and communities might exacerbate mental load and even burnout for the increased emotional attachment that such work inevitably implies.

Overall, the boiler inspection highlights the unsolved puzzle of maintenance in which the cracks in between the 'wants' of a carefully constructed social and technological infrastructure and the 'needs' of its survival still have to be repaired. As Shannon Mattern reminds:

"[a]cross the many scales and dimensions of this problem, we are never far from three enduring truths: (1) Maintainers require care; (2) caregiving requires maintenance; and (3) the distinctions between these practices are shaped by race, gender, class, and

other political, economic, and cultural forces. Who gets to organize the maintenance of infrastructure, and who then executes the work?" (2018)

Interestingly enough, the word maintenance originally means "holding with hands" (from Latin "manu tenere"), support and preserving, recalling an infinitely intimate and caring dimension of touch connecting one's hands to another body. Despite such image, nowadays maintenance rather signifies "holding with handcuffs", enslaved within the gears of technology, efficiency, and security. Along with that, it is necessary to acknowledge that behind the word care resides a long history [15] of misuses and abuses too, through which our ability to care and being cared in our own terms has been gradually disenfranchised. In line with the Care Manifesto, I would like to reconsider the meaning of maintenance oriented within a dimension of care as

"a social capacity and activity involving the nurturing of all that is necessary for the welfare and flourishing of life [... ; including] political, social, material and emotional conditions [allowing] to thrive" (2020, p. 5-6).

As the artist and caregiver Emily King puts it in a presentation of the project "hacking with care", care is about nurturing common goodness and finding a sustainable balance in one's relations with the world, with the other beings in the world, and with oneself as well (2016). She also specifies:

"Care is not defined by a particular set of skills, it has to do with presence, attention, intention" (2016)

In summary, from a caregiving perspective maintenance must be recognized as a form of care and affective labor. Maintenance as caregiving is the training of sensitivity towards the collective struggles that tend to exclude well-being as priority, even within a more emotional and psychological account of the working experience. It is the attention to the boundaries and the qualities of all the relations at stake: when do relations of friendship become working relations? When do relations of care become relations of control, or even of exploitation? And ultimately, it is the support of intentional choices about what needs to be cared, what needs to be repaired and how.

[15] From the tradition of invisibilized women's domestic, reproductive and affective labour, to all kinds of devalued and informal work of preservation and mutual aid, to the financiarization of care including the reorganization of all aspects of life around the interests of financial capital (The care collective, 2020, p.3).

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As of today maintaining as a caregiver remains one of the most difficult tasks that self-organised cultural initiatives have to face, and the very work of caring is still a source of burnout.

Maintenance as hacking

It's early morning of 31st of March 2023.

I found myself at Varia, again, preparing some coffee for a meeting with L., a member of Varia but also of another organization called Autonomic, which we are planning to boiler-inspect together. Autonomic is a cooperative owned by its workers dealing with the hosting, development, training and audits of free software, websites and digital infrastructures. The cooperative supports, in L.'s manners, "nice™ people", which is a shortcut for the intention of collaborating with whoever shares its core values and, most importantly, agrees with the statement "We Are More Important Than The Work" published in Autonomic's handbook. [16]

[16] https://docz.autonomic.zone/s/handbook/doc/we-are-more-important-than-the-work-F6wzI0fUt3

Before commenting on it, though, I would like to give space to a long anecdotal detour, that will hopefully contribute to further situate the reflections written so far, and complement some last thoughts emerging from the interview with L. about Autonomic.

So, I'm now sitting with my coffee, while the Dutch version of The little mermaid's soundtrack is playing from an old audiotape recorder. L. is standing in front of it and is telling me of how someone brought a huge box full of dusty audiotape cassettes a few days before, and how, because of that episode, he discovered they had an old tape recorder, which somebody else in the collective probably brought long time ago and since then it was camouflaging between an audio interface and a beamer. — Anyways, it's gonna be a bit hectic today — says L. changing side of the tape — but feel free to hang around during the meetings and let's try to organize the boiler inspection for Autonomic on the fly. In the meanwhile, a research group from KABK (Royal Academy of the Hague) knocks at the door. L. welcomes them inside, and while entering, one of them comments cheerfully surprised how the space has changed since last time he saw it, and how it seems much cozier now, with the two couches and the tiny table in the center, arranged like a living room. — Yeah, the space often changes, depending on the events, or the needs of whoever comes here to use it — answers L. offering some tea or coffee to B., one of the researchers — oh coffee, please — who later explains to me that during the morning he would have presented his research project on "computing otherwise" within art and design education to the rest of his group. Hopefully a few members of Varia would have helped him with the presentation, and would have introduced their artistic practices in relation to their local server, as what he sees like a living example of a community that collectively develops and maintains their own internet infrastructure, and therefore as source of inspiration for the group's research project. And indeed another member of Varia shows up at the door, but in fact he is intented to meet another artist together with L., in order to provide her technical support for yet another project with local servers and trees. A woman appears behind the glass of the entrance. Both L. and D., the last person who entered, hurry to open the door thinking she is the one they were waiting for, but when she introduces herself she turns out to be looking for M. instead (another member of Varia), with whom she agreed to meetup later on, but she was unexpectedly early. The little mermaid is still playing in the background. One of the researches notices it: "wait, is it the little mermaid playing in the background?". The question creates even more confusion, which allows

me to sneak away from the previous conversation and reach the newcomer, who I actually knew to be a guest of the master Experimental Publishing, and while inviting her to join for the coffee, I also let her know she is indeed in the right place, regardless of the other two hosts' hesitation. The researchers arrange a big meeting table on the other side of the room. and The little mermaid is stopped by L.. In the meanwhile, the missing characters M. — the other member of Varia — and S. — the artist of the local servers and trees — arrive too and join the table. Finally the presentation starts, with great surprise of B, who didn't expect the presence of a much larger public outside his research group — but I guess this is what happens when you are in an open space like this — he comments. Open for who? I'm wondering, but B. already talks about his desire of installing a local server that the students of the academy could use according to their own needs, host their communal website, for example, instead of relying on the institutional one, and a series of other projects inspired by open source principles. — is this a dejavu? — M. kindly conduces the group through the contents of Varia's server using the command line. She demonstrates the many digital tools that the collective is using like Etherpads, Wiki, and a publishing software that would turn HTML pages into PDF files. As the presentation unfolds slide after slide, and command after command, the facial expression of the others starts to contort as if all of a sudden a labyrinth full of rooms and corridors and stairs, each with its own peculiar function and style, materialized inside Varia, which until few minutes ago appeared to be a simple v-shaped room on the ground floor, with huge windows facing the street. Even M's terminal doesn't match at all with the usual imagery of a hostile dark window on the screen with bright monospace characters, but it is instead a colorful and extremely playful interface, much more inviting. As inviting as the soup that a few moments later we cook together on a small electric stove, and which two members of the Woonstad group, who enter the space in that moment to use Varia's printers for their flyers — There's soup in the kitchen! — enjoy as well.

Eventually, the whole bustle of planned meetings resolves into a serendipitous combination of encounters, in which the interests and the purposes of those present this morning are exchanged within a chaotic, yet pleasurable, dynamic. The experience of these moments certainly enables a feeling of commonality that is perhaps a fundamental aspect for the livelihood of self-run cultural organization like Varia. The simple fact of *being* in the same place at the same time creates already unintentional assemblages of stories, intentions, and values which juxtapose organically, creating unique conditions for participating to a shared reality. Without being rehearsed, that shared reality just manifested itself as the most natural unfolding of a series of events in sync with each other: M has met her guest during the research group's presentation, which was about the setup of a local server, same object of interest of the artist who came to meet L. and D., with whom I'm finally having a conversation about Autonomic, while eating a collectively cooked soup.

The morning spent at Varia, and the Boiler Inspection with L. make me reflect on a more generous and expandend image of maintenance as a "collective endeavour" (Mattern, 2018), in which self-organization is able to activate a "process [...] of joint action, of creating things together, of cooperating to meet shared goals", which scholars and activists David Bollier and Silke Helfrich described as commoning (2015). In parallel, Silvia Federici defines the production of commons as "the creation of social

relations and spaces built in solidarity, the communal sharing of wealth, and cooperative work and decision-making" (2019, p. 183). When it comes to digital networks, the practices related to the maintenance of socio-technical infrastructure could surely be candidates for a model of commoning, but in fact they often struggle to fully accomplish their project due to their entanglement with a as larger as suffocating socio-economic reality, dominated by the logics of efficiency, competition and extraction. While productivity and profit are normalized expectations, the difference between "working-with" and "working-for" remains obfuscated, threatening to turn these practices into a huge dead-end endeavor. In other words, "Commoning involves so much idiosyncratic creativity, improvisation, situational choices, and dynamic evolution that it can only be understood as aliveness." (Bollier, Helfrich, 2016), yet it would be naive to believe in such aliveness as an automatic result of commoning. Helfrich picks up from the work of the political economist Elinor Ostrom, emphasizing how "[h]er question was not whether people want to cooperate, but rather how to help them do so" (Helfrich, 2015) ". It is indeed important to be wary of the full package this commoning comes with. As observed in previous boiler inspections, in self-organized cultural initiatives aliveness is often wrapped into so many layers of inter-personal frustration, financial instability and dependency on other institutions that it might eventually suffocate in its own box before the delivery time.

Now, I would like to bring the attention back on Autonomic as a cooperative model. While talking with L., we go through the same questionnaire used for the previous boiler inspection with Varia, and some of the main points of discussion are the pros and cons of working with others according to a series of principles that put at the center the freedom of cooperating, the well-being and the autonomy of the group. He explains how central is defending the cooperative's own financial and infrastructural autonomy from technology industry. However, maintaining such freedom is not always so easy. In Autonomic, they need to be flexible in order to capture the so called "apply wind" of leads, open calls and funds, which makes them vulnerable to precarity too. However, it seems that by pushing forward their values through their webpages, and with their statement "We Are More Important Than The Work, Autonomic managed to be surrounded by "nice™ people". Their handbook and their statement "We Are More Important Than The Work", take the next step in constituting an entry point for an unapologetic negotiation of their desired working conditions. It is indeed vital for them to recognize how refreshing it could be to chose their own collaborators, and to work on projects that they find meaningful, even if this implies a chaotic and at times overwhelming process.

We Are More Important Than The Work

We are against the rampant burn-out, puritanical self-judgement, and stress in the technology industry.

When we are isolated and panicked, we can only make progress by sacrificing our health and our happiness.

We must take care of ourselves, and each other, to be able to do our work sustainably.

Capitalist organisations under-value wellness, running workers ragged and then casting us aside when it becomes cheaper to find a replacement.

We consciously look for the scars left in our psyches from working under these predatory conditions, and we ask for each other's help in rooting out the boss within ourselves.

No threats. No "performance reviews".

We approach critical feedback sensitively and thoughtfully, starting in private wherever possible.

These principles are more important than our commitment to our client work, and even the administrative work of keeping autonomic running.

We hope that we will always have the capacity to keep our word and meet our deadlines but if this is ever in conflict with our personal or collective wellness, we will have to choose ourselves and each other.

[] Autonomic.zone We Are More Important Than The Work

Here, I would like to suggest a more optimistic idea of maintenance, that is rooted in the discourse of commoning practices, but also in the tradition of hacking practices as well. The hope is that of bringing back joy and playfulness as fundamental values into the issue of what needs to be maintained and how. Gabriella Coleman extensively wrote about how hackers have built a practice of pragmatic and technical production that would playfully and experimentally turn a system against itself (Coleman, 2013, p.98-99). Similarly, the internet activist Jèrèmie Zimmerman proposes, in collaboration with Emily King and the collective Hacking with Care, a definition of hacking that reflects Coleman's writings:

"[Hacking is an] emancipatory practice of humans versus systems or tools. It is a systemic approach where you have to understand the whole box in order to be able to think outside of it [...] It is a set of ethical values; it is the free flow of information; the free sharing of knowledge; and it's about enabling others to participate"(2016)

Behind the frustrations and pleasures of both hacking and maintaining perhaps reside much deeper freedoms: the possibility of expressing and sharing practical knowledge, of creating a safer and common social space, of collaborating in a sustainable way beyond the coercion of scarcity and precarity, and of allowing the conditions for a joyful practice.

In closing, I would like to propose a definition of maintenance as a playful reworking of the statement n. 70 made by McKenzie Wark in her "A Hacker Manifesto":

"To [maintain] is to express knowledge in any of its forms. [Maintainers'] knowledge implies, in its practice, a politics of free information, free learning, the gift of the result in

a peer-to-peer network. [Maintainers'] knowledge also implies an ethics of knowledge open to the desires of the [maintaining] classes and free from subordination to commodity production. […] When knowledge is freed from scarcity, the free [maintenance] of knowledge becomes the knowledge of free [maintainers]." [17] (2004)

[17] The original recites: "To hack is to express knowledge in any of its forms. Hacker knowledge implies, in its practice, a politics of free information, free learning, the gift of the result in a peer-to-peer network. Hacker knowledge also implies an ethics of knowledge open to the desires of the productive classes and free from subordination to commodity production. [...] When knowledge is freed from scarcity, the free production of knowledge becomes the knowledge of free producers."

An approach beyond survival

April Fool's day, 2023

That we are living in time of crisis it is no surprise, as well as there's no wonder in saying the current status quo is precarious and no longer sustainable. It's actually been a while that the emperor has been going around with no clothes. Of course, we can all laugh about it. But even if more and more people started noticing that majestic nakedness and got used to it, to the point that is no longer a scandal, there is something that remains uncanny about this image, something awkward that a simple smile cannot undo. I'm wandering what would have happened if only Andersen's tale wouldn't have stopped there, and perhaps this is a worthy exercise of imagination: what would have been the reaction of the peasants after the laughter had gone? How to deal with such a realization?

Now, while the emperor keeps walking followed by his retinue of ministers, nobles and other crooks, it doesn't really matter if what we look at is a metaphor for a specific form of power structure, capitalism, that is loosing its legitimacy. What matters is that this capitalism, in its multiple forms, has created an incredibly interwoven network of dependencies and dominations which is threatened to collapse at every moment, thus creating a generalized condition of precarity and violence. Even by denouncing the situation those conditions wouldn't automatically change, so here it comes the big dilemma: am I playing dumb and joining the emperor's entourage or am I facing precarity? And if the latter is the case, how to survive? From my writing perspective, I'd like to think of that collective laughter as a symbol that the folklore encoded in order to point out towards the diversity of survival strategies, turning the awkward image of nakedness into an ironic opening of possibilities. Here, maintenance could be proposed as a lens to traverse and observe the many scales and dimensions of those possibilities.

The everydays struggles experienced within the niche practices of self-organizing in solidarity with independent web infrastructures in the cultural field exceed a one-size-fits-all definition of maintenance. As such they should be interrogated through a situated observation rooted in the specific context of each of these cultural initiatives. The boiler inspections have been, so far, a helpful methodology for such inquiry, through which ways of maintaining are collected and shared, within a playful and metaphorical space.

Through the journal in this thesis, I reflect on these methods of maintenance as contradictory: they only partially work if considered in their relation to the larger context of financiarized cultural production. In parallel I describe maintenance as integral to the practice of the radical administration, of a caregiving and of a hacking, in order to organize common tropes within the chaotic chain of systemic implication and complications intersecting organizing, infrastructuring, resourcing, care-taking, curating, creating and collaborating in autonomy. The provided ideas of maintaining as a radmin, a caregiver, and a hacker do not expect to provide an exhaustive analysis of the concerns of maintenance, but rather propose, in their combination, an approach that could point towards the need of maintaining livelihood, wellbeing, and solidarity beyond the mere survival of their material, social and technological conditions. Certainly, as an

extremely valuable form of vital knowledge, maintenance deserves to be further investigated both theoretically and practically along with other forms of commoning practices in (not only) the cultural field, and to be supported with more appropriate policies and funding models.

Finally, I would like to suggest a list of starting points to instigate further considerations:
• Maintenance is situated within...
• Maintenance is distributed across...
• Maintenance is a systemic ...
• Maintenance is sensitive to ...
• Maintenance changes through scales of...
• Maintenance is a form of practical knowledge open to ...
• Maintenance is a form of reactive care responsive to...
• Maintenance is labour, and it calls for the same rights of the worker
• Maintenance is a shared social space for …
• Maintenance is the commoning of …
• Maintenance is contradictory and therefore …
• Maintenance is ...

References

Bibliography

VV.AA., *A Transversal Network Of Feminist Servers*, ATNOFS, 2022
Coleman E.G., *Coding freedom. The ethics and aesthetics of hacking*, Princeton University Press, 2013
Constant, *Are You Being Served? (notebooks)*, edited by Anne Laforet, Marloes de Valk, Madeleine Aktypi, An Mertens, Femke Snelting, Michaela Lakova, Reni Höfmuller, Constant, Brussels, 2015
Federici S., *From Crisis to Commons: Reproductive Work, Affective Labor and Technology, and the Transformation of Everyday Life*, in Federici S., *Re-enchanting the World. Feminism and the Politics of the Commons*, PM Press, Oakland, 2019
Helfrich S.,*Patterns of Commoning: How We Can Bring About a Language of Commoning*, in Bollier D. Helfrich S. (Editors), *Patterns of commoning*, The Commons Strategies Group, Amherst, Massachusetts / Jena, Germany / Chiang Mai, Thailand, 2015
Piccinini A. Rich K., *Radmin Reader*, Feral Business Research Network, 2020
The care Collective, *The care manifesto: the politics of interdependence*, London, Verso, 2020
Wark M., *A Hacker Manifesto*, Harvard University Press, 2014

Zines

AA.VV. *Hosting with*, AMRO festival, Linz, 2022
Varia, *Digital solidarity network*, Rotterdam, 2021

Web publications

Autonomic.zone, *We Are More Important Than The Work*, URL: https://docz.autonomic.zone/s/handbook/doc/we-are-more-important-than-the-work-F6wzI0fUt3 (last access, April 13, 2013)
Iaconesi S. Persico O., *L'insostenibie inefficienza del calcolo*, 2022, URL: https://docs.google.com/document/d/1Vb9_sQvMDUYqwL-R48WM8HDRxdw-6_6FDKZWOxuNkkM/edit#heading=h.mikpo8fyarb8 (last access February 27, 2023)
King E., **Zimmerman J.**, *Hacking with Care*, URL:https://hackingwithcare.in/about-2/ (last access April 12, 2023)
Mattern S., *Maintenance and Care. A working guide to the repair of rust, dust, cracks, and corrupted code in our cities, our homes, and our social relations*, in *Places Journal*, 2018, URL: https://placesjournal.org/article/maintenance-and-care/ (last access April 12, 2023)
Bollier D., **Helfrich S.**, *Patterns of commoning*, 2016, URL: https://www.onthecommons.org/magazine/patterns-of-commoning (last access March 30, 2023)
Snelting F., *Infrastructure Solidarity*, Ardeth, 2021, URL: http://journals.openedition.org/ardeth/2194 (last access October 30, 2021)

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Colophon

Other info about the publication:

The title has been inspired by the project Hacking with Care
https://hackingwithcare.in/

You can find the publication online as well and print it at home:
https://project.xpub.nl/hacking-maintenance-with-care/home.html

The design is made with Pagedjs by Coko (https://pagedjs.org/), and it uses some default elements from the browser DuckDuckGo. It might slightly change or break completely when downloaded from different browsers ;)

TYPEFACE:
Fluxisch Else

This work has been produced as part of the graduation research within Experimental Publishing (XPUB), a two year Master of Arts in Fine Art and Design that focuses on the intents, means and consequences of making things public and creating publics in the age of post-digital networks.
https://xpub.nl

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