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Research Question

What possible pathways and perspectives exist for the evolution of graphic design towards a more liberated practice that fosters creative autonomy and open collaboration, freestanding from systems of economic dominance?

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Foreword

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For almost as long as I have been a graphic designer, student and professional, I have always struggled to find appropriate resources and tools that didn't cost me a month's salary. I was always told *Apple* are the best machines for a graphic designer, the colours are just so much better. The *Adobe Suite* is a must-have, how else would you design logos or book layouts, or even animate? Beyond the question of resources, there is the notion of copyright. Plagiarism was always a huge affair, a term thrown around gratuitously for even the slightest resemblance such as choice of fonts. When I initially learned about the term *libre*, I was at a design book fair, when a graphic designer started telling me about how he used a program called *Ether2html* to design his books. This free program allowed him to design layouts using *HTML* and *CSS*. From there started a long trip down a rabbit hole of *Wikipedia* articles, *GitHub* repositories and niche websites that led me to small design communities I had no knowledge of before, and something clicked.

Libre or *free* software provides users with the freedom to use, study, modify, and distribute it as they see fit. Libre graphics is a term derived from the latter, encompassing practices, standards, tools, file formats and creative works in the areas of visual arts such as graphic design, illustration, typography, photography, animation or video.¹ There is a distinction between *free* and *libre*. While the terms are often used interchangeably, as it is of common appreciation that the underlying principles remain the same, they have slightly different connotations. In this paper, I will mostly be using the term *libre*. Although my choice of terminology may be partly based on my cultural and linguistic biases, I believe that libre is driven by more principle and emphasises its ethical and social implications. Beyond being legal frameworks and economic models, *libre* and *open-source* are philosophies. Even though these concepts have been largely adopted in certain communities, particularly by developers, it remains "*a niche within a niche*"² in the graphic design community. This can be partly explained by the complex dynamic between graphic design as a work of artistic value protected by copyright, and libre graphic design that is redefining the creative field with its collaborative and non proprietary approach. This begs the question: *what possible pathways and perspectives exist for the evolution of graphic design towards a more liberated practice that fosters creative autonomy and open collaboration, freestanding from systems of economic dominance?* From the movements that shaped libre culture as we know it today to the transformative potential of libre graphics, this paper will provide the beginning of an answer to this question.

A *broad* definition of the *free-culture* movement

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A broad definition of the free-culture movement

↳ The foundations of free-culture

↳ Defining free-culture

The free-culture movement is a social movement and subculture that advocates for free access to works of the mind, as well as the freedom to distribute and modify them in the form of free cultural works.³

Free-culture defends the idea that copyright should not infringe upon fundamental freedoms, and that the free circulation and reappropriation of creations contribute to cultural enrichment. Technological innovation, and more specifically the advent of the *World Wide Web* have enabled more and more people to access, create, modify, share or even publish various types of works. The free-culture movement can be defined as a set of communities that have formed to put into practice these new possibilities and create a wealth of collectively reusable cultural works. The definition of free-culture is fluid, and although there is no universal definition, there are a number of fundamental principles associated with it:⁴

Free distribution and circulation: Free culture advocates for free circulation of works without restraint, via licences and frameworks that allow creators to specify the conditions of use, modification and sharing. *Access to knowledge:* It challenges barriers that hinder access to knowledge and information, encouraging their diffusion. *Open collaboration:* It encourages collaboration, exchange of ideas, and the pooling of resources through the creation of sharing communities, collaborative projects, and networks of mutual support. Works referred to as *libre* or *free* are works that can be freely studied, used, copied, and/or modified by anyone, for any purpose. They may include certain acceptable restrictions that uphold or safeguard these essential freedoms. A free cultural work is defined by four essential freedoms:⁵

“Freedom to use the work for any purpose, freedom to study and apply the knowledge acquired, freedom to copy and distribute copies of the work, freedom to modify and improve the work, and to distribute the derived versions”.

³ ↳ *What does a free culture look like?*
Students for Free Culture

⁵ ↳ *Definition*, //freedomdefined.org/

⁴ ↳ *Free Culture : How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, Lawrence Lessig, 2004

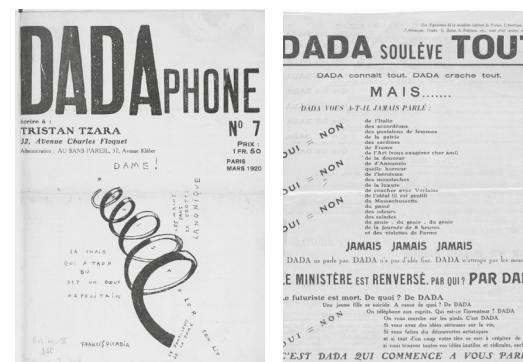
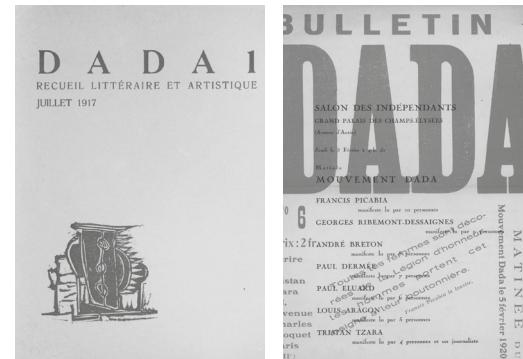
These freedoms guarantee to each link in the chain of the work's distribution, from the creator to the final user, freedom to get involved in the creative process, and allows free and open circulation of knowledge. It is difficult to pinpoint the exact starting point of free-culture, as it is vast and applicable to many fields. Its roots lie in various earlier movements and philosophies that laid the foundations for free access and the circulation of knowledge. However, three major influences can be identified.

↳ 20th century *Avant-Garde* art movements

Avant-garde art movements from the early 20th century, although not having explicitly worked on open collaboration, set a precedent for more creative freedom with their experimental approaches. Thus, they anticipated certain fundamental principles of free-culture, by encouraging collaboration. *Dada* and *Surrealism* are two movements marked by a spirit of collaboration, particularly in the creation of publications such as manifestos and journals. The *Dadaists* experimented with the collage of text and images, while the *Surrealists* used automatic writing techniques to challenge traditional publishing conventions. One example is *Dada journal*^{fig.1}, a collaborative publication born in Zurich in 1917, which involved contributions from artists such as Hans Arp, Marcel Duchamp and Tristan Tzara. The name *Dada* is very telling, since it was chosen for its comprehensible pronunciation in a vast number of languages. Tzara himself said,⁶

“I was with some friends, looking up a word in a dictionary to match the sounds of all the languages, and it was almost dark when a green hand laid its ugly hand on the page of the Larousse — with a precise indication of dada — and my choice was made”.

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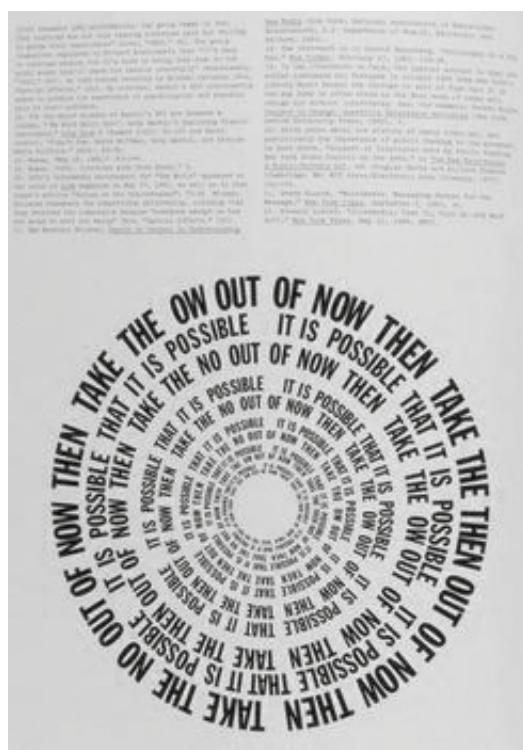


→fig. 1, from left to right, top to bottom, *Dada Journals 1, 6, 7, Dada manifesto*, courtesy of MoMA

↳ At the intersection of californian
countercultures and technology

Today, California's *Silicon Valley* is the epicentre of exponential technological development and unbridled capitalism, a testament to the economic wealth generated by the trade in proprietary software. It is of an ironic contrast, then, that between the sixties and seventies, this same location was the birthplace to a number of countercultures. The prevalent ones such as the *Hippie* movement and the *Beat Generation* were characterised by a rejection of prevailing cultural and social norms, but above all of traditional power structures. It is hardly surprising that these alternative communities, which sought to create spaces for free creative expression through music, art and lifestyle, strongly galvanised the founding projects of free culture.

At the intersection of emerging utopias in californian communities and information theories such as cybernetics lies an idea of a world organised as a complex “*energy-matter nexus*”, individuals, populations and environments intertwined in permanent exchanges.⁷ The emerging figure of this philosophy in the context of technology and free-culture is Stewart Brand. He frequented the *USCO*, short for *Us Company or the Company of Us*^{fig.2 fig.3}, an artists’ collective, as well as the *Merry Pranksters*, a group of beatniks fond of psychedelic trips who saw LSD as a political experiment to deepen introspection and imagine an alternative way of life in harmony with nature.



→fig. 2, USCO art in Walker Art Center's exhibit catalogue for *Hippie Modernism: The Struggle for Utopia*



→fig. 3, USCO's Tabernacle, New York, 1967,
photo by Michael Callahan

6 L.*Archives Dada: chroniques*, Marc Dachy, 2005

7 L *From Counterculture to Cyberculture*,
Fred Turner, 2006

His encounters crystallised this philosophy in him through the *Whole Earth Catalog*^{fig.3}, first a travelling store and then an alternative catalogue bringing together resources and tools to promote individual self-emancipation through self-learning. The catalogue has fostered the emergence of an open, inquisitive community, challenging established systems and paving the way for new forms of social and cultural organisation. The catalogue is a space of idea exchange, from bookkeeping to rubber dinghies ^{fig.4}, bringing nomadic communities together in one single network.⁸

The concept of networks was fundamental to Stewart Brand. In 1985, with the help of Larry Brilliant and other hacker and activist groups, he created the *Whole Earth Electronic Link*, better known by its acronym the *WELL*. It was one of the first virtual communities, hosted on a central computer. Users could connect via a modem to participate in discussions and share ideas, thus positioning the *WELL* in opposition to the traditional network systems at the time, which were more focused on services and technical features. By creating this open, community-based discussion space, Stewart Brand not only participated in the avant-garde of free-culture, but also that of the *World Wide Web*, making him one of its first architects.

↳ Computers can *change your life* for the better

Across the country on the east coast in Massachusetts, one could find the *MIT*'s artificial intelligence labs. Large scale scientific computers such as the *IBM 704* or the *TX-0*^{fig.5} were renowned for their computing power and ability to run complex programs, but the minds working on those machines created something more powerful than programs simulating human conversations, they developed an immensely influential ethic.

The hacker ethic is a set of unspoken concepts and values that unite its adopters in their desire to make information accessible, in order to cultivate knowledge and foster creativity. Their ideal is an open system that anyone can diagnose and improve. The hacker ethic follows 6 principles according to Steven Levy⁹→

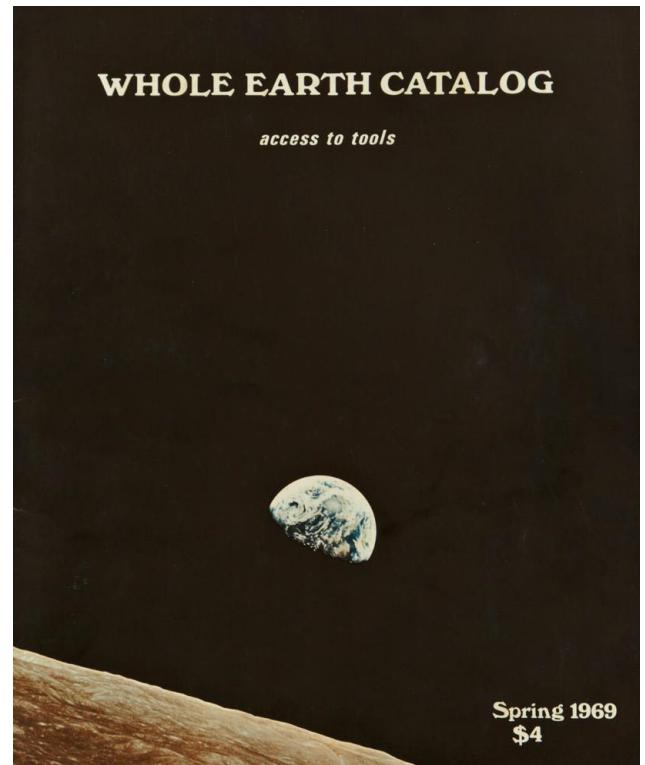
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- “ 1. Access to computers – and anything which might teach you something about the way the world works – should be unlimited and total. Always yield to the *Hands-On Imperative* !
- 2. All information should be free.
- 3. Mistrust Authority – Promote Decentralization.
- 4. Hackers should be judged by their hacking, not bogus criteria such as degree, age, race, or position.
- 5. You can create art and beauty on a computer.



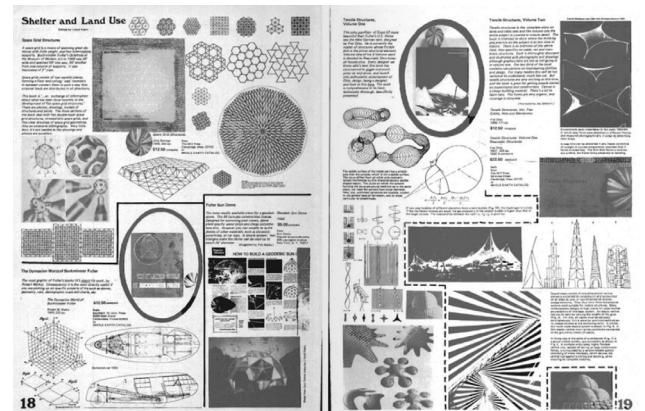
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→fig. 4, *Whole Earth Catalogue*, 1969, photo by Ben Roth

6. Computers can change your life for the better."



→fig. 5, Inside the Whole Earth Catalog, 1969



→fig. 5, TX-0 Computer, 1956, photo by Hewlett-Packard Company

The hacker ethic's boundaries extend beyond the digital space, in the shape of *Hackerspaces*.¹⁰ These collaborative spaces where hackers come together to work on projects, are catalysts for pushing the boundaries of technological creativity. A notable example is the *Chaos Computer Club*^{fig.6} in Germany, which was founded in 1981 and has become one of the world's largest hacker collectives, advocating freedom of information and transparency in technological systems. They describe themselves¹¹ as:

“a galactic community of life forms, independent of age, sex, race or societal orientation, which strives across borders for freedom of information.”



→fig. 6, Wau Holland and Steffen Wernery from the Chaos Computer Club, Berlin, 1981, photo by Werner Baum

A broad definition of the free-culture movement

Ultimately, hacker ethics and hacker culture are based on openness, collaboration and knowledge sharing. Hackers challenged traditional ideas of intellectual property and restricted access to information, valuing the free circulation of ideas and the development of technology.

↳ Philosopher, programmer

↳ In the beginning there was software

In 1980, back at *MIT*'s artificial intelligence labs, an encounter between a *Xerox* printer and a man named Richard Stallman was the starting point for the immensely influential movement of free software. Stallman, having been immersed in the lab's hacker culture, had a habit of modifying the software of various machines, including the previous printer. He had modified its source code in order for it to electronically message a user when the job was printed or jammed. The new printer however, was equipped with software with restricted access. Stallman's frustration turned into a growing realisation that this incident was not an isolated one but a symptom of a larger problem, a world increasingly dominated by proprietary software that restricts user freedom.¹²

The free software movement laid the foundations of free-culture in a context where confidentiality and copyright clauses were multiplying in software creation. Stallman envisioned a world where individuals could collaborate and contribute to the development of software, unshackled by the limitations of proprietary systems. In 1983, he founded the *GNU Project (General Public Licence)*, and later the *Free Software Foundation*. *GNU* is a series of free software licences that grant the user the rights to modify the source code without legal constraints, thus cancelling exclusive rights. It guarantees the four essential freedoms that were instrumental in shaping the free-culture ethos discussed earlier. Initially, Stallman had expressed two¹³:

“The word “free” in our name does not refer to price; it refers to freedom. First, the freedom to copy a program and redistribute it to your neighbors, so that they can use it as well as you. Second,

¹⁰ ↳ <http://Hackerspaces.org/>

¹¹ ↳ Chaos Computer Club //ccc.de/

¹² ↳ *Free Software, Free Society: Selected Essays of Richard M. Stallman*, 2002

¹³ ↳ *GNU's Bulletin*, Volume 1 No.1

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the freedom to change a program, so that you can control it instead of it controlling you; for this, the source code must be made available to you.”¹⁴

Later on, he added a third, the freedom to study the software, and finally a fourth, the freedom to run the program. His vision for free software extended beyond the technical aspects, it was a philosophy of collaboration and empowerment.

“Every generation has its philosopher—a writer or an artist who captures the imagination of a time. [...] Our generation has a philosopher. He is not an artist, or a professional writer. He is a programmer. Richard Stallman began his work in the labs of MIT, as a programmer and architect building operating system software. He has built his career on a stage of public life, as a programmer and an architect founding a movement for freedom in a world increasingly defined by code.”¹⁵

— Lawrence Lessig in the foreword of *Free Software, Free Society: Selected Essays of Richard M. Stallman*

↳ The divergence of open source

Open source software, or open source architecture came from the free software movement itself. It gained momentum in the late nineties, but the term itself was coined in 1998 by members whose beliefs were no longer aligned with those of the movement. They were critical of the moral and political agenda implied by free software, and wanted a more commercially minded alternative.¹⁴ They aimed to find a new term that could resonate with the business world and promote the practical benefits of freely sharing and collaborating on software development. Thus, open source was born.

A broad definition of the free-culture movement

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There are some differences between open source and free software, notably new limitations in open source licences. Derived works must be distributed under the same terms as the licence of the original software. Furthermore, the licence can restrict source-code from being distributed in modified form. In fact, the licence must explicitly allow free distribution of software built from the modified source code. A new addition is also the right to use non open source software or code, and modified versions are not obligated to also be open source.¹⁵

However, the legal differences are minimal. The split seems to mostly be based on diverging philosophies. Stallman rejected the alternative term, as it did not convey the value of freedom that free software had. In his words,

“Free software is a political movement; open source is a development model.”

Despite its creators' best efforts, open source has never managed to supersede free software. Instead, a combined term for free and open source software emerged, *FOSS* (free and open source software) or *FLOSS* (Free/libre and open source software). Regardless of the tensions between the two communities, the free and open source ethos continues to inspire communities and individuals to freely share knowledge, build upon existing work, and collectively create.

↳ From third space, to cyberspace

↳ Design beyond the confines of industrial secrecy

The *Maker* movement first appeared in the United States at the turn of the new century. It appeared at the intersection between free-culture and libre software, and the *Do it Yourself* movement. Makers aim to create their own market ecosystem by developing products, either from scratch or by tinkering with existing ones. Their craft typically revolves around electronics, 3D printing, or even more traditional activities such as woodworking or metalworking.¹⁶

The *Maker* movement and the open design movement are intimately connected. In essence, the open design movement consists in developing products, machines or systems by publicly shared design information.

¹⁴ ↳ Goodbye, “free software”; hello, “open source” //crafthub.org/~esr/open-source.html

¹⁵ ↳ The Open Source Definition //opensourceinitiative.org/

¹⁶ ↳ The Maker Movement, Maker Faire

Ronen Kadushin ^{fig.7}, initiator of the movement, says in his manifesto ¹⁷: “*A revolution in product development, production and distribution is imminent due to the Internet’s disruptive nature and the easy access to CNC machines. Open Design is a proposal to make this happen. Its aim is to shift Industrial Design to become relevant in a globally networked information society.*”

These subcultures gave rise to third spaces ^{fig.8} such as *Makerspaces* and *Fablabs*, akin to *Hackerspaces*. A third space is a physical or virtual space that is distinct from home (first space), and work (second space), that serves as a social, collaborative, and creative meeting point for individuals and communities.¹⁸

“Displaying conviviality, intergenerational transmission and strong potential for invention, these places, which were quickly coined “third spaces,” emerged as sympathetic and welcoming spaces.”¹⁹

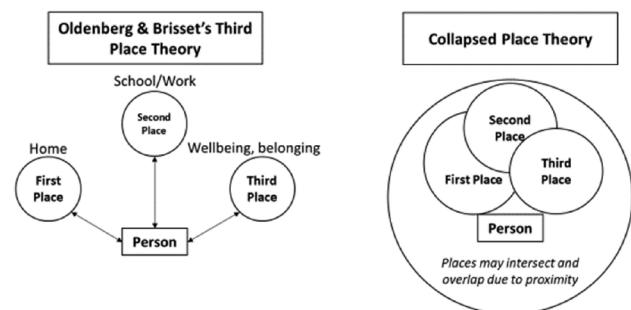
This concept highlights the importance of these intermediary spaces in shaping social dynamics and supporting community engagement, starkly opposed to the closed dynamics of industry. The philosopher Pierre-Damien Huyghe defines industry as a “*production method consisting of layers successively added in such a way that the final layer, that of the ultimate appearance, while covering the first, allows its influence to pass through, in other words, secretes it in both meanings of the word. Simply put: it keeps it a mystery, a secret.*”²⁰

By disrupting traditional production models, the emergence of collective creative practices within amateur and *Hobbyist* communities operate to reinvent industrial capitalism. These creative and manufacturing activities can be defined as the most advanced expression of new production logics, and offer a form of production that is open, free and decentralised. In particular, they have given rise to digital manufacturing, by offering an environment conducive to collaboration, knowledge transfer and innovation, conveying through these emerging third spaces promises of freedom.

16 17



→fig. 7, Flatveld chair, Ronen Kadushin, Open Design, 2010



→fig. 8, Third Space Theory Diagram

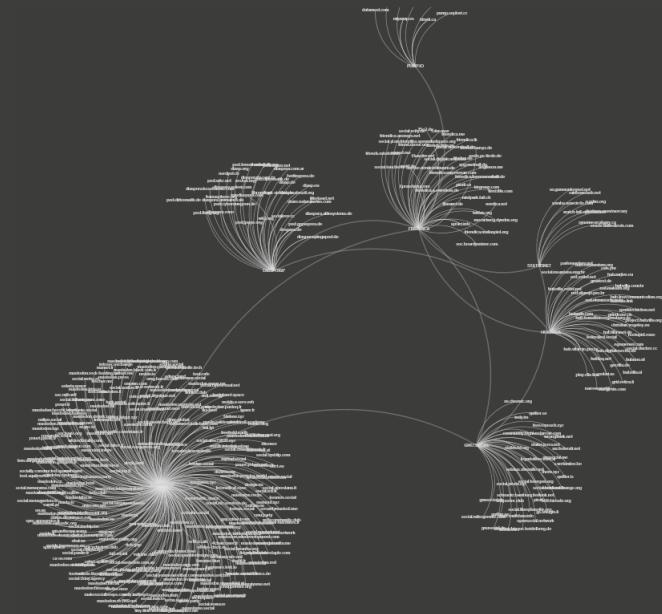
↳ Virtual spaces for collaboration

“Open-source architecture is an emerging paradigm that advocates new procedures in imagination and formation of virtual and real spaces within a universal infrastructure.”²¹

It leverages digital platforms and collaborative tools to create collective design efforts and knowledge exchange. Geographical barriers dissolve as enthusiasts from around the world engage in collaborative exploration, utilising networked environments to facilitate creation processes.

The open source architecture model contributed to the emergence of an ensemble of independently hosted federated servers that communicate with each other known as the *fediverse*²², a contraction of federation and universe. In the *fediverse*, each instance operates independently, devoid of a central authority.²³ Two prominent examples of *fediverse* platforms are *Mastodon* and *Diaspora**. Both *Mastodon* and *Diaspora** exemplify the ethos of the *fediverse*, enabling users to escape the confines of centralised social media and engage in a more open, customisable, and community-driven space. *Fediverse* platforms are instrumental to the development and sustainability of libre initiatives by empowering their users through knowledge sharing and collaboration. They enable the collective improvement of libre initiatives and methodologies. For example, the libre graphics collective *Libre Graphics Meeting* has its own server on *Mastodon*.²⁴ The platform serves as a hub for exchange and amplifies their visibility by uniting a supportive community of libre graphics creators.

18 19



→fig. 9, The graph of the fediverse, Liaizon Wakest

The *libre* graphics revolution

20 21

↳ An assessment of libre tools and frameworks

↳ Free culture extended to *graphic design* through legal frameworks

The expansion of free-culture from software to a wider field of application is in large part due to Lawrence Lessig. Lessig is an American political activist and lawyer specialising in constitutional and intellectual property law. In his book *Free Culture*⁴, Lessig applies the philosophy of free software to culture and information, explaining that the media uses laws and technology to confiscate culture and control creativity.

“There has never been a time in our history when more of our “culture” was as “owned” as it is now. And yet there has never been a time when the concentration of power to control the uses of culture has been as unquestioningly accepted as it is now.”

—Lawrence Lessig

Lessig applied this philosophy when founding his biggest project in 2001: *Creative Commons*. This non-profit organisation created a set of legal licences that offer a practical solution for creators who wish to share their works while respecting their rights and encouraging collaboration. Through this flexible alternative to traditional copyright regimes, creators can specify the conditions of use of their works, while granting users more extensive rights than those conferred by standard copyright. CC licences provide a legal framework that reinforces the principles of free-culture, as they facilitate access to creative resources, enabling designers and users to engage in free design practices and explore new forms of expression.

The CC licences are modular, consisting of four specifications that one can mix and match, resulting in seven different possibilities for licensing creative works.²⁴ The four specifications, along with their corresponding pictogram, are defined as follow:

 BY → *Credit must be given to the author*

 SA → *Adaptations must be shared under the same terms*

 NC → *Only noncommercial uses of the work are permitted*

 ND → *No derivatives or adaptations of the work are permitted*

The *Creative Commons* organisation defines the resulting licences as:

CC0²⁵

Allows creators to give up their copyright and put their works into the worldwide public domain, allowing reusers to distribute, remix, adapt, and build upon the material in any medium or format, with no conditions.

CC BY²⁶

Allows reusers to distribute, remix, adapt, and build upon the material in any medium or format, so long as attribution is given to the creator. The licence allows for commercial use.

CC BY-SA²⁷

Allows reusers to distribute, remix, adapt, and build upon the material in any medium or format, so long as attribution is given to the creator. The licence allows for commercial use. If you remix, adapt, or build upon the material, you must licence the modified material under identical terms.

CC BY-NC²⁸

Allows reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only as long as attribution is given to the creator.

CC BY-NC-SA²⁹

Allows reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only as long as attribution is given to the creator. If you remix, adapt, or build upon the material, you must licence the modified material under identical terms.

CC BY-ND³⁰

Allows reusers to copy and distribute the material in any medium or format in unadapted form only, and only so long as attribution is given to the creator. The licence allows for commercial use.

CC BY-NC-ND³¹

Allows reusers to copy and distribute the material in any medium or format in unadapted form only, for noncommercial purposes only, and only so long as attribution is given to the creator.

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These licences were enumerated from least to most restrictive. Although it is plain to see that the ones closer to the bottom of the list have little resemblance to the libre culture ethos, it is important to note that Lessig's intent in creating the Creative Commons was above all to allow freedom and flexibility to creators. In fact, he coined the phrase "*Some Rights Reserved*".²⁵ His goal was to counter increasingly restrictive copyright rules by offering reasonable and flexible copyright:

"Too often the debate over creative control tends to the extremes. At one pole is a vision of total control — a world in which every last use of a work is regulated and in which "all rights reserved" (and then some) is the norm. At the other end is a vision of anarchy — a world in which creators enjoy a wide range of freedom but are left vulnerable to exploitation. Balance, compromise, and moderation — once the driving forces of a copyright system that valued innovation and protection equally — have become endangered species."³⁰

Through its least restrictive licences, the *Creative Commons* framework created a previously nonexistent ecosystem that encourages open and collaborative creativity.

↳ All Rights Reversed

Richard Stallman popularised the term *Copyleft*^{fig.10}, a legal framework that encompasses various copyright licences. The particularity of *Copyleft* lies in two essential adjectives: protective and reciprocal. Slightly less permissive than libre licences, they demand that derived works must also be released under a compatible *Copyleft* licence. *Copyleft* is based on a fundamental principle that while everyone is free to benefit from others' prior work, any modifications to that work should also be shared with the broader community under the same terms, ensuring equal benefit for all.²⁷

An important *Copyleft* licence emerged at the issue of a meeting named *Copyleft Attitude*^{fig.11} in France in 2000. The *FAL*, or *Free Art Licence*, advocates for the principles of *Copyleft* such as the freedom to use, copy, modify and distribute works, while safeguarding creative works by prohibiting exclusive ownership or appropriation. The following statement is made regarding the *Free Art Licence*: “*While the public's access to creations of the human mind usually is restricted by the implementation of copyright law, it is favoured by the Free Art License. This license intends to allow the use of a work's resources; to establish new conditions for creating in order to increase creation opportunities.*”²⁸

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→ fig. 11, Antoine Moreau, “La tête à Toto au mur Saint Martin”, 2010

“In 1984 or 1985, Don Hopkins (a very imaginative fellow) mailed me a letter. On the envelope he had written several amusing sayings, including this one:

“Copyleft—all rights reversed.”

I used the word “copyleft” to name the distribution concept I was developing at the time.”²⁹

— Richard Stallman

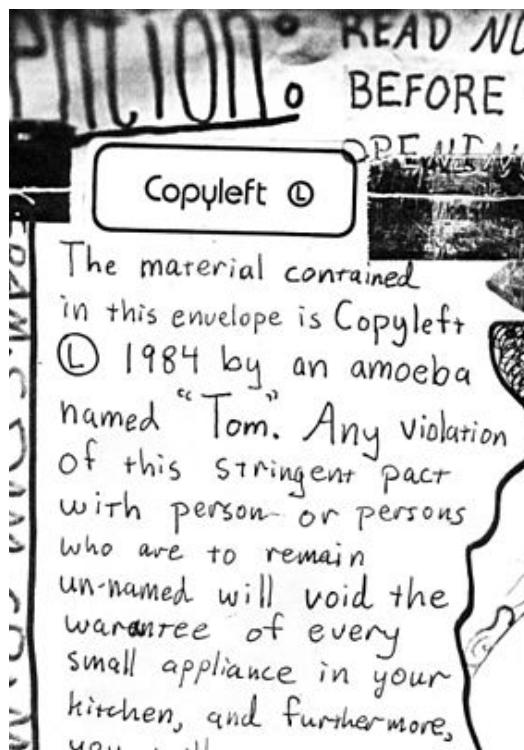
↳ Libre vs proprietary software

In the graphic design industry, softwares play a significant role in shaping creative workflows. The proprietary software landscape for graphic design is dominated by a few major companies, with *Adobe* at the forefront, establishing itself as the industry standard. *Adobe* was founded in 1982 as a programming language that would print on screen designs exactly as they appeared called *PostScript*.²⁸ After building a typeface library, the founders, John Warnock and Charles Geschke focused on desktop software, giving way to the names we know so well today such as *Photoshop*, *Illustrator* or *InDesign*.

“Adobe has become so ubiquitous in their software, that it has become a verb on its own: *Don't like the picture? Just photoshop it.*”²⁹

Adobe's market dominance is a double edged sword. As the industry leader, its software suite offers cutting-edge features for creatives that few third party programs can match. Unfortunately, this monopoly creates dependency from users, and establishes it as a requirement. This dependency on a single company for critical software stifles autonomy. As a result, designers often find themselves locked into *Adobe*'s ecosystem, forcing them to conform to its proprietary formats and workflows. Furthermore, designers become accustomed to specific toolsets and creative processes, a phenomenon which David Gerwitz aptly names “*the value of a muscle memory monopoly*”.³⁰ In his article, he describes how challenging it is to switch to alternative software or platforms when one is accustomed to *Adobe*'s creative suite. This ultimately limits creators' flexibility and autonomy.

Adobe's hegemony gives the illusion that in order to be a graphic designer, one must use, and therefore pay for its software. This creates a barrier for aspiring graphic designers, as the high costs that come with using this software is extremely discouraging and prohibitive, in turn accentuating class inequality. This lack of accessibility prevents diversity and inclusivity in the design industry. The cost of *Adobe* software is not just a hindrance for aspiring graphic designers. Its subscription-based economic model



→fig. 10, Scan of the back of the envelope with the “Copyleft” sticker, mailed from Don Hopkins to Richard Stallman, 1984

28 ↳ [The GNU Project // gnu.org](http://gnu.org)

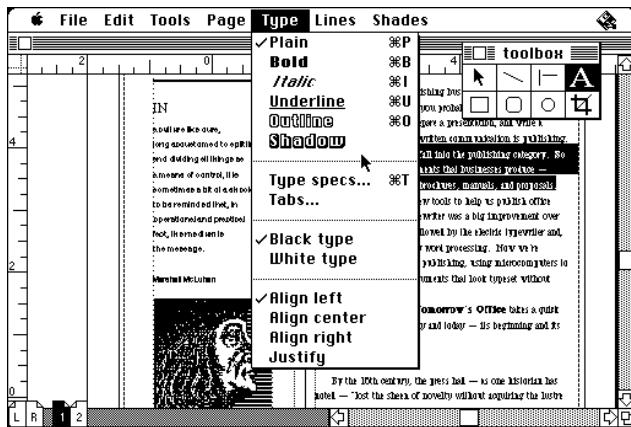
27 ↳ [Copyleft Attitude FAQ // artlibre.org](http://artlibre.org)

28 ↳ [Free Art License 1.3 // artlibre.org](http://artlibre.org)

29 ↳ [Adobe's Monopoly on the Creative Industry, Tyler Haynie](#)

30 ↳ [Like it or not, Adobe Creative Cloud has a monopoly on our muscle memory, David Gerwitz](#)

places a financial burden on designers, especially freelancers and small businesses, who must continuously pay to access design tools that, as we have seen before, are deemed required and essential to their practice.



→fig. 12, Screenshot of Aldus PageMaker desktop publishing software, in Postscript, 1987

It is becoming increasingly clear that designers should be aware of the implications of relying solely on proprietary software. Exploring alternatives like libre and open source software opens the doors to a more diverse, accessible, and inclusive design landscape. Naturally, the libre design movement seeks to challenge this monopoly through libre software and frameworks. When interviewed by Anthony Masure for Strabic, the graphic design collective *Open Source Publishing* stated,

“In contrast to the standardised proprietary software industry, these open tools provide for in-depth study and modification, mostly in collaboration with the community: we believe it’s important to have an intimate relationship with our tools.”³¹

When looking for alternatives to the *Adobe Creative Suite*, one can find a fierce opponent to each of its emblematic softwares.

Photoshop // GIMP ↗

GIMP, for *GNU Image Manipulation Program*, is a pioneer in the libre design software landscape. It offers a wide range of advanced image editing features that are comparable to *Photoshop*. It supports multiple file formats, layers, masks, filters, customisable brushes and various selection tools, allowing users to perform tasks such as retouching photos, creating digital artwork, and designing graphics. Its flexibility allows for a vibrant community of developers and contributors to continuously improve the software. Many plugins, resources and documentation are created and shared by its active and supportive community.³²

Illustrator // Inkscape ↗

Inkscape is an open source vector graphics editor. With its intuitive interface, it provides all the necessary features for illustration, logo design, and any precise scalable artwork.³³

InDesign // Scribus ↗

Its layout and typesetting features rival those of *InDesign*. As a desktop publishing application, it allows designers to create documents, magazines, books, and work with advanced typography and colour management for printing.³⁴

26 27

These examples are just the tip of the iceberg when it comes to libre and open source design software. Their strength lies in the active communities surrounding them, who offer support, improvements, and learning tips. The libre approach encourages experimentation and creativity, empowering designers with a sense of ownership over the design process in order to push the boundaries of graphic design.

³¹ [Visual Culture, Open Source Publishing. Git et le design graphique](#), Anthony Masure, Strabic

³² [GIMP //gimp.org](#)
³³ [Inkscape //inkscape.org](#)
³⁴ [Scribus //scribus.net](#)

↳ Reclaiming tools as a form of empowerment

↳ Tools for conviviality

Before discussing tools, it is important to analyse the underlying ideas, concepts, and cultural references that shape the design and functionality of today's technological devices and systems. Machine, in its Latin form *Machina*, designates invention and machination, in other words, everything related to ruse and deception. Our relationship with technology today is one of aesthetics and interfaces. In the past, it was an instrument of domination, both over others and over our environment. It is perhaps this change that explains the semiology behind the design of today's technologies. Since the beginning of our century, we have been seeking to subvert the traditional codes associated with the machine. We seek to hide the mechanisms, and in a way, we are no longer masters of machines because they no longer need to be understood. Thus, the interface becomes a layer and a mask for digital technologies.³⁵ It is a border between the symbolic human world and the calculated digital world. This vision of our relationship to machines using the imagery of layers explained by Henri Bergson harkens back to Pierre-Damien Huyghe's definition of industry discussed earlier. *Machine, Industry* and *Innovation* are essential concepts to analyse when trying to assess the influence that the tools we use have on us. Stéphane Hugon suggests we redefine innovation to take better account of these new questions and challenges. In his words, innovation is "*the capacity of an object to be appropriated by a group of people who will use it*".³⁶

In his book written in 1973 *Tools for Conviviality*³⁷ , Ivan Illich argues that we as a society need to develop new instruments in order to reclaim practical knowledge. Illich wanted to "invert the present deep structure of tools in order to give people tools that guarantee their right to work with independent efficiency." According to him, convivial tools are those that enhance human capabilities and initiate self-reliance, cooperation, and freedom. They are designed to be accessible, adaptable, and under the control of individuals and communities. Through this concept, he stressed the importance of shifting from a society of excessive consumption and dependency on complex systems to one that promotes human agency and autonomy. Libre graphics and libre design software place themselves in direct continuity to the concepts developed in Illich's book. We could use his definition and say that libre designers entertain convivial relationships with the tools they use.

28

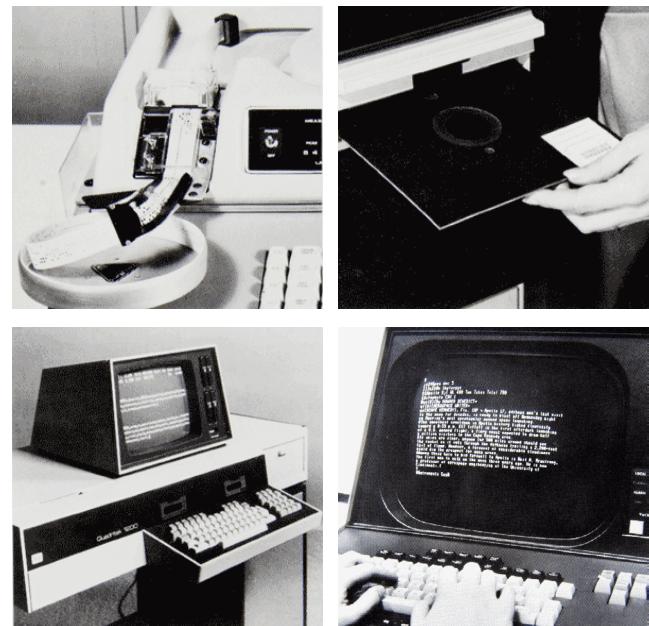


→fig. 13, *Tools for Conviviality*, Ivan Illich, 1973,
Harper&Row

+

“Today’s creation largely depends on digital tools. Far from being a neutral means to an artistic achievement, those tools are actually opinionated: they carry values and are full of conventions about the way things “ought” to be done. To us, a greater awareness of the role of digital tools is—if important to everybody—crucial in the education of artists and designers. Instead of means, the soft- and hardware tools can become partners to consciously think and converse with, to question and interrogate and to clash with. And because (visual) creation is so tightly coupled with technological development, a larger awareness of these tools can help one speculate about future practices and invent the tools to support them.”³⁸

29



→fig. 14, Magnetic tape process and text composition on Monophoto Intertype, from Typogabor

Around the same time, Vera Molnár, a trailblazing artist in the field of computer-generated art, co-founded a research group named *Art et Informatique*. She started exploring the possibilities of using algorithms and computer code to generate artworks. Part of the artistic movement *New Tendencies* that started in Zagreb, she embraced technology, also coined “*the thinking machine*”, as a tool for creative

³⁵ ↪La machine dans la philosophie de Bergson, Caterina Žanfi, 2013

³⁶ ↪L’aboutissement de la technologie et sa propre disparition, Isabelle Musnik

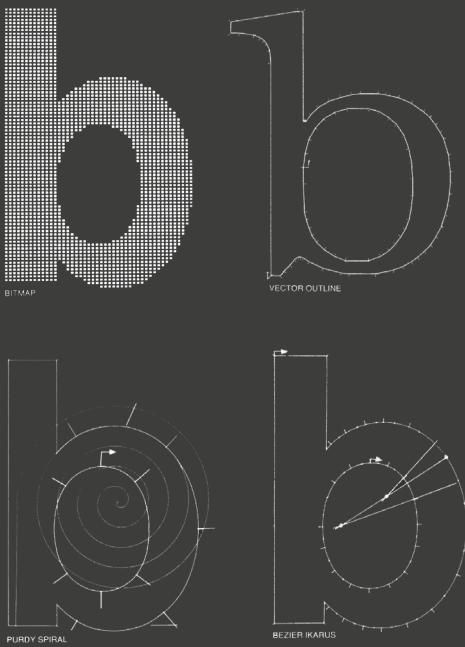
³⁷ ↪Tools for Conviviality, Ivan Illich, 1973

³⁸ ↪About Considering Your Tools, Libre Graphics Research Unit

³⁹ ↪Production graphique pour les graphistes et designers, la typographie à l’ère de la photocomposition, Peter Gabor

↳ A new *creative process*

Understanding and manipulating libre design software has made designers more active and autonomous *vis-à-vis* of the norms and limitations imposed by proprietary software. However, many graphic designers have taken this approach a step further, through a practice known as creative coding. The history of graphic design is tightly linked to programming and computer technology. In the late 1960s, phototypesetting machines^{fig.14} which were used to create printed text for newspapers or other publications, started incorporating microcomputers.³⁹ This innovation replaced their complex analog systems, allowing the machines to process digital fonts and characters.^{fig.15}

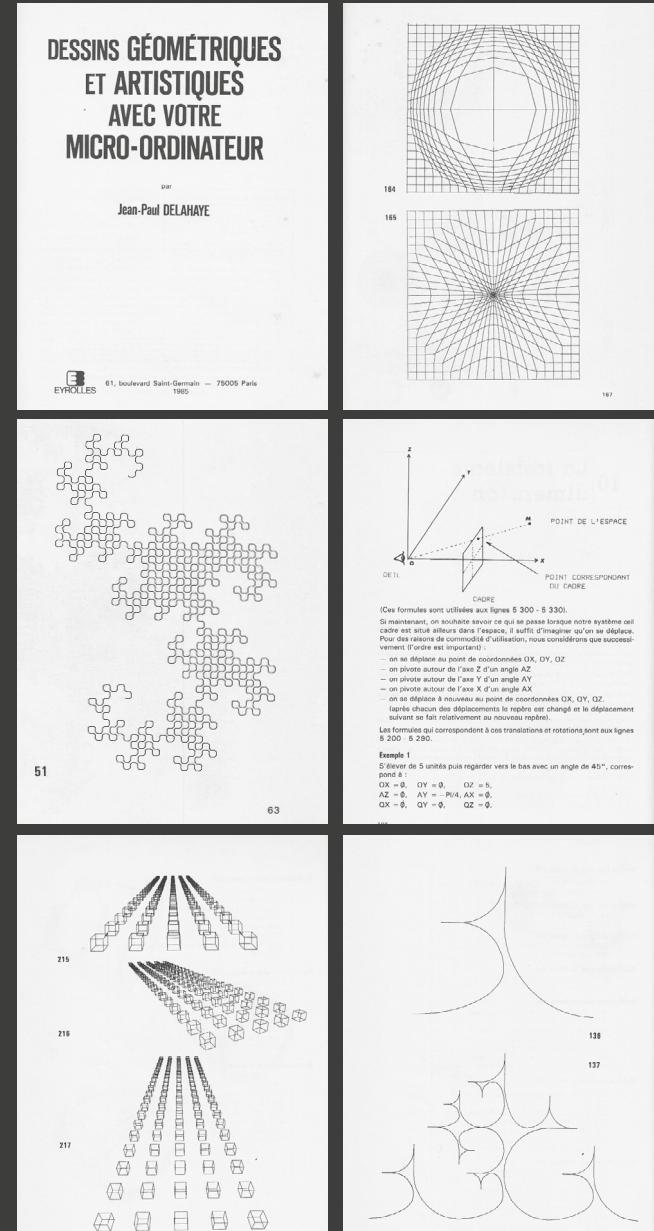


→fig. 15, Evolution of digital glyphs, by Typogabor Blog

expression.⁴⁰ With the arrival of terminal displays, artists started to experiment with drawing instruments like the plotter or cathode ray tube display traditionally used for data visualisation.⁴¹ In his book *Dessins Géométriques et Artistiques avec votre Micro-ordinateur*⁴² published in 1985, french mathematician and computer scientist Jean-Paul Delahaye details methodologies to create graphics using *Microsoft Basic* and drawn using a plotter.⁴³ This book is a testament to the strength of computer art, as its techniques transcend generational barriers. Delahaye's programs were recoded in *p5.js*, and are accessible on *GitHub* for creators to use. Julien Gachadoat is one of those creators, combining monochrome geometric shapes and using repetition to create generative graphics.⁴⁴

The field of graphic design as we know it today is born from this convergence between computer programmes, the personal computer, and the graphic interface. The first software programs that made programming easier to master, because they were designed for graphic production, date back to the mid-nineties. *Flash*, released in 1996, played a pioneering role in this respect, combining a graphic interface with programming capabilities.⁴⁴ →fig.17 →fig.18

30 31



→fig. 16, Extracts from *Dessins Géométriques et Artistiques avec votre Micro-ordinateur*, Jean-Paul Delahaye, 1985

40 ↗A Little-Known Story About a Movement, a Magazine, and the Computer's Arrival in Art, Margit Rosen, 2011

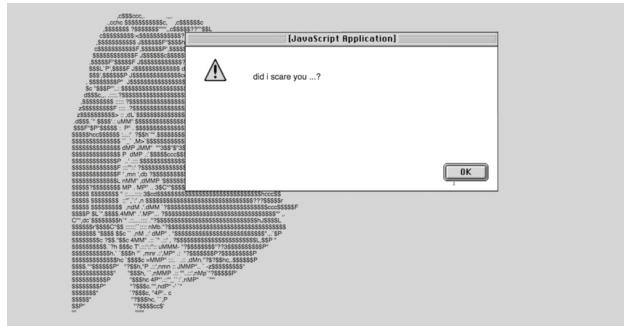
41 ↗History of Computer Art -- Part I: Computer Graphics, Sher Minn Chong

42 ↗*Dessins Géométriques et Artistiques avec votre Micro-ordinateur*, Jean-Paul Delahaye, 1985

43 ↗Portfolio, Julien Gachadoat //v3ga.net/

44 ↗Graphisme en France n°28, 2022, CNAP

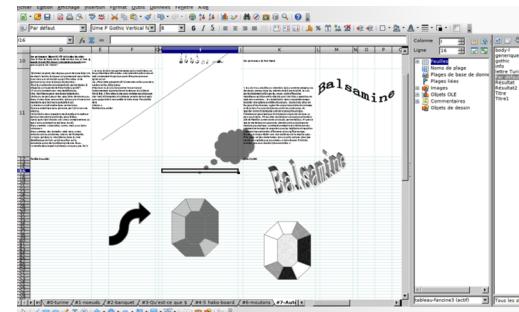
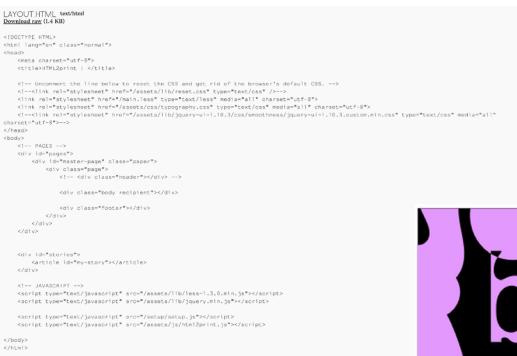
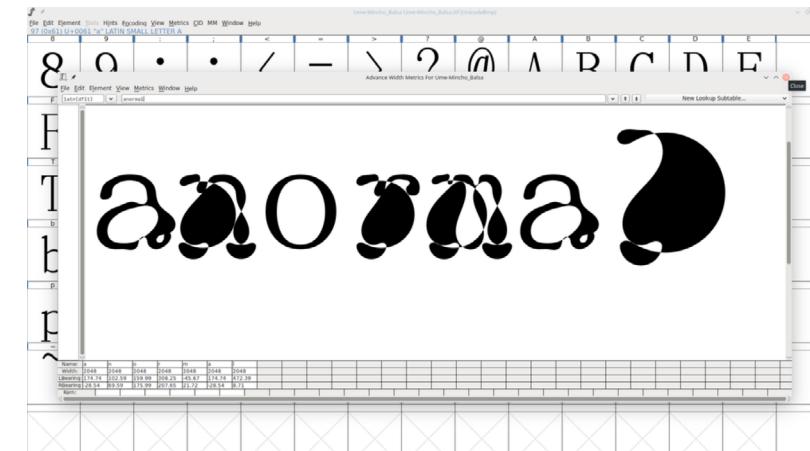
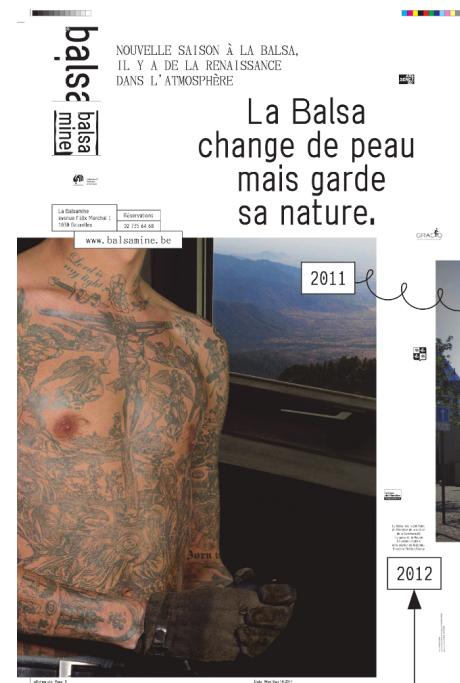
However, more influential and long-lasting than *Flash*, is *Processing*. This software created in 2001 created big waves in the graphic design community. It contributed to the growing interest from graphic designers for the web, by expanding graphic composition possibilities on this new publication space. One of its creators, Casey Reas, says about *Processing*, “*We saw a potential for learning how to code in a more essential and foundational way—that was really the vision of Processing. I don’t really think that was happening at the time. Instead of, to say it in a really crude way, dumbing down coding so designers can understand it, we thought designers and artists and architects can really do a great job with this. It just needs to be presented to them in a way that is motivating for them and engaging. And the web was just extremely essential. The idea that you could export your work, throw it up on a server, and anybody who had a network connection anywhere in the world could see it. Putting the code people have made right there, so everybody can access it and share and learn, was something we picked up from the browser automatically allowing you to view HTML.*”⁴⁵



32 33

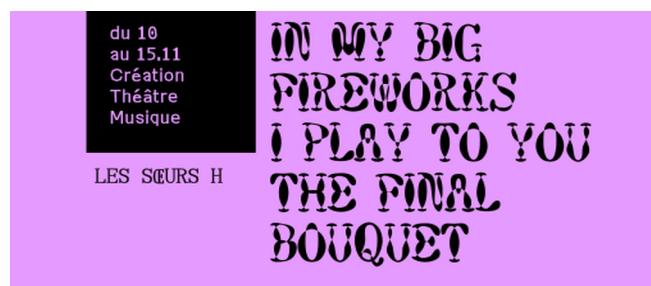
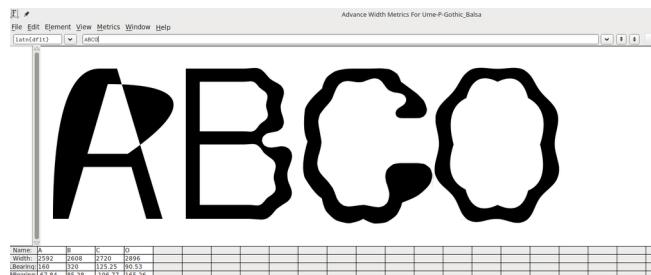
→fig. 17, Greyscale Paradise, designed with Flash, 1999 by Hi-ReS!
© Alexandra Jugović

With this approach, graphic designers no longer use systems to design graphics, but design their own graphic systems. This subversion of standard creative processes is gradually creating new unique forms of graphic creations. Kévin Donnot wrote in his article “*code = design*” for *Graphisme en France* that there is a strong link between the homogenisation of design software and its use and that of graphic design works.⁴⁶ By experimenting with code, graphic designers discover new configurations that had not been visible before. The emphasis is on the process, as is explicitly the case for *LUST*, a dutch studio specialised in libre graphics and creative coding research.



"In our studio, form is the direct result of a process."⁴⁷

These new processes are particularly visible in a growing experimental technique known as *Web to Print*. Web technologies such as *HTML*, *CSS* and *javascript* are increasingly being used for the layout of printed publications. A pioneer of this print publishing movement is *Open Source Publishing*, also known as *OSP Kitchen*. Through radical experimentations with digital tools and design, they have developed programmes and frameworks for *Web to Print*.⁴⁸^{fig.19} The most prominent example is *HTML2print*, a tool for designing documents that allows for a visual feedback of the printed output, while being code based.⁴⁹^{fig.20}

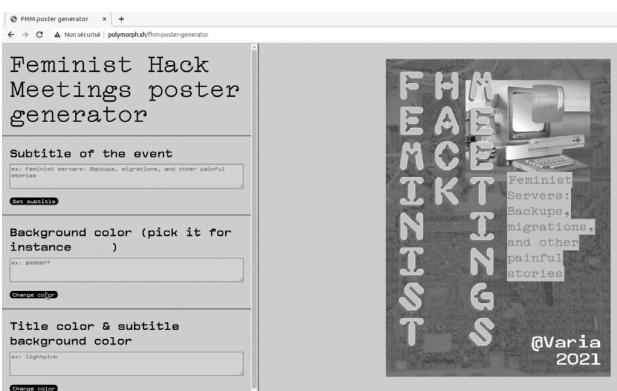


→fig. 20. Visual Identity for Balsamine Theatre by OSP Kitchen, using *HTML2print* and creative coding, 2020-2021, more inside the fold

A few years ago, I was lucky enough to participate in a workshop organised by PrePostPrint, a group of designers who experiment with the Web to Print technique to reimagine printed objects through the prism of collaboration, libre culture, and accessibility.

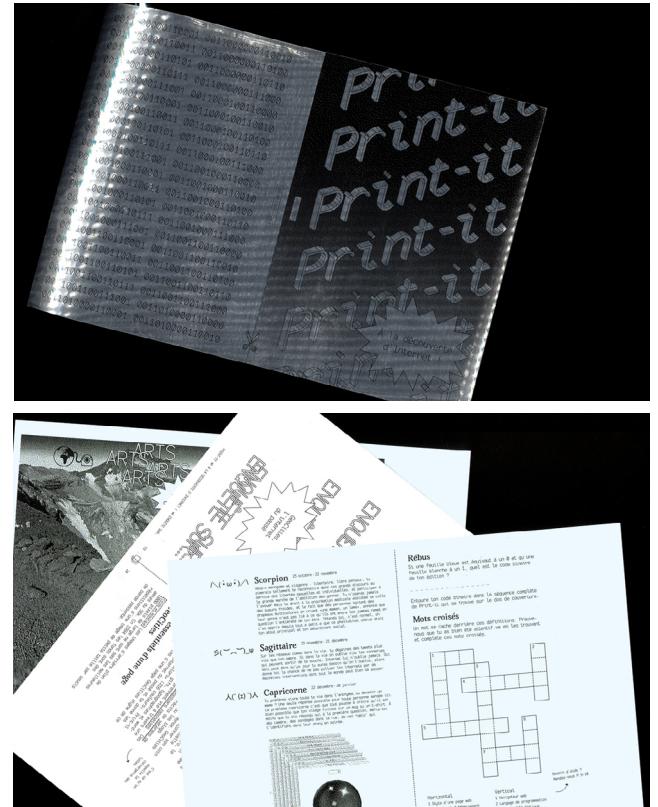
The graphic object is crafted within an experimental or unusual approach with alternative, hacked or *DYI* tools, made in a certain context constrained by its economy, its emergency or its collaborative nature.⁵⁰^{fig.21}

During the workshop, they explained the *CCS-Print* technique, which we used to print their new publication, *OP007: Print-it, let's discover the Internet!*⁵¹^{fig.21} directly from a click of a button on their website. By using *CSS*, they designed a layout that transcended traditional creative codes of publishing. By randomising graphic elements such as glyphs and text placements, each person printed a unique printed object. In doing so, we as readers became actors in the making of the publication, by printing and binding it, and were able to explore in a very tangible way the creative potential of interactions between paper and digital. A similar initiative was offered by Amélie Dumont for the *Feminist Hack Meetings* in 2021 in Rotterdam. She programmed a *HTML* poster generator⁵²^{fig.22}, through which participants could modify and generate new versions from the basic pattern.⁵³



→fig. 22. Feminist Hack Meetings poster generator by Amélie Dumont, 2021, @ameliedumont@mastodon.social

34 35



→fig. 21. *Print-it, let's discover the Internet!*, Morgane Bartoli, Corentin Moussard, 2019

Designers who use code to generate graphics not only broaden the creative possibilities of their work, but also allow other people to contribute to their designs to enrich them. The *Bonjour Monde* collective has designed and shared small programs for producing experimental typography. For example, they designed the *Dataface* font⁵³^{fig.23} using *Python*, which in its program allows users to play with the font data, and therefore the font itself, to disrupt the initial shape.⁵⁴ Claire Williams pushes the concept of code and design convergence even further in her project *Data Knitting*, which consists in using open source programs to generate graphics which are then knitted as scarves.⁵⁵^{fig.24} She describes her process: "Using open-source tools derived from a culture of electronic and digital craftsmanship, a computer is linked to a domestic knitting machine from the 1980s, hacked to become a kind of textile printer. Generating and experimenting

⁴⁵ LProcessing: the Software that Shaped Creative Coding, Aiga Eye on Design Graphisme en France n°12, code->outils->design, 2012, CNAP

⁴⁷ LUST interviewed by Casey Reas and Chandler McWilliams, Graphisme en France n°18, CNAP

⁴⁸ LOpen Source Publishing //osp.kitchen

with surprising and infinite patterns - text, data, sound, images - or translating digital material by combining programming tools and graphics software, enables us to push back and rethink the limits of the traditional pattern, giving us a new way of looking at it. This project is part of a more global reflection on the question of the reappropriation of tools, which brings together a textile practice and the DIY and Free Culture movements. The reappropriation of these tools enables a dialogue to be established between ancestral textile techniques and digital and electronic tools.”⁵²

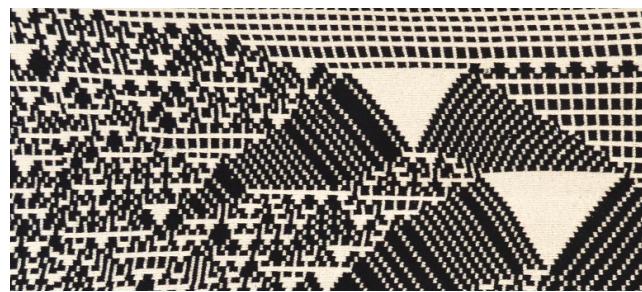


→fig. 23, *Dataface* font specimen, *Bonjour Monde*

The use of programming facilitates collaborative and synchronised work, in particular through the use of *Git (Global Information Tracker)* version management software. In programming, version management software is used to store files and all the changes made to them. These are highly effective tools for managing the collaborative writing of source code, and they have inspired the libre graphic design community to reappropriate this system for themselves. *Visual Culture* is a project that offers a new workflow where one could explore the different versions of the design file, who has modified it, and share it with collaborators or a larger public.⁵³

Ultimately, open-source and libre programming frameworks provide graphic designers with methodologies to broaden the creative scope of their work, and collaborate more easily within a growing community. Indeed, web technologies often surpass classic design software by offering new possibilities such as variables, animations, and flexibility that make this new publishing space a fertile ground for graphic experimentation, and situate creative coding on the border between a more artistic practice and graphic design.

36 37



→fig. 24, *Data Knits*, *Claire Williams*

↳ New shapes of graphic design

↳ The rise of *libre* graphics initiatives

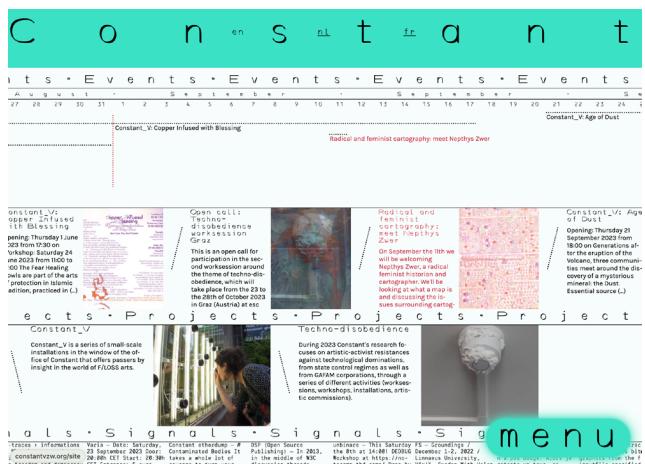
Projects such as the ones mentioned earlier, despite still remaining niches in the graphic design community, are emerging and offering a vast array of contributions to the libre movement, inspiring others to step forward and join the movement. *Eightycolumn* is a network of artists and designers using libre software in the practice of their craft.⁵³ They “encourage the exchange of practical

information, hacks and tips, course material, requests for feedback and help, presentations of works, announcements of relevant workshops, lectures, festivals". In an effort to connect people and institutions around libre culture, the first *Libre Graphics Meeting* took place in Madrid in 2013. Since then, there have been meetings every year until 2021. They also have their own server on the decentralised social network *Mastodon*, uniting the largest proportion yet of libre designers and enthusiasts.²³

During a two year research program called *Libre Graphics Research Unit* and described as

"a travelling lab where new ideas for creative tools were developed"

the Belgian art association *Constant*²⁴ studied the importance of constructing and understanding one's digital tools.⁵⁴ "Because digital tools often suffer from overdetermined functionality and are full of conventions about the way things "ought" to be done, it is important that practitioners take part in their construction. Unavoidably shaped by conventional models of production and distribution, tools condition creative practice in terms of divisions of labour, vocabulary and medium." Their research work resulted in large part in the publication of a reader for designers and developers entitled *Considering your tools*. This was in response to the lack of educational and literary content on the questions of libre and open-source tools for the graphic design community.⁵⁵



→fig. 25, Constant art research association website //constantvzw.org

The libre graphics revolution

*Libre Graphics Magazine*²⁶ is the first and only publication in both print and web formats specialised in the question of libre graphics. Despite having ended its run in 2015 concluded by an eighth and final issue, Ana Isabel Carvalho, ginger coons, and Ricardo Lafuente created a space to highlight libre artists and designers, and provided thoughtful writing on subjects ranging from open source fonts, gender representation in the libre community, and creative coding.

"We're reflecting a nascent, new community: the Libre Graphics user community, which hasn't been anything until now. Equilibrium must be found between what exists — the vibrant developer community — and what doesn't yet, but so easily could — an equally vibrant and articulate user community. We do not intend to reinvent the wheel, simply to attach a bicycle. With such a usable, accessible bicycle, attached to the power of the existing Libre Graphics community and infrastructure, we may just give users, existing and new, the opportunity to get on and take a spin."

True to their beliefs and implication in the libre community, all magazines and their source files are still available for free on their website.⁵⁶

*Design Threads*²⁷ is a collaborative report about the state of graphic design.⁵⁷ The concept of threads invites a powerful image that is representative of the way that the libre graphics community collaborates. Threads, libraries, and *Git* are powerful tools that connect the community through collective knowledge and creativity. The libre and open design communities have found a home on *GitHub*. On this platform, designers can upload their design files, provide documentation, and invite others to collaborate on their projects. A variety of design works, such as logos,

²³ ↗ Libre Graphics Meeting server on Mastodon, //post.lurk.org/@lgm

²⁴ ↗ Libre Graphics Research Unit, Constant

²⁵ ↗ Considering your tools, Libre Graphics Research Unit

²⁶ ↗ Libre Graphics Magazine

²⁷ ↗ Design Threads, //designthreads.report



→fig. 26, Libre Graphics Magazine ISSUE 2.3 The Type Issue

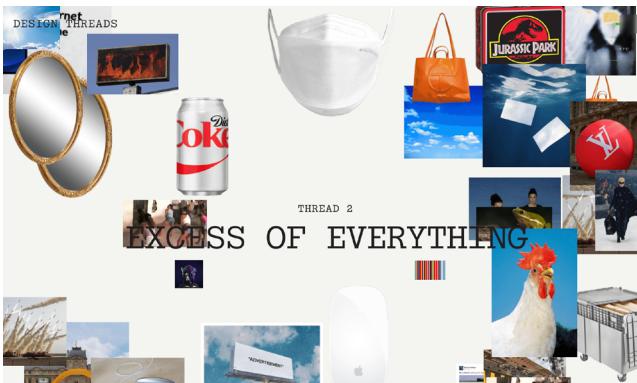
DESIGN THREADS

A COLLABORATIVE REPORT
UNRAVELING THE STATE OF
DESIGN TODAY

THREAD (NOUN)

1. A THEME OR CHARACTERISTIC, TYPICALLY FORMING ONE OF SEVERAL.
2. A CONNECTED GROUP OF PIECES OF WRITING ON THE INTERNET, WHERE PEOPLE TALK ABOUT A PARTICULAR SUBJECT.

40 41



→fig. 27, Design Threads, Thread #3, Excess of everything

illustrations, and templates, are freely available for others to study, remix, and use in their projects. It serves as a hub for designers interested in embracing libre design practices. Notably, the organisation *Libre Graphics* hosts a wide panel of repositories with software for practices ranging from *Web to Print* or font converting to motion design.⁵⁸ By leveraging the collaborative power of *GitHub*, the libre graphics community creates an ecosystem where designers can actively participate, collaborate with peers, and collectively advance the field of graphic design through their practices.

↳ The future of graphic design is iterative

Remix culture is, at its core, a cultural and creative movement that celebrates the act of reimagining and repurposing existing content to create something new and original. Even though the arrival of the internet, “*the world’s most efficient copying machine*” according to Cory Doctorow, accelerated the phenomenon, combining elements to create new pieces of art has been a common practice since the beginning of human history.

“One could argue that remix culture has been around as long as the idea of culture” itself. One might even go back to ancient Greece to see this at work in the minstrels who performed *The Iliad* and *The Odyssey*, or spin forward nearly 2000 years to witness Chaucer’s co-option of Boccaccio. And let’s not even get started on Shakespeare. From Duchamp to Damien Hirst, artists have consistently challenged the idea that meaning ascribed to objects is permanently fixed.”⁵⁹

The process has always been there, but the technology of the internet has made it even easier. When using the word remix, the first thing that comes to mind is music, and that is simply because it is the type of cultural work that uses this creative methodology the most. “*The sampling*

⁵⁸ ↳ Libre Graphics GitHub repositories

⁵⁹ ↳ Remixing Culture And Why The Art Of The Mash-Up Matters, Ben Murray

culture out of which hip-hop emerged, for example, like blues and rock before it, represented a re-versioning of existing forms to create something new.” Despite growing concerns about intellectual property and copyright restrictions, many creators and actors of the artistic and cultural industry adhere to remix culture, recognising its transformative creative potential and impact on the development of the cultural landscape. For some, it is more about defending than simply adhering, as is the case for Lawrence Lessig, mentioned earlier for his literature on free culture and the creation of the *Creative Commons*. In his book *Remix*, Lessig positions remix culture as a fundamental aspect of cultural evolution and creativity : “*the right to quote [to remix] is a critical expression of creative freedom that in a broad range of contexts, no free society should restrict.*”⁶⁰

In his TED talk *Creativity is a Remix*, Kirby Ferguson breaks down in three steps what he defines as key elements, or building blocks, for creativity : *Copy, Transform, and Combine*.⁶¹ →fig.28

COPYING ↴

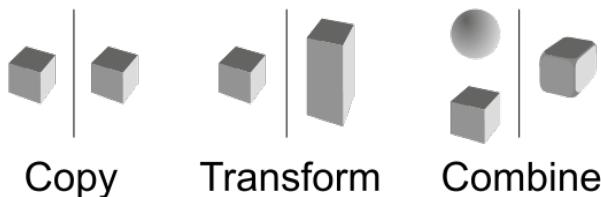
is a form of learning. Only once we have acquired a solid foundation of knowledge can we start truly generating original and unique ideas.

TRANSFORMING ↴

is the process of taking an idea and coming up with many iterations and variations. In fact, Ferguson goes on to say that historical breakthroughs do not come from someone who had a stroke of genius, but who instead came up with just the right variation, a legacy from the progress made by many individuals before him.

COMBINING ↴

all these different ideas together is the final step of the creative process. It guarantees more unique and innovative ideas.



→fig. 28, Scheme inspired by Kirby Ferguson, made with Inkscape by Shaddam

Kirby even goes further as to say that every original idea has been conjured using this method, which, more often than not, is an unconscious thought process. No matter how attached people are to the idea that creative people come up with original and unique ideas by simple innate talent, the reality is much more simple. We reassemble little pieces of knowledge that we store in scattered parts of our brain into new configurations and variations.

“Creativity is not the output of a vacuum. Creativity is the summary of many inputs.”

Libre graphics and more generally libre culture are inherently a part of remix culture, as they encourage individuals to share and build upon each other’s work freely, ultimately reshaping the way we create, share, and consume creative works. As we have seen earlier, the libre graphics community encourages designers to share their design source files openly, allowing others to access, study, and modify their work. Additionally, creative coding and generative design techniques allow for large series of productions with potentially infinite variations. These examples demonstrate another one of libre graphics’ strengths, its potential for an ever growing multiplicity of graphic design responses. Yet, it is specifically typography that contributed the most to the graphic design community’s adoption of libre culture. Open source and libre font foundries are intrinsic to the libre graphics movement, and that may be due to the fact that typography is very similar to software. “*A font is software for writing; it is everywhere and at the same time it is virtually invisible; embedded in computer systems and digital documents it plays a vital part in how we communicate and even something as plain as a terminal window requires a font, requires information to make letters appear on a screen in a certain way. However ubiquitous, each text requires a precise decision about which typeface is used once displayed, whether that choice is a conscious decision or instead the result of a default setting. In the long tradition of type design, committed typographers have worked at this non-spectacular level, using their skills to draw letter forms in ways that they felt would enhance the clarity of messages, any message. They have been joined by computer scientists, understanding the continuum between language, typography and programming.*”⁶²

60 ↴ *Remix*, Lawrence Lessig, 2008
61 ↴ *Creativity is a Remix*, TED Talk by Kirby Ferguson

62 ↴ *OSP Kitchen FAQ 1.0*, 2008

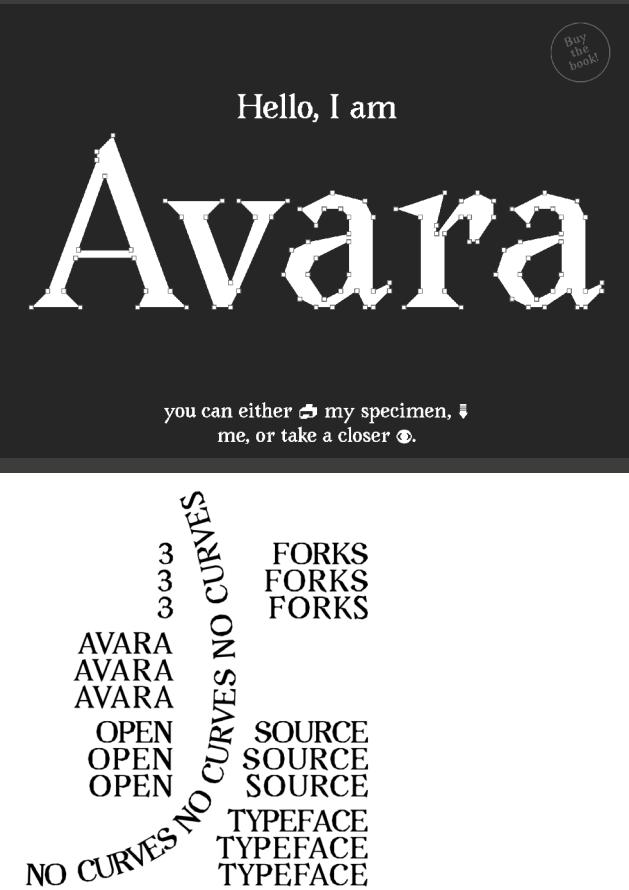
Because typefaces today have gone from lead blocks to sets of data, they represent a natural point of convergence between free software and design. The concept of the “*fork*” used in open source typography is inherited from the world of open source software. A *fork* is when a new version of an existing project is created, with a different direction than intended, creating a diverging evolution of it. Usually, someone would start by creating a *fork* of a project, adding changes to it, and the original creator can either decide to merge the changes to his project, or to let the *fork* be, thus letting it create a new timeline, a new parallel iteration. This method creates culturally rich ecosystems, and when it comes to typography, not only does this model make sense, but it has also always been present in its history. For example, the notorious typeface known as *Helvetica* is exactly what happens when the *Swiss International Style* meets 1898’s eponymous sans-serif *Akzidenz Grotesk*, and decides to rework it “*for a new century*”⁶³.^{fig 29}

Aa Bb Cc Dd Ee
Ff Gg Hh Ii Jj Kk
Ll Mm Nn Oo Pp
Qq Rr Ss Tt Uu Vv
Ww Xx Yy Zz

→fig. 29, The differences between *Akzidenz Grotesk* and *Helvetica*

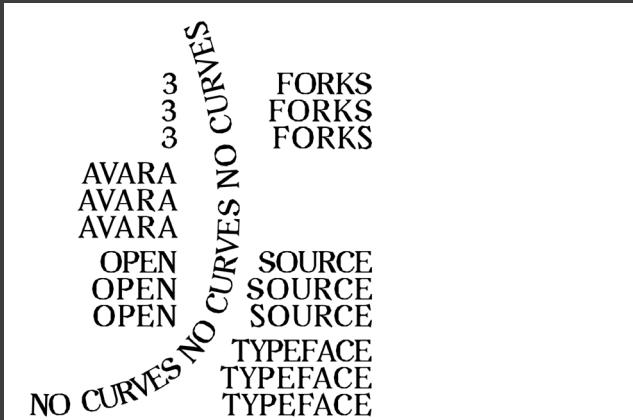
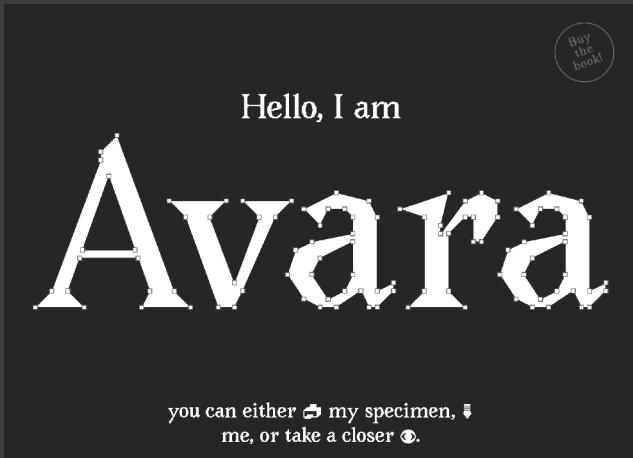
Forking in the software ecosystem is not necessarily practical, however for creative projects like typefaces, having multiple iterations coexisting is more of an asset, as it offers designers more options, consequently contributing to a more diverse visual culture. Raphaël Bastide from *PrePostPrint* saw this advantage and designed a font named *Avara* for the open source type foundry *Velvetyne*.⁶⁴ This font was designed specifically in the purpose of facilitating the creation of its variations.^{fig 30}

44 45



→fig. 29, The differences between *Akzidenz Grotesk* and *Helvetica*

“*Avara* is a libre transitional serif curveless type family. The placement of its nodes is exclusively based on a rough square grid. The original reason of this design choice was to facilitate collaboration on the font, and it now results in the radical and highly constrained shapes of this type family.”



→fig. 30, *Avara* typeface for *Velvetyne Type Foundry*, Raphaël Bastide, Wei Huang, Lucas Le Bihan, Walid Bouchouchi, Jérémie Landes

An interesting example of forks in open source typography is the case of *Pilowlawa*^{fig.31}, a typeface released by *Velvetyne Type Foundry*. In December 2020, they released Vincent Wagner’s fork^{fig.32}, which consisted of 3D models of its glyphs. This fork gave an entirely new dimension to the typeface.⁶⁵

Interest in open source typography has been growing. The inclusive font foundry and collective *Bye Bye Binary* created *DINDong*, a redesign of Peter Wiegel’s *DIN* typeface.⁶⁶^{fig.33}

“It’s the result of a deconstruction into different modules of the letters of the *Din fette Breitschrift*, themselves derived from Friedrich Söennecken’s system, said to be the precursor of *DIN* standard shapes. [...] The idea was to try and “de-gender” this typeface, typographically speaking. *DINDong* contains inclusive and non-binary glyphs and ligatures, as well as linking elements and alternatives to the midpoint, in an attempt to make this historical character more inclusive.”

This example clearly demonstrates that beyond the idea of adding diversity to graphic responses, open source typography methods of collaboration can be catalysts for social change.

In 2015, Loraine Furter & Eric Schrijver organised the *Collaborative Open Source Type Design Workshop*^{fig.34} with students from the *Maryland Institute College of Art*. During this workshop, they worked on extending and remixing open source typefaces, all the while questioning and developing collaborative protocols. For example, Michael Bongifio, Stefon Kelly and Jen Evans experimented with the design sprint process to develop new punctuation glyphs for the *Reglo* typeface. “We used the concept of ‘design sprints’ to collaborate on creating new font glyphs. We each picked a glyph to work on and then did so for 20 minutes, when time was up we committed our changes and swapped glyphs to continue. Once a glyph was finished, we started on a new one. We continued these rounds until the end of the workshop.”⁶⁷ These versioning



→fig. 31, Pilowlava typeface for Velvetyne Type Foundry, Anton Moglia, Jérémie Landes, Maksym Kobuzan



→fig. 32, Pilowlava 3D typeface fork, Vincent Wagner

DINDong

DINDong est un re-dessin crapuleux de la Din fette Breitschrift, dessinée par Peter Slegel. DINDong rejoue pour mieux déjouer la norme DIN. Elle est issue d'une déconstruction en différents modules des lettres de la Din fette Breitschrift, eux-mêmes issus du système de Friedrich Soennecken dit précurseur des formes des normes DIN. Friedrich Soennecken proposait déjà un système

6 , 9 , ? >>. Certains éléments ont été gardés intacts de la fonte d'origine comme << ¶ • * © ® § 1 2 3 1/4 1/2 3/4

ligatures inclusives et non-binaires

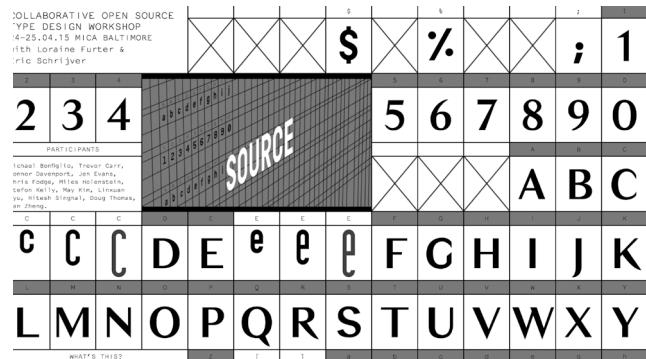
Version 1.0

ae

é

→fig. 33, DINDong typeface for Bye Bye Binary, Clara Sambot

and simultaneous design methods employed in programming are new potential approaches for graphic design. They can influence the way we work, and even the graphic forms themselves, which are impacted by the possibility of observing the work of others at different moments in the design process.



→fig. 34, Collaborative Open Source Type Design Workshop website

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Open Source Publishing explained in their 2008 faq why they chose to start working on collaborative typography:

*"The alphabet may belong to all of us, but it's designed embodiment certainly does not. As fonts are such excellent expressions of bits, we would like to re-think use, distribution and production in the light of alternative approaches to knowledge production as proposed by the Free Software and Copy-Left movement"*⁶²

⁶⁵ L.Pilowlava, Velvetyne Type Foundry
⁶⁶ L.DINDong, Bye Bye Binary

⁶⁷ L.Collaborative Open Source Type Design Workshop, Lorraine Furter & Eric Schrijver
⁶² L.OSP Kitchen faq 1.0, 2008

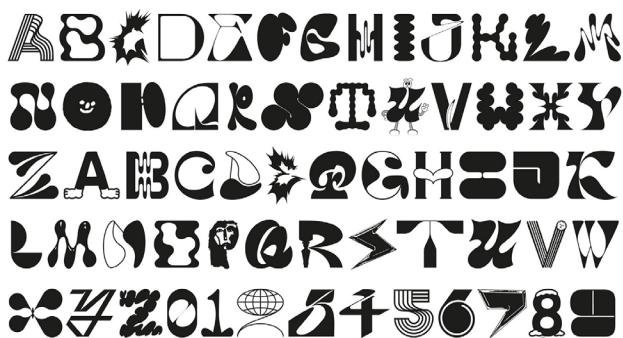
They go on to add:

↑ *Typography is inherently generative. It's own use of the term 'Font Family' to begin with, each typeface is a variation on a theme.*

↑ *The proprietary model is impossible to enforce: the distribution of fonts asks for another legal position, and another economic model.*

↑ *Collaboration might enhance quality – a typeface is a complicated piece of software and its quality would go up once many eyes look at it and help fix bugs."*

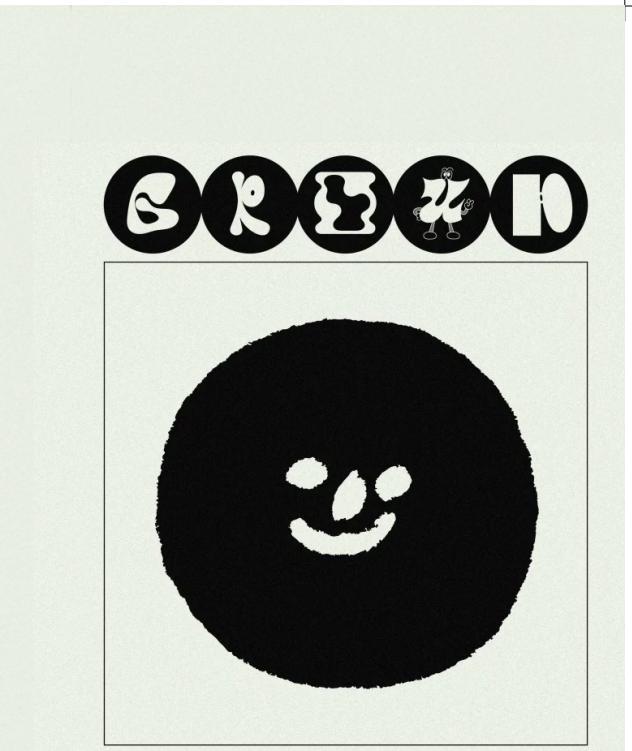
In 2019, in the midst of lockdown due to the rise of Covid-19, Raissa Pardini, graphic designer and activist, leveraged the power of collaborative typography to raise money for charities. *Group Font* ^{→fig.35} is a typeface for which each letter and number has been designed by a different creator. *"I wanted the creative community to get together during a time where everyone was asked to stay at home. Each artist had one or two letters and we made an alphabet of two caps and a set of numbers. It's a wild font, but it fulfills its purpose. We are very proud of the outcome and the money we raised so we decided to spread the donations and help different funds and charities."*⁶⁸

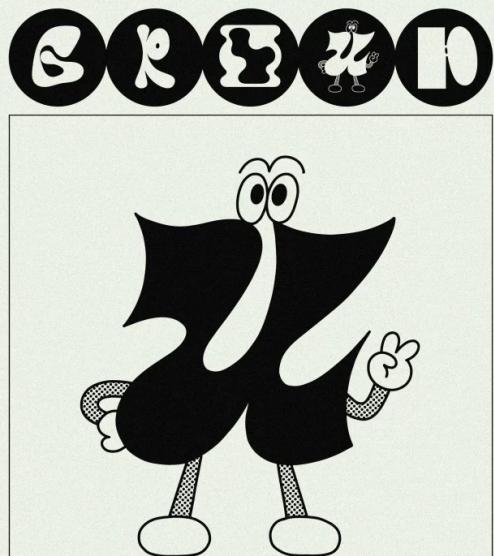
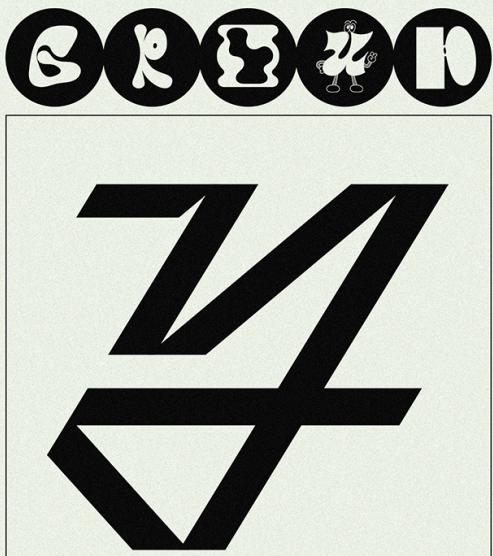


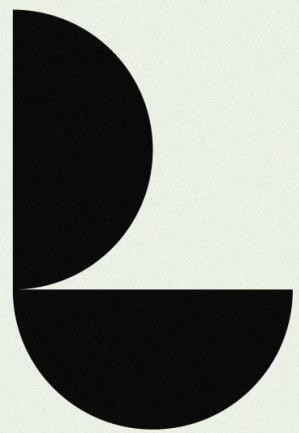
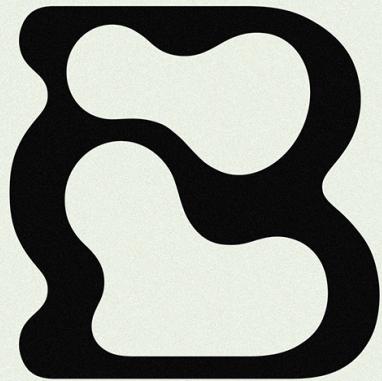
→fig. 35, *Group Font*, Raissa Pardini

Ultimately, libre graphics methodologies surpass limitations imposed by a single iteration of a graphic creation, since it evolves at every stage of its reproduction. This leads to a multiplication of possible graphic responses. Hence, a designer can interact with the creative process, experimenting and exploring different iterations. The result is richer, more diversified designs, and thus a more vibrant and flourishing cultural landscape.

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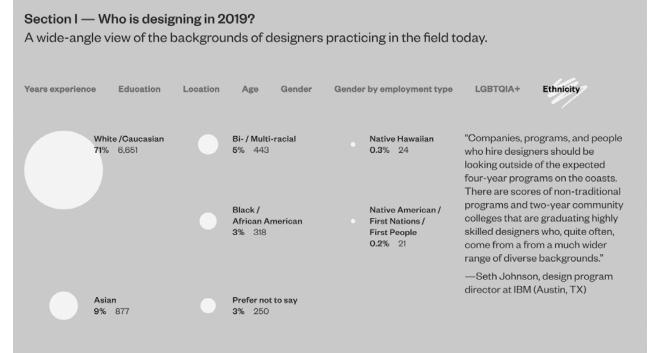
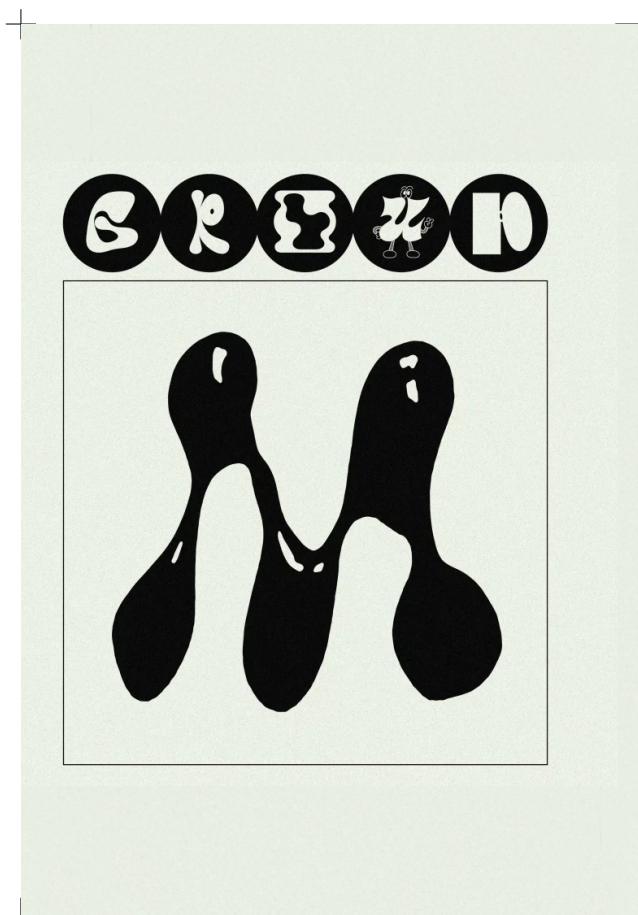




↳ The transformative potential of libre graphics

↳ Accessibility and inclusivity

In 2019, *AIGA's Design Census*^{69 ↗fig.36} revealed that globally, 70% of graphic design students are female, while only 35% of graphic design professionals are. It also revealed that only 3% of designers are African American, a dangerously low percentage, while 71% are Caucasian, 8% Asian, 8% Hispanic, and 5% multi-racial. Furthermore, it states that the number of designers who identify as LGBTQIA+ represents 15%. These statistics are a stark reminder of the disparities that exist in terms of diversity in the creative industry. This can be explained by factors such as access to education, biases, and systemic barriers.



↗fig. 36, Aiga Design Census, 2019, section 1

Libre graphics initiatives contribute to make the graphic design field more accessible by promoting libre tools, software and assets in an increasingly vibrant and diverse community. For example, *Libre Graphics Club* aims to help designers learn how to use libre and open-source software through workshops, tutorials, and events. They have collaborated with many schools, libre sub-communities, and digital solidarity networks.⁷⁰ One of these networks is *Badass Libre Fonts by Womxn*^{↗fig.37} created by Loraine Furter, “a collection of libre fonts drawn by womxn designers, who are often underrepresented in the traditionally conservative field of typography”⁷¹.

68 ↗Raisa Pardini brings creatives from across the world together to create Group, a collaborative typeface raising money for charities //Collide24.org//Libre Graphics Club //libregraphics.club/

69 ↗How much designers earn and other data from the AIGA Design Census 2019, It's Nice That
71 ↗Badass Libre Fonts by Womxn //design-research.be/by-womxn/



→fig. 37, Badass Libre Fonts by Womxn, //design-research.be/by-womxn/

The collection counts contributors from many other open-source typography studios, such as Jérémie Landes, founder of the *Velvetyne Type Foundry*, and the *Bye Bye Binary* collective, working and researching inclusive and open-source fonts. Fuelled by the same rationale of inclusivity and social justice, the *Hackers&Designers COOP* is a decentralised non-profit organisation based in Amsterdam, situated at the intersection of today's hacker culture and design, that works to encourage collaboration and technological literacy. “*The aim of H&D is to stimulate and support exchange, learning and collaborations within this larger network of soft- and hardware developers, designers, artists, and researchers, and to create inspiring and encouraging spaces for the community to share skills, urgent topics, and interests, as well as concrete offers for commissions, exhibitions, guest lectures and workshop facilitation. The H&D network could also be described as a network of tool builders. By tools we mean software and/or hardware constructions but also pedagogical tools and tools for collaboration that enable critical engagement with, and through, technology.*”⁷²

The libre graphics and open source communities are not without fault either when it comes to diversity. According to the *2017 Open Source Survey* initiated by GitHub, 22% of coders identify as female, and 34% are people of colour. However, when it comes to open source coders, only 3% of the respondents identified as female, with 16% belonging to an ethnic or racial minority.⁷³ This lack of diversity is even more regrettable when we take into account the fact that women were at the forefront of the digital revolution.

“*W*omen have historically worked with machines, whether as typists, telegraph operators, telephone operators, mechanographers or programmers. They were often a temporary vanguard in the development of innovative technologies, before being replaced by the machines that took their names. The term “computer,” long before it came to designate the computer, referred to the person, often a woman, who did the calculations by hand.”⁷⁴ →fig.38

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→fig. 38, Computer Grrrls, art exhibition in 2019 at the Gaité Lyrique on history, gender, and technology.

The open source community has been under fire for harbouring aggressive rhetoric, with an overwhelming white and male demographic. As a result, this insensitive language pushes women, non-binary people, and people of colour to the margins of the community.⁷⁵ For instance, Eric S. Raymond, founder of the *Open Source Initiative*, was banned from its mailing lists after having used offensive language.⁷⁶

These problems, however, do not remain unanswered. Coraline Ada Ehmke, software developer and founder of the non-profit *Organization for Ethical Source*, created a code of conduct called the *Contributor Covenant*^{fig.39}, which she describes in her interview with *Aiga Eye on Design* as ensuring “*a harassment-free experience for everyone, by being respectful of differing opinions, viewpoints, and experiences and giving and gracefully accepting constructive feedback.*” Lauren Lee McCarthy also integrated a code of conduct when creating the *p5.js* code library to dismantle the community’s predominant culture of intimidation. She explains, “*There’s this acronym, RTFM, short for read the fucking manual, it’s the kind of flippant reply a newcomer programmer might get when trying to report a bug to a forum. Like shirking someone’s question with, “just Google it,” RTFM suggests that the query isn’t worthy of time, and the person asking it hasn’t done their homework. The code of conduct asks members to remember to approach every situation with patience and care. I’ve had people come in and report something they think is a bug, and the community responds and walks them through it, and then they ask how to make the documentation better. It’s possible to create a community where people’s worth is tied to building something together.*”

CHAOSS, short for *Community Health Analytics in Open Source Software*, is a community within the *Linux Foundation* that analyses metrics to better understand the open source community’s health. One of its areas of focus is diversity and inclusion, for which Link, the co-founder, invented a badging system to identify projects that respect the code of conduct. He tells *Aiga Eye on Design*: “*The badging system (which is in development) would certify that a project has taken a thorough look at the right metrics for its diversity and inclusion initiative. The badge would mean a project has gone through basic hygiene, and it could telegraph a welcoming environment to those who’ve felt unwelcome elsewhere.*”

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“Demonstrating empathy and kindness toward other people

“Being respectful of differing opinions, viewpoints, and experiences

“Giving and gracefully accepting constructive feedback

“Accepting responsibility and apologizing to those affected by our mistakes, and learning from the experience

“Focusing on what is best not just for us as individuals, but for the overall community

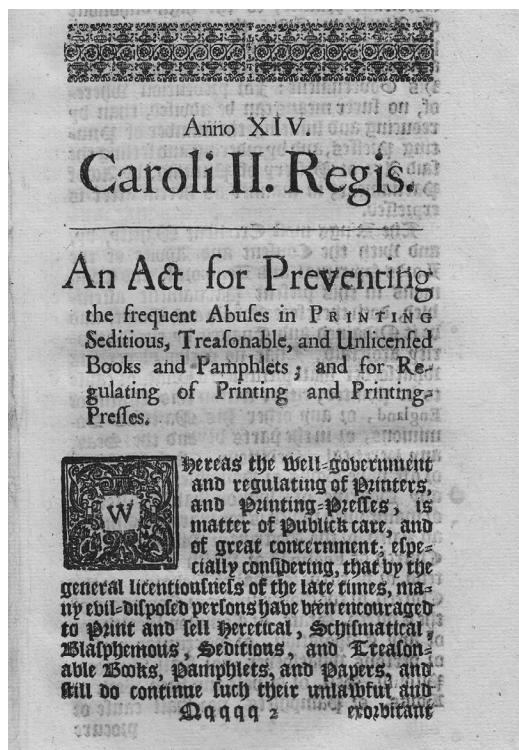
→fig. 39, Extracts from *The Contributor Covenant*,
Caroline Ada Ehmke

↳ The case for *intellectual property*

The concept of copyright first appeared in *England*, in a context where the arrival of the printing press paved the way for production and distribution of cultural works. In 1666, the English Parliament passed *An Act for preventing the frequent Abuses in printing seditious treasonable and unlicensed Books and Pamphlets and for regulating of Printing and Printing Presses*. Fortunately, it was soon renamed in 1966 the *Licensing of the Press Act*.⁷⁵⁷⁶ This required all publications to be registered with the *Stationer's Company*. From this starting point, the long and convoluted roads to a legal framework protecting the authors more than the distributors eventually resulted in the *Berne International Copyright Convention of 1886*.⁷⁷ These legal frameworks provide arguments when it comes to protecting the interests of designers and creators in general.

The first argument is ownership and control. *Copyright* allows designers to establish legal ownership over their creative works, giving them control over how their works are used, distributed, and reproduced. According to the *World Intellectual Property Organisation*⁷⁸, this control enables designers to determine how their creations are presented to the public and ensures that they have a say in how their works are used. Another argument is economic rights. Allowing designers to profit from the commercial exploitation of their works by licensing their creations to others, selling copies, or distributing their work creates financial incentive, and thus encourages designers to invest time and effort. Beyond financial incentive though, is recognition. Intellectual property and copyright laws ensure that designers are credited for their works, which helps them cultivate a reputation and protects their integrity. *Copyright* also prevents others from falsely claiming ownership or reappropriating designers' works as their own. The threat of legal consequences discourages these illicit practices, and can protect smaller creators from getting their work plagiarised by bigger organisations who would then reap financial profit in their place.

Last but not least is the preservation of cultural heritage. Intellectual property allows creators to retain control over traditional designs and artistic expressions that have cultural significance. The case of the *Haida Gwaii* Indigenous community in British Columbia is a famous example of protection and preservation of traditional



→ fig. 40, Scan of the *Licensing of the Press Act*, London, 1662

⁷⁵ ↳ *Gendering FLOSS*, Libre Graphics Magazine ISSUE 2.2

⁷⁶ ↳ *How Codes of Conduct Are Combating Open Source's Diversity Problem*, Aiga Eye on Design

⁷⁷ ↳ *Copyright in Historical Perspective*, Lyman Ray Patterson, 1968

⁷⁸ ↳ *Copyright*, World Intellectual Property Organisation //wipo.int/

art and cultural expressions from misappropriation. The *Haida* people are known for their rich cultural heritage, which includes intricate wood carvings and totem pole artistry.⁷⁹⁴¹ These art forms hold deep cultural and spiritual significance for the *Haida* community, a testament to their history, traditions, and connections to the land. Non-Indigenous artists and communities were continuously reproducing *Haida* carvings. To protect their heritage, the *Haida* community decided to apply for copyright protection under Canadian law. By securing copyright, they gained legal recognition of their artistic ownership and cultural heritage. They could then control the reproduction, distribution, and public display of their traditional art. Additionally, the *Haida Gwaii* community worked with the Canadian government to implement the concept of *Indigenous Cultural Intellectual Property (ICIP)*. This framework recognizes and protects the traditional knowledge and cultural expressions of Indigenous communities, allowing them to exercise greater control over their cultural heritage and ensure its preservation and respectful use.⁷⁹



→fig. 41, Haida carved Totem poles, image from Canadian Museum of History

The question raised in this paper is not whether intellectual property laws and copyright licences should be abolished, but rather how to make them more adapted to the creative landscape today by questioning the ownership and control of culture and information. With copyright laws, intellectual production comes to be seen as a product, encouraging creative works and activities to be commodified.

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⁷⁹ The logic of capital has resulted in the concentration of ownership and control of the communications system in the hands of the richest members of the capitalist class. The dominant class thus earns profits from ownership of communications firms, further enhancing its wealth. Political economists underscore the point that ownership and control of the means of communication also significantly augment the ideological power of this class. Furthermore, the dominant class, with its superior resources and communications networks, is generally able to organize its hegemony within the political system. Consequently, government policies regarding communications have generally tended to favor property rights over access to channels of communication.⁸⁰

↳ Challenging systems of economic dominance

Graphic design, at its core, while negating its ties to commercial and capitalist logics, is the construction of a visual language, with the purpose of communicating ideas, information, and knowledge. However, a large part of its applications are in the service of selling products or services, and thus in a form of mass communication. This implies an asymmetrical communication, one sender, many receivers, which can inherently be authoritarian, imposing, and impenetrable. Libre graphics leverages the strength of community to redefine graphic design as a collective construction of language, which, by its decentralised model, represents a political opposition to corporate and advertising designs. The creative potential that the libre graphics model offers allows the community to generate new identities and stories, unencumbered by rules imposed by branding or marketing strategies.

“We think of the possibility to combine ideas which seem incompatible in the first place. Which allows to go from the “or” to the “and” and taking fully into account an “and-itian” practice, close to the one of the hacker since he sticks out from the duality technophobia/technophilia, and to invent an “and”, meaning another way of thinking the industrial world: “The exemplar character of the fights lead by the actors of the Free software movement stands in that, for the first time, workers coming from the industrial world invent a novel organisation of work and of economy which made deproletarization its principle and its credo.”⁸⁰

— OSP in Relearn⁸¹

Furthermore, libre design holds out the promise of liberation from capitalist logic by its new kind of ideation and creation, raising sociological questions about innovation and work. It challenges traditional closed creation processes through collaboration, community engagement and facilitated access to knowledge and resources. “This effectively involves new ways of conceiving design and production, leading to a different consideration of the economic or intellectual value of collaborative projects, which in turn calls for a new form of individual involvement, work and creative effort.”⁸²

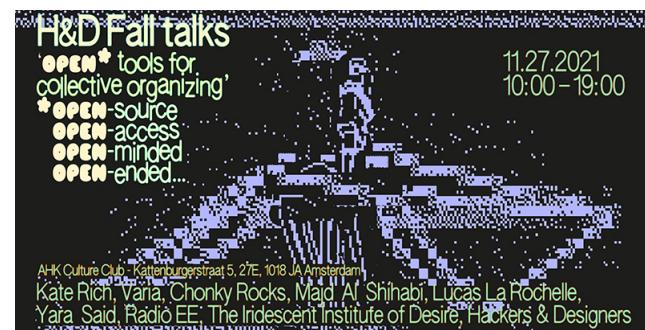
The libre communities, by their divergence from the general market, had to imagine alternative business models to support creators. *Kickstarter* and other crowdfunding platforms are powerful catalysts for creative projects. For example, *Fund I/O* is a model that offers an initial crowdfunding period, during which people pledge what they’d be willing to pay. At the end of that period, the amount is averaged, and if the set minimum is reached, the project is released as a fully free work.⁸³ Some libre graphics projects can also rely on donations from users and sponsors, including individuals, organisations, and

companies that appreciate the value of open source works and want to contribute to its development. Additionally, some projects receive grants and funding from non-profit organisations. The *Hackers&Designers COOP* has imagined its own

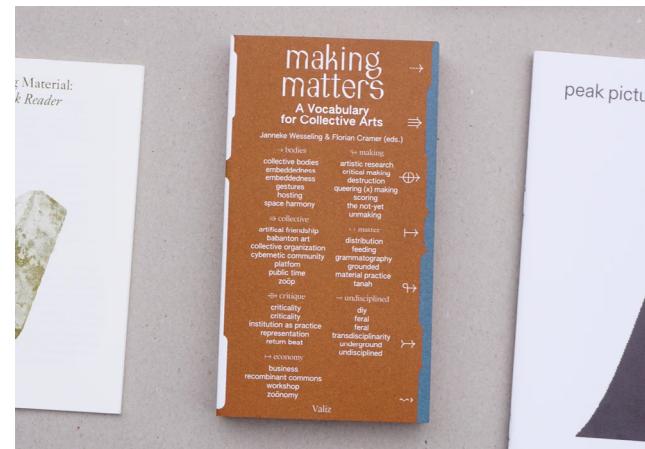
“model of collaborative organization based on fiscal democracy”

In this model, funds are divided equally between the members of the cooperative.⁸⁴ These alternative business models allow the libre graphics community to remain independent, collaborative, and driven by a shared ethos of openness, while still securing the resources needed to continue developing their projects. →fig.42 →fig.43

56 57



→fig. 42, Hackers&Designers Open* tools for collective organizing, event, AHK Culture Club, Amsterdam, 2021



→fig. 43, Making Matters: A Vocabulary for Collective Arts, Hackers&Designers, Janneke Wesseling, Florian Cramer, 2022

⁸¹ ↗Relearn, Open Source Publishing, 2011 ↗osp.kitchen/writing/relearn/

⁸³ ↗About //fund.io/

⁸² ↗Open design, Fabrication numérique et mouvement maker, Camille Bosqué

⁸⁴ ↗About, Hackers & Designers COOP

Conclusion

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While introducing this paper, I questioned the perspectives for graphic design towards a more liberated practice. The answer was found in the heart of the libre graphics community. Since the beginning of the commodification of art and creative works, there has always been a movement arising in opposition to the dominant power structure, in the shape of countercultures and parallel community-driven initiatives. The libre graphics community is a critical example of this phenomenon and of people's need for emancipation. It has created a space for creators to thrive in an atmosphere of collaboration, free from the constraints of the graphic design market. The libre graphics movement empowers more creative people by giving them access to graphic design tools and literature, creating a more diverse creative landscape. It provides a greater creative autonomy through its open software philosophy, and ultimately fosters a spirit of community versus competitiveness, demonstrating a powerful stand against our society of mass production.

But what about its sustainability? The enthusiastic use of creative works and assets provided by the libre graphics community often takes the form of a consumer relationship, where they are chosen because they are freely available, without any real understanding of the issues at stake in the culture of libre graphics. This question has already been widely discussed in the libre software sphere, and graphic designers will not be able to escape it. If many consume libre works, far fewer contribute to it; what then of the spirit of community and autonomy of production carried by the culture of libre graphics? This culture, with its strong ethical dimension, will need to find a way to preserve itself in the face of this mercantile adversity.

This also begs the question, should everyone start creating libre graphics? I believe there is no answer to this, as it is ultimately a choice, and that in the current economic climate, no one can solely rely on a libre practice. However, by contributing to this community, we can slowly build together a beginning of an answer for an alternative model to the graphic design market in place. When interviewed by Rob van Leijsen for *Graphic Design in the Post-Digital Age*, Raphaël Bastide stated,

“I do not think about my tools as problem solvers [...] They are mostly a means for me to occupy a space that commercial companies cannot fill. They are bound to certain expectations, and, as an independent designer and artist, I am not.”⁸⁴

This to me perfectly crystallises the essence of what libre graphics are: a soft yet powerful form of protest against what is expected of us as designers. It does not matter that it is not a widespread practice, because as long as it exists, it provides optimism and hope that graphic design could one day completely liberate itself from systems of dominance.

↳ Colophon

↳ *Libre Graphics & the Politics of Empowering the Creative Landscape through Collaboration*

↳ Thesis written by *Rebekah Heffernan* and supervised by *François Vermorel*

↳ Submitted for the Art Direction
Master's department at *L'Institut Supérieur des Arts Appliqués, Paris*

↳ Designed with Scribus using libre and open source typefaces:

↳ Libre Baskerville designed by *Pablo Impallari*

↳ AUTHENTIC Sans designed by *Christina Janus & Desmond Wong*

80

↳ Terminal Grotesque designed by *Raphaël Bastide*

↳ for *Velvetyne Type Foundry*

↳ Cirrus Cumulus designed by *Clara Sambot*
↳ for *Velvetyne Type Foundry*

↳ Redaction designed by *Titus Kaphar & Reginald Dwayne Betts*

↳ Sprat designed by *Ethan Nakache*

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