

FOUNDING¹

Adobe creative suit was founded by John Warnock and Charles Geschke in 1982 and in only a few years they changed the whole printing world. Warnock and Geschke established their company after leaving their other job at Xerox PARC; research and developing company.

¹The first part of this document, manual will be about the starting of Adobe inc. and their journey to becoming the industry standard for things like photo editing, graphic design, their creation of the adobe creative suit, -cloud and their eventual downfall of the large monopoly they have created.

They left after they tried to convince the company of introducing a new key printing technology, a 'software' called Proscript that they had developed but the company wasn't interested.

This script was a big deal because beforehand digital designers mainly used dot matrix printers who were only able to print rows of pixels which had problems because everything that was printed needed to be fixed to a row of dots. This meant that working digital was very restricting and that working with things like typography was a struggle.

cture taken of middle-aged John Warnock and Charles Geschke a few years in their Adobe adventure. Both are wearing a white shirt with a black tie and pants.

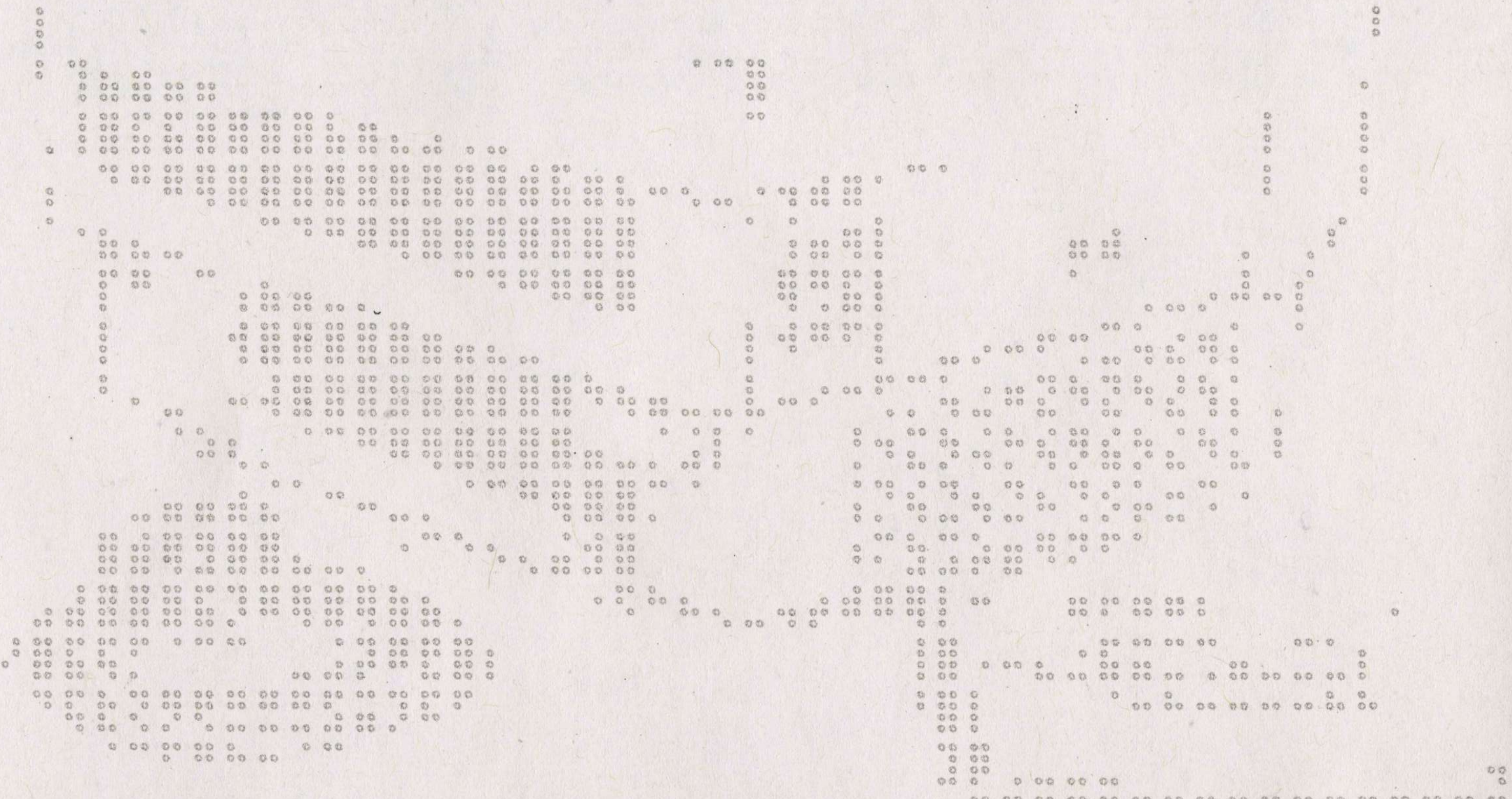
<https://blog.typekit.com/wp-content/uploads/2014/05/john-chuck2.jpg>

"This was the first logo of Adobe inc., it came into existence in 1982. Marva Warnock, the wife of John Warnock, designed it.
<https://logos-world.net/wp-content/uploads/2020/06/Adobe-Logo-1982-1990-700x394.png>

Example of how postscript works

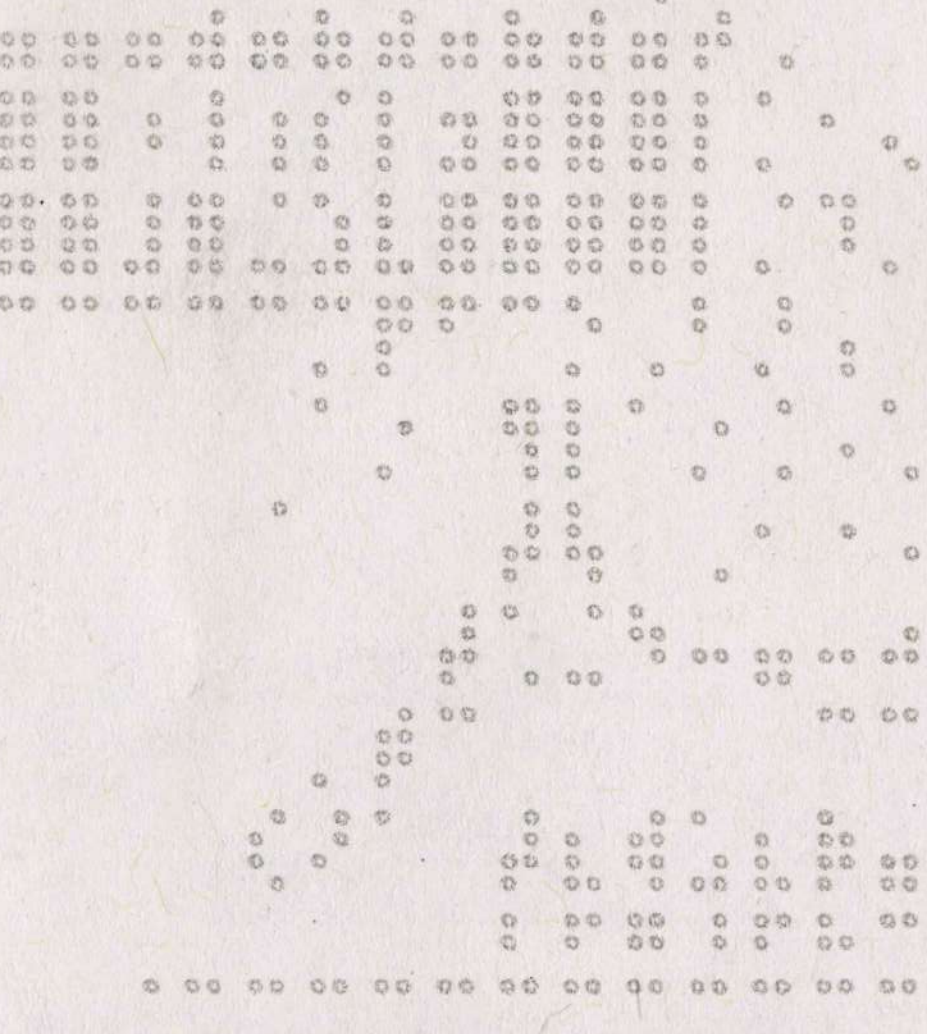
```
/ANGLE {
  newpath
  100 0 moveto
  0 0 lineto
  100 50 lineto
  stroke
} def
10 setlinewidth
0 setlinejoin
100 200 translate
ANGLE
1 setlinejoin
0 70 translate
ANGLE
2 setlinejoin
0 70 translate
ANGLE
```

http://paulbourke.net/dataformats/postscript/8.gif



Apple laserwriter (March 1985), delivered text and graphics print quality comparable with that of the professional printing press. This leap forward in quality was accomplished by both hardware and software innovation.

https://collections.museumsvictoria.com.au/content/media/14/237714-small.jpg



Logo of the AdobePDF file format. https://www.biochek.com/wp-content/uploads/2018/07/adobe-pdf-icon-logo-png-transparent.png?x14571

After some time, new printers came along with the postscript² code as their main drive for their new technology of laser printing. This meant designing digitally wasn't a struggle anymore because people could print detailed images for the first time. This saved a lot of time for these designers because now they weren't 'forced' to work by hand.

Steve jobs attempted to buy the company for a lot of money, but John and Charles didn't budge. Instead, apple and adobe made a deal where apple bought 19 percent of shares of the company plus a 5-year licensing fee for postscript in advance. Later apple computers licensed this script in their laser writer printers. This also helped spike the desktop publishing revolution. Before this people were limited to a photo type setter which was very expensive in comparison.

This idea that all you needed for printing was a Macintosh and a printer changed the game and replaced this photo type setting industry in a few years. Which was very impressive because this was an old industry active from the 50's.

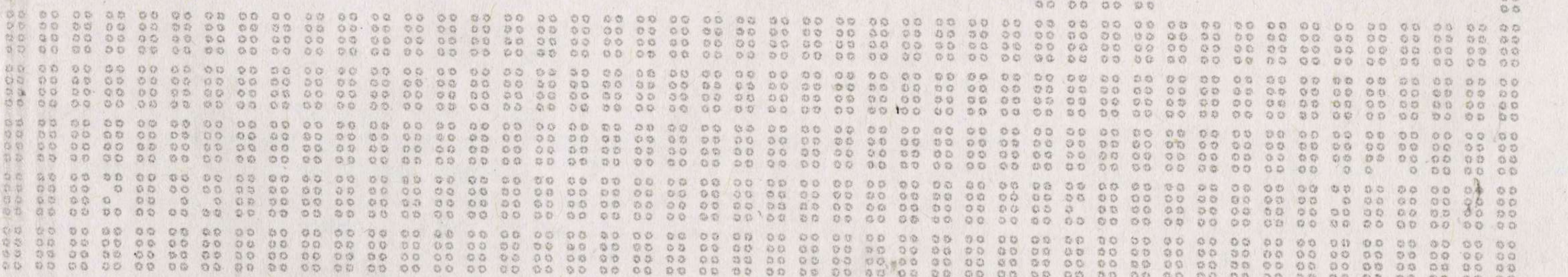
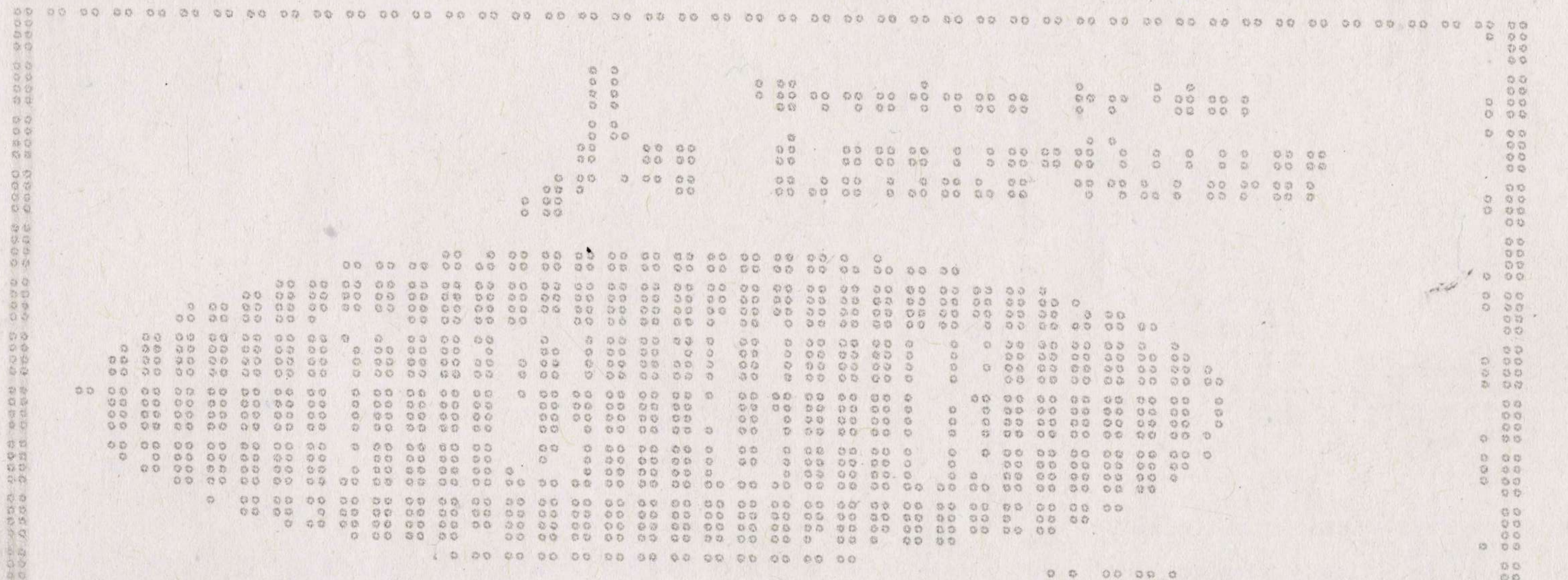
INTRODUCTION SOFTWARE MARKET

In the late 90's adobe joined the consumer software market with their first program toe in the water being Illustrator which was exclusive for the apple Macintosh. This introduction of the Macintosh also helped further popularize laser printing.

After their success with Illustrator, adobe released Photoshop. The software wasn't built-in house by adobe like Illustrator but created by another duo who showed their program to adobe. They immediately bought the licensing to distribute the software on the adobe suit. Since then, the software has become the industry standard not only in raster graphics editing, but in digital art. This was because professional digital retouching would normally cost you 300 dollars per hour for a professional and that was for basic things like little color changes. At that time adobe photoshop costed 895 dollars, this sounds like a lot but it was a lifetime buy and you could do as much retouching as you wanted instead of paying a fee.

PDF

Later on in the adobe lifetime they John Warnock and Charles Geschke had a new idea for revolutionizing the industry. They wanted to make pdf's; the goal of



this format was to "effectively capture documents from any application, send electronic versions of them and view and print these documents anywhere u want" in their mind they wanted to use this for possibility archive entire libraries in an electronic way. Adobe later on introduced the pdf together with the acrobat reader which enabled to zoom in any document without losing quality.

#Screenshot of a video where Adobe CEO & Illustrator developer John Warnock demonstrated the new product in a single one-hour take.. This video shipped on VHS with the very first version of Adobe Illustrator. https://www.youtube.com/watch?v=xv3x12B6yUs

#Screenshot of the first version of Adobe's Acrobat Reader. This was released for the public on 15 June 1993, as the first version of the Adobe Acrobat software line. It runs as a graphical, 16-bit on top of an existing MS-DOS operating system. https://www.ny-acrobat-reader.com/wp-content/uploads/2019/08/Acrobat_Reader_1.png

CREATIVE SUIT

Because of Adobe's strong grip on the software industry and their large collection of now industry standard programs they introduced the Creative suit in 2003. The first two versions of the suit were available in two editions: the standard and the premium -edition.

#Cropped version of the Adobe Creative Suite Premium (version 1) logo. A version of the first Creative Suite, released on October 27, 2003 and targeted towards both professional print and web publishing. It was succeeded by Adobe Creative Suite 2 Premium on April 27, 2005.

The premium included the extra software like Acrobat Professional, Dreamweaver, GoLive. This introduction of the Creative Suite helped InDesign become the dominant publishing software, replacing QuarkXPress. This was because customers who purchased the suite for Photoshop and Illustrator received InDesign at no additional cost.

"The 'pay forever' subscription model attracts most of the criticism, and it raises antitrust issues."

The biggest problem with Adobe is their road to becoming a monopoly, this means that the company is the only provider of a good or service, which gives it a large economic advantage against other companies.

There are two ways of becoming a monopoly a vertical and horizontal integration; vertical meaning they from the start control the entire supply chain from production to retail.

https://static.wikia.nocookie.net/adobe/images/3/30/Adobe_Creative_Suite_1_Premium_box.jpg/revision/latest?cb=20200204093251

Obscured version of the 2022 Adobe creative cloud logo. It features the logo atop a bright, colorful gradient which "brings the colors of Adobe's product brands" together.

<https://seeklogo.com/images/A/adobe-creative-cloud-2020-new-logo-B6324473C2-seeKlogo.com.jpg>

THE "CREATIVE CLOUD"

In 2013 Adobe announced that CS6 (Creative Suite version 6) would be their last version and that future versions of their creative software would only be available via their Adobe Creative Cloud subscription model. Adobe also announced that it would continue to support CS6 and would provide bug fixes and security updates through the next major upgrades of both Mac and Windows operating systems. The Creative Suite packages were pulled from Adobe's online store in 2013 but were still available on their website until January 2017.

This "Creative Cloud" is a set of applications and services from Adobe that gives subscribers access to a collection of their software used for graphic design, video editing, web development, photography... It hosts the downloads, supports cloud storage, and stores fonts, all of which make it not only required for any adobe user, but also optimal. This "optimal experience" also makes it nearly impossible to get your beloved 'adobe' fonts back and open your files for when your license runs out or you think about changing to another program; almost giving you no way of leaving without almost starting from new.

CRITICISM

The only criticisms I generally come across all are in regard to the subscription model of service. Seems to be the main bone of contention with anyone who complains about Adobe.

The other way: horizontal means buying out all the competitors, so you become the only available party. The social opinion about these monopolies is divided in the people who think these monopolies have a positive social and economic impact.

Probably one of the worst problems with monopolies is that these companies can price fix. This means that they can choose the price of the product or service because they own all of production. There is no other option than to buy their product. This has multiple effects but can mostly lead to a drop in the product quality. This is very visible in the adobe creative suit particularly in the strange errors, bugs, etc. that come with each new update. If the price fixing becomes too extreme, they might create one of the biggest problems, inflation. This is because their greediness could cause a shift in the economic value and thus create an inflation issue.

Due to these monopolies there also starts to become a loss of innovation. Because there are no other 'better' products, services available there is no need for these companies to innovate on their own

Flipped image of Rich Uncle Pennybags. He is the mascot of the boardgame Monopoly. Pennybags is depicted as a portly old man with a moustache who wears a morning suit with a bowtie and top hat. In large parts of the world he is known, additionally or exclusively, as the Monopoly Man, or Mr. Monopoly.

<https://pbs.twimg.com/media/EzIeeRnXEAcWGs.jpg>

The dollar sign, also known as peso sign, is a symbol consisting of a capital "S" crossed with one or two vertical strokes. It is used to indicate the unit of various currencies around the world, including most currencies denominated "peso" and "dollar". The explicitly double-barred sign is called cifrão.

<https://media.istockphoto.com/id/620368864/photo/gold-us-dollar-symbol.jpg?rs=612x612&w=0&k=20&c=sFbY0Z9a9sxr>

There are a lot of alternatives for the adobe creative suit but due to an eight-page constraint I am only going to talk about the "popular" softwares. This list will also only include open source software because otherwise there would be a chance for a monopoly birth.

product or service. This loss is also very visible with the adobe creative suit. They have no competition, so they have no strive to evolve as a product; most of the time they are just adding slice of life additions or making certain 'tools' easier for the user. These changes are not always bad but this loss of innovation is making the future of the adobe creative suit very bland, black and white.

One of the more recent examples of the Adobe monopoly in practice is the new Adobe Pantone payment system. The software giant said that the standardized pre-loaded color libraries in Photoshop, Illustrator and InDesign would be phased out from 16 August 2022; the move was flagged at the end of last year. However, three Pantone Color books would remain: Pantone + CMYK coated, Pantone + CMYK uncoated, and Pantone + Metallics Coated. The change means that customers will need to buy Pantone Connect licences to access all of the Pantone libraries via a plug-in. Adobe said the change had come about because "Pantone's licensing with Adobe was adjusted".

OTHER OPTIONS³

GIMP INTERFACE. ALTERNATIVE TO PHOTOSHOP

Adobe Photoshop is the most popular and widely used graphics editing tool both for regular and professional users. It's an excellent tool for photo editing, website design, and graphics creation. When it comes to an alternative to Adobe Photoshop, GIMP provides the best replacement.

GIMP is a free and open-source image editor available for GNU/Linux, Mac, Windows and other Operating System. It provides a handful of sophisticated tools that make a graphic designer and photographer's work easier. From high-quality photo manipulation to original artwork creation, GIMP includes options to create icons, graphical design elements, color management features etc. And the customization options along with third-party plugins make your work a bit easier.

INKSCAPE. ALTERNATIVE TO ADOBE ILLUSTRATOR

Adobe Illustrator is a standard tool suited for vector graphics editing and design. With an impressive set of drawing tools and effects, it is widely used for vector editing, posters creations etc.

Inkscape is a very competitive, free and open source tool to Adobe Illustrator. A powerful vector editor, Inkscape has flexible drawing tools, various file format compatibility, powerful text tools and support for Bezler and spiro curves. It supports advanced scalable vector graphics features like markets, clones and blending.

MASTERPDF. ALTERNATIVE TO ADOBE ADOBE ACROBAT [NON-FOSS]

Adobe Acrobat is another application from Adobe Creative Suite which is mainly used to view, create and modify PDF files. The Adobe reader supports viewing, printing and annotating of PDF files while the Acrobat is used to create, edit, convert, digital sign, encrypt and export PDF files.

It's difficult to find a fully functional open-source PDF editor. LibreOffice can be used edit a pdf file with some limitation, and so can Inkscape. However, Master PDF, the only proprietary software in this list supports all the features for editing a PDF file. It allows creating, editing, encryption and signing the PDF documents with ease. You can comment documents with stamps, notes, text underlining and fill PDF forms easily.

OPENSLOT. ALTERNATIVE TO ADOBE PREMIERE

Adobe Premiere Pro is video editing application from Adobe System which is used for high-resolution video editing, audio sample-level editing, 5.1 surround sound mixing and more.

OpenShot is a powerful and easy to use video editor which serves as the best replacement for Adobe Premiere Pro. With a simple user interface, OpenShot provides a large number of features.

DARKTABLE. ALTERNATIVE TO ADOBE LIGHTROOM

Adobe Lightroom is a photo processor and image organizer which allows viewing, organizing and retouching large numbers of digital images. With Lightroom, you can enhance and your photographs, punch up colors, remove distracting objects and straighten skewed shots.

When it comes to an alternative to Adobe Lightroom, the best free and open-source software is darktable. It is a photography workflow application and raw developer which manages digital negatives or RAW images, lets you view them and have features to enhance them.

It provides basic image operations like crop and rotation, highlight reconstructions, white balance, invert operation and exposure control. Tone image operations include modification to the exposure, level adjustments, changing lightness, recreating contrast for HDR images etc. darktable also includes color image operations for correcting overexposure and color, contrast, enhancing saturation and manipulation of RGB channels. The Correction modules helps you manage sharpening of details, noise level, spot removal, chromatic aberrations and more.

NATRON/BUTTLEOFX. ALTERNATIVE TO ADOBE AFTEREFFECTS

Adobe After Effects is a visual effects and motion graphics application used for filmmaking and television production.

Natron provides a perfect alternative to Adobe After Effects with motion editing and multi-view workflow. With an intuitive user interface and a quick rendering, you can work with keyframes with a very accurate curve editor. It can be used as a command line tool and the command line version is executable from ssh on a computer with any display. It supports smooth zooming and panning for large images, and includes a full-featured dope-sheet to quickly edit clips and keyframes in time-space.

ButtleOFX is another open source composition software which provides an intuitive Graph Editor to connect nodes, Parameters Editor to customize effects and three different Workspace layouts to switch in-between according to your needs. The project is still in alpha state so there will be bugs. If you are willing to try, you can grab a copy from here.

SCRIBUS⁴. ALTERNATIVE TO ADOBE INDESIGN

Adobe InDesign is a desktop publishing application used primarily for creating posters, flyers, brochures, magazines, newspapers, books etc. It supports exporting a file to epub format for creation of e-books. When it comes to an alternative to Adobe InDesign, Scribus provides a powerful and easy alternative.

Scribus is a free and open source application available for all major operating systems and is based on the free Qt toolkit. From creating layouts to typesettings and creating animated and interactive PDF presentations and forms, Scribus is used to write newspapers, brochures, newsletters, posters, and books.

PIRACY. ALTERNATIVE TO THE WHOLE CREATIVE SUIT

Another option that I haven't mentioned yet is pirating the adobe creative suit. Pirating is the act of stealing software that is legally protected. This includes copying, distributing, modifying, or selling the software. Originally copyright laws were put into place so that the people who develop software (programmers, graphic artists, etc.) would get the proper credit and compensation for their work.

Color list from the Adobe photoshops color picker. After clicking the drop-down menu and selecting the Pantone Color book your swatch are in Pantone Solid. Now quickly type the first few digits of the specific Pantone color you need. e.g to find Pantone 232 C, type in "232" and Photoshop will bring up the color. It's important you type quickly so that Photoshop searches the digits as one number rather than single digits. You may also search for the color name. Type "y" to bring up all the yellow colors in the book. The color will now appear as your active color in the toolbar making it available for use.

<https://graphicsmob.com/wp-content/uploads/2021/03/pantone-auto-pick-color.jpg?ezimgfmt=ng:webp/ngcb3>

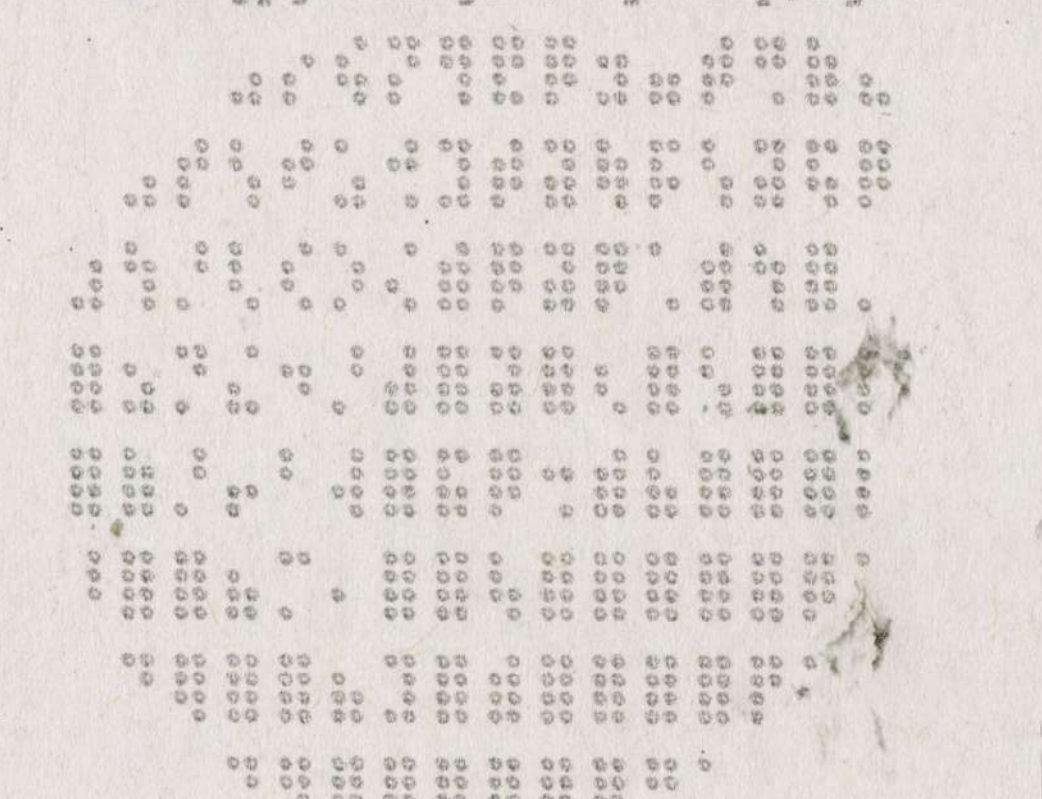


Image of Scribus logo. This icon hasn't changed since the release of the open-source program on the 4th jan 2007 19:44. https://upload.wikimedia.org/wikipedia/commons/9/9a/Scribus_logo.png

Scribus was used to create this document, manual. This was my first time using a program that was not from the Adobe monopoly. This meant that there was a lot of struggle to put my vision of the design on this document. Even though the program isn't as polished as InDesign there are definitely interesting/innovating ideas like the 'Edit text with Story Editor' option where another window would pop up and you saw only the text with no style but the style attributes were given on a side-menu. (There could be a possibility that this is also in InDesign, but I haven't found it, looked for it.)

One thing that really bugged me when working with this software is that it is very apparent that the program wasn't really created for the Macintosh operating system. The most apparent reason is the weird scroll buffering when your trackpad is in 'reverse' scrolling, this made it very frustrating to even scroll down to another page to edit some text. I think I will keep trying to use this program to set myself free from the monopoly board that the graphic education system put me on. (Dramatic interpretation⁵)

This was my personal opinion, experience using this Scribus but I think if you are still learning InDesign, graphic design as a whole you should at least try to use this program for a few weeks. (Definitely when using windows, Linux) And even after you trial and error you could always still crawl back to the monopoly table. (Another dramatic interpretation)

##Image of The Pirate Bay logo, an online index of digital content of entertainment media and software. [1] Founded in 2003 by Swedish think tank Piratbyrån, The Pirate Bay allows visitors to search, download, and contribute magnet links and torrent files, which facilitate peer-to-peer, file sharing among users of the BitTorrent protocol. https://upload.wikimedia.org/wikipedia/commons/thumb/1/16/The_Pirate_Bay_logo.svg/400px-The_Pirate_Bay_logo.svg.png

*There must be no alternative to piracy, meaning that the victimless crime argument does not apply. The precondition that an individual will not pay for the software is not enough to justify piracy. The noble justification and willing but unable arguments apply only when there is sufficient need, and no alternative.

These two conditions must be satisfied to morally justify piracy. While "sufficient need" is too vague for rule-Utilitarians, the reach of human imagination is not enough to create a set of laws to address every situation where such piracy may be justified. The legality of the act is not enough to condemn piracy, but individuals who pirate without satisfying the two conditions are not morally justified in piracy according to my research and reasoning.

When software piracy occurs, compensation is stolen from these copyright holders. Software piracy doesn't require a hacker or skilled coder. Any normal person with a computer can become a software pirate if they don't know about these software laws.

MULTIPLE FORMS OF PIRATING

SOFTLIFTING

This is when someone purchases one version of the software and downloads it onto multiple computers, even though the software license states it should only be downloaded once. This often occurs in business or school environments and is usually done to save money. Softlifting is the most common type of software piracy.

CLIENT-SERVER OVERUSE

This is when too many people on a network use one main copy of the program at the same time. This often happens when businesses are on a local area network and download the software for all employees to use. This becomes a type of software piracy if the license doesn't entitle you to use it multiple times.

HARD DISK LOADING

This is a type of commercial software piracy in which someone buys a legal version of the software and then reproduces, copies or installs it onto computer hard disks. The person then sells the product. This often happens at PC resale shops and buyers aren't always aware that the additional software they are buying is illegal.

COUNTERFEITING

This occurs when software programs are illegally duplicated and sold with the appearance of authenticity. Counterfeit software is usually sold at a discounted price in comparison to the legitimate software.

ONLINE PIRACY⁶

This is also known as Internet piracy, is when illegal software is sold, shared or acquired by means of the Internet. This is usually done through a peer-to-peer (P2P) file-sharing system, which is usually found in the form of online auction sites and blogs.

OPEN SOURCE DESIGN¹

In my journey away from the Adobe creative suit I have found myself in a new type of headspace; the way I look at creating, designing drastically changed due to these open-source programs, systems. The world of graphic design in my eyes has a big self-centered problem, attitude, therefore I would like to bring an open-source mentality forward in this world, so it becomes a place where people, designers openly share their techniques even files and where other creators use these for their own projects. Of course, the other users can't blatantly copy the previous designers, but the idea is that they use these images, text, techniques... to elevate their own idea, project. (This idea also implies that the original creator is credited in some form; for example their name in the colophon.)

The second part of this document, manual will be about anew open-source way of creating, designing. This includes the way you think about sharing your work, using images and even a possibility to think about 'open-source printing'.

A picture of the AxiDraw V3; this is a high performance personal writing and drawing machine. Currently shipping in about 2-3 weeks. \$550, with free shipping to US addresses. (In chapter PRINTING i will further elaborate on this machine.) <https://cdn.evilmadscientist.com/catalog/emskits/axidraw/v3gen3c/imglrg/182x.jpg>

¹I understand that there are other available options like screen printing that is very cheap, accessible to the public but to make my point as clear as possible I am only referring to techniques like risograph-, laser- and ink printing.

²All of the information needed for 'printing' with this new technique is available in this manual but here is the user guide for when you, the reader need extra information or are interested in the inner working of the machine. https://cdn.evilmadscientist.com/dl/ad/public/AxiDraw_Guide_v550.pdf

PRINTING

This open-source mentality has brought me to a new technique for printing, by making use of the AxiDraw v3. This machine is extremely versatile and designed to serve a wide variety of everyday and specialized drawing and writing needs. You can use it for almost any task that might normally be carried out with a handheld pen. It allows you to use your computer to produce writing that appears to be handmade, complete with the unmistakable appearance of using a real pen to address an envelope or sign one's name. And it does so with precision approaching that of a skilled artist, and just as importantly using an arm that never gets tired.

In my eyes you can call this act of 'perfect replication' printing, the only difference is that you have more choice in the material that is used for printing and the placement.

IMPACT ON MONOPOLY²

The interesting mechanism of the machine and effect it gives to your print is not the only reason I why I want to bring this new printing technique forward but also because I see a way to free yourself from this large printing industry, monopoly.

In the first part of this manual, I guided you through the progress of escaping from the adobe creative suite by giving you other options for their software. In the second part I wanted to also give you other options but for the hardware that is in place instead of the software we use.

Normally when you need to print a publication, poster... with 'good' quality you need to already have a high-end printer or go to a printshop where they print it for you. Both of these tactics are part of the capitalistic printing industry; owning a printer is a very expensive and rigorous process; buying the printer, repairing, ink, energy... and when you go to a printshop the freedom of creating, printing it yourself disappears.

MORE ABOUT AXIDRAW

AxiDraw V3 is the third-generation version of the AxiDraw, redesigned from the ground up for high performance. It features smooth rolling wheels on custom aluminum extrusions, specially designed for high stiffness and light weight. Its sturdy, rigid construction gives it finer quality output and in most applications allows it to operate with significantly higher precision and speed than competing and previous generation machines.

AxiDraw is a project by Evil Mad Scientist Laboratories, working in collaboration with Lindsay Wilson of IJ Instruments Ltd.

AxiDraw machines are designed and manufactured by Evil Mad Scientist in Sunnyvale, California, with both foreign and domestic components. The major structural components, including our aluminum extrusions, are made in USA.

GETTING STARTED

The AxiDraw comes fully assembled, tested, and ready to use, right out of the box. A universal-input plug-in power supply is included with the AxiDraw, as is a USB cable, and an optional paper-holding easel. Assuming that you've installed the software first, you can be up and plotting within minutes of opening the box. Their comprehensive PDF user guide walks you through every step of the process.³

To operate AxiDraw, you will need a reasonably modern computer with an available USB port (Mac, Windows or Linux), plus internet access to download necessary software. Pens and paper are not included. (You can use your own! AxiDraw does not require proprietary pens or paper.)

AxiDraw is normally controlled through a set of extensions to Inkscape, the excellent, popular and free vector graphics program. Basic operation is much like that of a printer driver: you import or make a drawing in Inkscape, and use the extensions

to plot your text or artwork.⁴ It's all handled through a straightforward graphical user interface, and works cleanly on Mac, Windows and Linux.

QUICK SETUP

INSTALL THE SOFTWARE

Install Inkscape.

Install the AxiDraw plugin for Inkscape. (This plugin will automatically be added to Inkscape after restarting the software.)

SETUP THE AXIDRAW

1. Move the AxiDraw to its Home Corner.
2. Plug in power and USB cables. (All USB plugs seem to work: in the back of the computer (iMac), in the keyboard, in a usb hub...)
3. Add the pen to the plotter.
4. Position your paper with its upper-left corner below the pen tip.
5. In Inkscape
 - a. Select the drawing or text and select Path > Object to path.
 - b. Extensions > AxiDraw Control. Go to tab setup. Click the Toggle pen between UP, DOWN option. Click apply to toggle the pen down and back up to check the correct vertical movement.
 - i. Adjust the pen's height
 - ii. Try to keep the range of movement to a minimum. This will draw faster and is better for the servo motor.
 - c. Extensions > AxiDraw Control. Tab Plot and click Apply to start plotting. (Each visible layer will print.)

USAGE

When using this new technique one of the first things you need to think about is the material you are going to use. Different materials are going to give different effects to your print. This manual is printed in graphite using a mechanical pen with a width of 0.3mm.⁶ I chose this material due to the open-source headspace I am trying to bring forward; the graphite makes it possible to erase aspects that are not important, correct for the reader, create space for their own notes, to combine this manual with their own work, etc.⁵ Because of its erasable character it made solving mistakes during the printing progress a very easy progress.

Different materials can also come with different problems to overcome. The graphite pencil made the printing process itself very difficult due to the point of the pencil becoming smaller and smaller the further you get.⁷ The best option when printing is to test different materials and see what effect they give or difficulties they create.

IMAGE PRINTING

The last difficulty to overcome when using this technique is the printing of images. This is because the AxiDraw only draws the outline of a shape, this means that you can't just place an image in in Inkscape because it will only draw the shape of the border and not the image itself.

The following pages will show you different options to make image printing possible and interesting.⁸

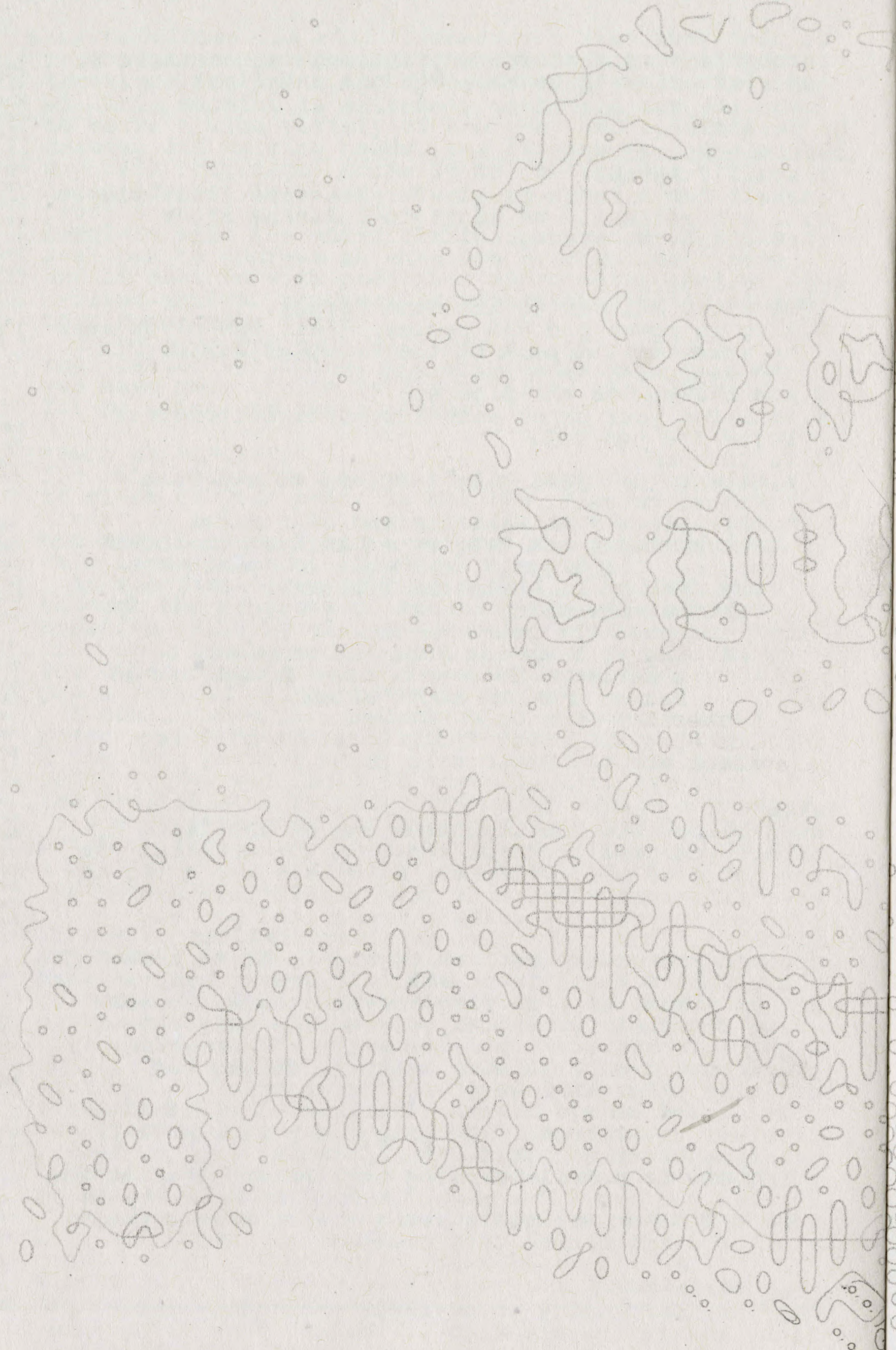
⁴You can only 'print' in a SVG file format this means that you need to implement an already created SVG file into Inkscape or convert you work online using automatic converting sites like 'https://cloudconvert.com/pdf-to-svg'. These or not always reliable so the best option is to create, design your work straight in Scribus or Inkscape; when using Scribus you need to export each page separate as an SVG and outline your text. Then open these pages in Inkscape and place them in the right order. (This order can differ depending on which binding method you use; for example when binding a booklet with 8 pages the order is 8, 1, 2, 7, 6, 3, 4, 5)

⁵This also has environmentally benefits because the mistakes could be rectified there was no need to throw away the paper and start all over instead you could keep working on that one paper.

⁶When using graphite I also recommend using this mechanical pencil so that you only need to click the top of the pen to make the point bigger instead of taking the pen out and sharpening it.

⁷I have found two tactics that can overcome this hardship; the first one is to break your design up in different parts and print these separate. For the second tactic you need to go to your battery setting and set the option 'turn display off after' to for example 5 min. What this does is make your computer go to sleep after the time set and thus also putting the AxiDraw to sleep. This technique is useful because the 'printer' only has a pause - and not a resume button so when stopping the machine, you need to start all over again making the progress even more difficult.

⁸A few tips; when using this technique of the most frustrating things is that when the 'printing' progress starts it is impossible to work on Inkscape. Your computer says, "Application Not Responding" but the software is just in use by the 'printer'. This technique is more time consuming than any other printing techniques, so the best working method is to 'print' in the background and occasionally look at the progress being made. The last tip I want to give you is to create a 'dedicated workspace'; what I mean with this is a kind of outlining with tape for example where you put your paper in so your designs placement is always perfect.



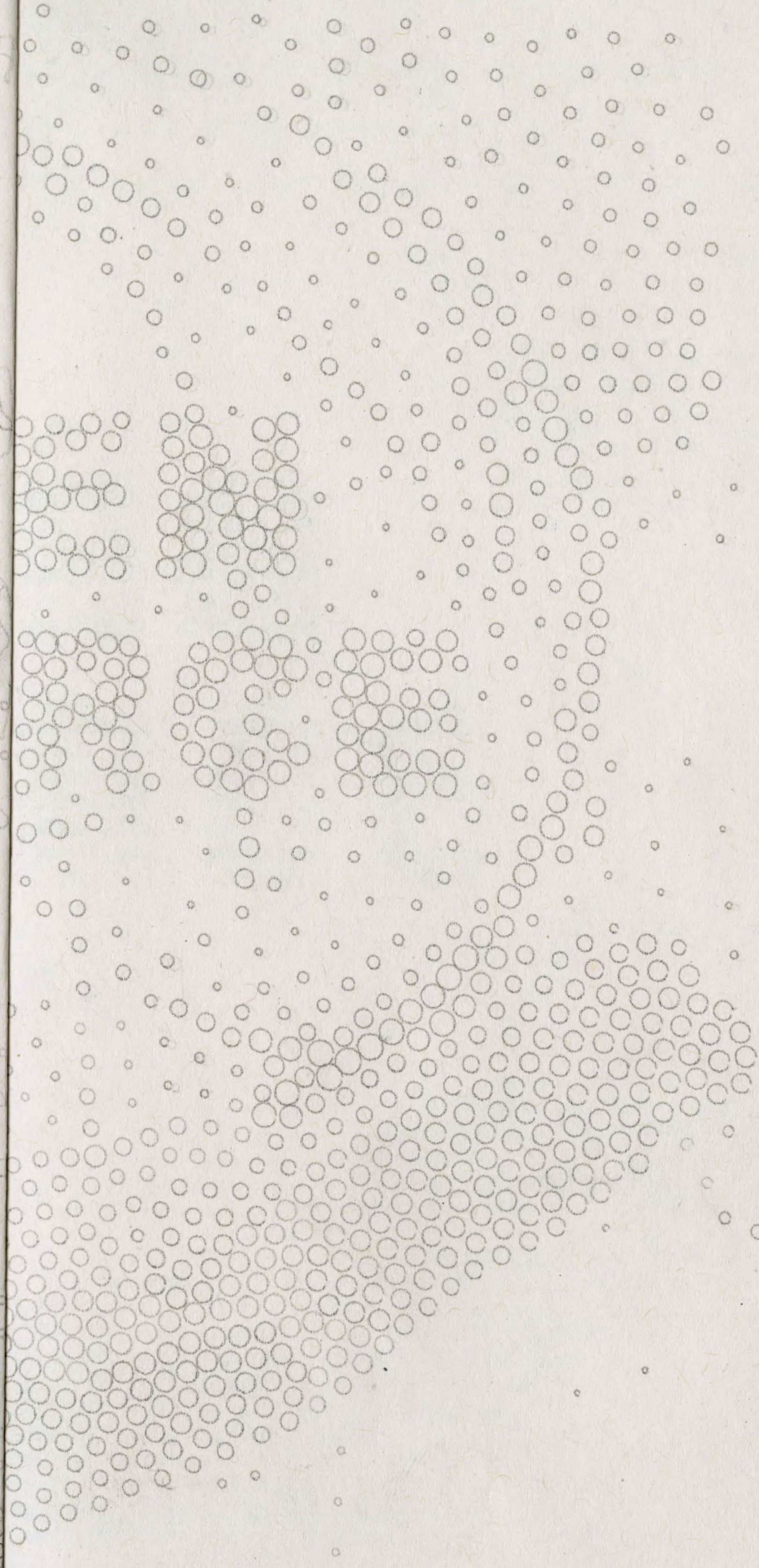
"Left crop of a stock photo titled "Painted hand shows concept hologram Open source on his hand." <https://thumbs.dreamstime.com/b/painted-hand-shows-concept-hologram-open-source-his-hand-painted-hand-shows-concept-hologram-open-source-his-hand-drawn-man-115398454.jpg>

¹Tutorial: import image into GIMP, convert it to indexed colours using a black and white (1bit) palette and the Floyd-Steinberg (normal) dithering. Invert and save this image. (jpg) Open it in Inkscape and use the option, "Trace Bitmap". (Setting of sliders is personal but can affect the organic style.)

ORGANIC BITMAP¹¹

A technique that uses a type of memory organization, image file format normally used to store digital images called a bitmap. You can also use this storage technique for creating images with a very pixelated pattern reminiscent of old computer graphics. When you turn a bitmap into an SVG (Scalable Vector Graphics) it doesn't recognise all the pixels and creates a more organic shape.

+/-
This technique is one of the most unique ones due to the organic shape the SVG file creates but it's also one of the longest processes. This is because of the time it takes for the bitmap to be traced.



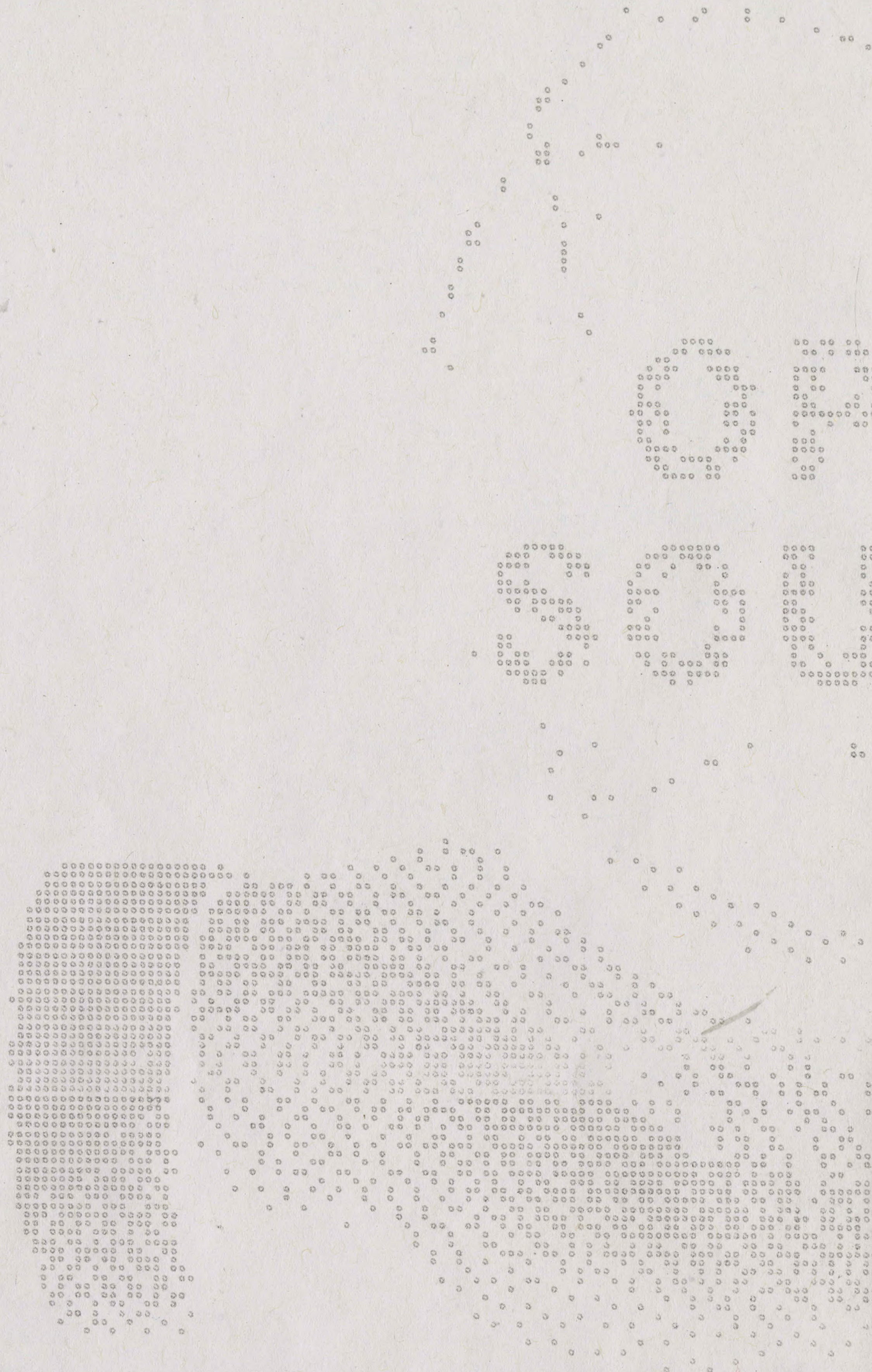
STIPPLEGEN¹²

A technique that uses an application created by EvilMadScientist. It creates stipple drawings from image files, this solves the main issue of creating good vector artwork representing halftones. It uses Adrian Secord's algorithm, which mathematically produces a set of points that can closely represent the appearance of a traditional stipple drawing.

+/-
This technique creates a very peaceful image, state by using a recognisable shape and the big amount of white space the circle leaves behind. This type of image is also very easy to create because of the software.

"Right crop of a stock photo titled "Painted hand shows concept hologram Open source on his hand." <https://thumbs.dreamstime.com/b/painted-hand-shows-concept-hologram-open-source-his-hand-painted-hand-shows-concept-hologram-open-source-his-hand-drawn-man-115398454.jpg>

¹²Site where you can download the StippleGen software. It also has a tutorial on how to use it. <https://wiki.evilmadscientist.com/StippleGen>



"Left crop of a stock photo titled 'Painted hand shows concept hologram Open source on his hand.'" <https://thumbs.dreamstime.com/b/painted-hand-shows-concept-hologram-open-source-his-hand-painted-hand-shows-concept-hologram-open-source-his-hand-drawn-man-115398454.jpg>

⁹One of the easiest websites I found to create the Dot art. <https://emojicombo.com/dot-art-generator>

BRaille⁹

A technique that makes use of the digital braille alphabet to create images, shapes, logos. It uses the 8-dot computer braille where the seventh and eighth dots are normally used to indicate the position of the cursor.

+/-

This technique is used throughout the whole manual due to its benefits like the grid the 8 dotted pattern creates and simple shapes that makes the printing progress very quick. It does have a problem where printing small details is almost impossible.



ASCII¹⁰

A technique that uses computers for presentation and consists of pictures pieced together from the 95 printable characters defined by the ASCII Standard.

It can be created with any text editor, and is often used with free-form languages.

+/-

This technique is very visually pleasing due to the personal attribute of the Ascii characters but because of their varying shapes it is one of the most time constraining techniques to use.

"Right crop of a stock photo titled 'Painted hand shows concept hologram Open source on his hand.'" <https://thumbs.dreamstime.com/b/painted-hand-shows-concept-hologram-open-source-his-hand-painted-hand-shows-concept-hologram-open-source-his-hand-drawn-man-115398454.jpg>

¹⁰One of the easiest websites I found to create this Ascii art. <https://www.ascii-art-generator.org/>

¹³I am not going to go in detail about this aspect because I am purely using it for its file sharing purposes.

¹⁴The difference between these providers are small and don't matter if you just want to download the files. If you want to keep using Nextcloud I would recommend that you would do research about what provider works best for you.

¹⁵Pressing this will bring you to your own personal files; if you don't want to keep using this software you shouldn't pay attention to these.

¹⁶This link will change after 2023-06-29; thus, a new link will be created and written in the manual. If you want to have permanent access to the document you can add me as a contact and I will give you an internal link.



"Logo of NextCloud software.
https://clouds.geant.org/wp-content/uploads/2018/02/Nextcloud_Logo.svg.png

"Image of a penguin with blue hearts in front and the words 'Thank You!' standing next to the animal. Symbolizing the gratitude I have for you the reader but also symbolizing the connection I gave grown with the open-source attitude throughout the creation of this manual. The penguin referring to the Linux mascot Tux who is also a penguin.
<https://1.bp.blogspot.com/-HIz3t7BoJ08/UWQIGrNKLF1/AAAAAAAAANE/d3V5OGiFmVw/s1600/penguin2.jpg>

SOURCING THIS DOCUMENT

As mentioned throughout both parts of this manual one of the biggest characteristics of the open-source model is the permission to use, redesign documents or content of a product and the encouragement of open collaboration. Naturally this means that all the content used to create this manual as well as the files needed to design and 'print' it are available to download on Gitlab. I encourage you the reader to use these files for your own project or research, print the document to have a personal psychical copy, etc.

NEXTCLOUD

Nextcloud is a suite of client-server software for creating and using file hosting services. It provides functionality like Dropbox, Office 365 or Google Drive when used with integrated office suites Collabora Online or OnlyOffice.¹³

It can be hosted in the cloud or on-premises. It is scalable from home office software based on the low-cost Raspberry Pi all the way through to full sized data centers that support millions of users.

SETTING UP NEXTCLOUD ACCOUNT

1. Go to; <https://nextcloud.com/sign-up/>
2. Fill in your email of choice and agree to the terms of service.
 - a. Don't press sign up yet; under this input box you can choose what kind of provider you want to use; change provider button.¹⁴
3. After this step, you will receive a mail to verify your account within 6 hours.
 - a. Press 'click here to verify your email address.'
 - b. You will receive a new email where you will get the option 'Start using TheGood.Cloud'.¹⁵

Now you have full access to Nextcloud and its capabilities. It is now possible to get the files by pressing using this personal link; <https://use04.thegood.cloud/s/88ze5yAxfy6djgg16> and using this password to unlock it; yN4m/6CldN.

NEXTCLOUD TRIAL

Downloading the software is very easy but not necessary to get the files. You can also make use of the instant trial; this gives you immediate access to a Nextcloud test account.

This means you can take some time to explore their interface, download the files and maybe even see how Nextcloud can help you accomplish your future tasks.

SETTING UP NEXTCLOUD TRIAL

1. Go to; <https://nextcloud.com/instant-trial/>
2. Fill in all the information that is necessary to get acces.
 - a. Agree to the terms and conditions.
3. After this you will recieve a mail that you will give you acces to the trial.
Note: Your account gets removed after 60 minutes.

