AN INTRODUCTION TO:

BOOKBINDING
The Public is an activist design studio specializing in changing the world.

This zine, a part of our Creative Resistance How-to Series, is designed to make our skill sets accessible to the communities with whom we work. We encourage you to copy, share, and adapt it to fit your needs as you change the world for the better, and to share your work with us along the way.

Special thanks to Mandy K Yu from the York-Sheridan Design Program in Toronto, for developing this zine on behalf of The Public.

For more information, please visit thepublicstudio.ca.

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Introduction

THE ART OF BINDERY

Bookbinding is a means for producing, sharing and circulating independent and community work for artistic, personal or commercial purposes. It is the craft of assembling pages into a book through the fastening of multiple folded or unfolded papers or other material. Depending on your budget, time, and patience, you can either get bookbinding professionally done or do it yourself easily at home! There is a diverse range of inexpensive and easy ways to turn creative content into printed matter. Bookbinding provides structure for creative expression and acts as a means to transform creative content into printed matter.

Bookbinding enhances the presentation of your creative project. You can use it to assemble a professional portfolio, a collection of photographs or recipes, decorative guestbook, or volume of literature such as a personal journal or collection of short stories or poetry. It can also be used for an informational, educational, and advertising purposes such as brochures, pamphlets, programs, and zines. Regardless of its function, bookbinding provides structure for creative expression.

Professional bookbinding services can be pricy and although DIY can be time-consuming, doing it yourself can be rewarding and inexpensive: you can personalize your piece in countless ways, take ownership of your own creation, make your voice heard and share your message!

The act of publishing ideas, imagery, or literature is rewarding for many artists, musicians, writers and designers. However, anyone at home can create and produce printed works with a little bit of knowledge, patience and a creative mind! This zine will guide you through the ins and outs of bookbinding with simple tips, ideas, exercises, information and a step-by-step guide with other crafty suggestions for creating your own book.

A brief history

BOOKBINDING ROOTS

Long before the modern Latin alphabet was conceived, ancient civilizations had been documenting their thoughts for thousands of years by engraving on stone or wood with tools and later, writing with ink on papyrus or parchment by hand.

Continuing through history, other record-keeping structures emerged including scrolls, manuscripts, and tablets for recording business transactions, religious scribes, philosophical concepts, navigational maps, astronomical and scientific documentation, court records, and much more.

The need to gather and share multiple pieces of information proceeded to the development of the book, and when producing books by hand became too time consuming, the need for a faster and more efficient means of publication and distribution led to the invention of the printing press which brought us mass production of the printed book.

Today, bookbinding can be used for:
- portfolios
- photo albums
- poetry books
- journals
- ads
- menus
- short stories
- much more

FUN FACT

One of the first books ever printed for mass production, The Gutenberg Bible, was made in Germany during the 1400s by Johannes Gutenberg’s revolutionary machine — the printing press with moveable type.

This printing and typographic system allows moveable, metal components to efficiently reproduce and print parts of a document, like letters and punctuation marks. His invention has changed history and since paved the way for mass publication and communication.
POWER OF THE WRITTEN WORD

Knowledge is power, and the written word is even more powerful than some may think. There are many books that have led radical and political movements, spread awareness, and spoken the truth. Books are important to schools, communities and activist groups because we can learn from them and grow stronger as a collective.

Here are a few examples of radical justice in the form of print and why each bookbinding style and technique is effective for the given project:

**React Manual for Amnesty International by Tom Sieu, John Givens**

This manual acts as a guide for activists by encouraging teens and young adults to take a stand against oppression and repression in the government. **Hardcover**: meant for durability. **Coil Bind**: can withstand many page turns, is useful as a workbook/notepad since it allows you to write and navigate between pages with ease.

**Lexicon Pamphlet Series for the Institute for Anarchist Studies**

This small-sized pamphlet series aims to use the power of the written word as political tools by defining key terms and phrases. **Saddle stitch or fold**: effective for short publications, easy to assemble and hand out, and inexpensive to print.

**NOZONE IX EMPIRE by Nicholas Blechman, Naomi Mizusaki, Stefan Sagmeister**

Through graphic illustrations and comics, artists, designers, photographers, illustrators, and writers question society and power politics. **Paperback bind**: portable, durable for high page counts.

**2/15: The Day the World Said No to War by Connie Koch**

A hardcover collection of full-bleed photographs commemorate the day when over thirty million demonstrators gathered to protest against the violence and war in Iraq in 2003. **Horizontal**: to effectively display landscape images that can span two pages when opened. **Hardcover tape bind**: for durability and to preserve the high quality print of the photographs as a display piece.
ANATOMY OF THE BOOK
& BASIC TERMS

Head: top edge of the book
Tail: bottom edge of the book
Spine: where pages are bound
Joint/Hinge: where the corners connect with the spine to allow the book to open
Text block: the inside pages or a group of pages

Endsheets/Endpapers: papers at the front and or back of the volume, often used for decorative purposes, which can be glued to the covers as well
Folio: a single piece of paper folded once
Signature: several folios nested then sewn together to form the text block

Spread: 2 facing pages of a book
Landscape: when paper/volume is in a horizontal orientation
Portrait: when paper/volume is in a vertical orientation

FUN FACT: When you fold several sheets of paper into a signature or a zine, you will notice that the middle pages stick out. This is called a fore edge creep. Try it yourself: gather 10 or more pieces of paper into a booklet, folded down in half. You will notice the inner pages bulge out on the side. Trimming the excess paper length with a sharp blade or guillotine cutter can easily solve this. Keep this in mind when deciding cover sizes since the creep adds width to the signature and text block.
BOOKBINDING SYSTEMS

Thermal and Glue
I.E. TAPE, PERFECT BINDING

Perfect binding holds the book together by the spine of the book with a glued strip of material. This method can be carried out mechanically (with a machine), or manually (by hand).

Punch and Bind
I.E. FAN BOOK, STUDS, RINGS, COIL

A fan book is held together by one pivot point from a screw, ring, or stud, and opens out like a fan.

Binding studs have a similar use to screws and also have covers over the back of the screw.

Binder rings allow you to gather any size and or weight of papers together to form an almost keychain-like book.

Coil binding is the most economical method for short-run publications. A spiral cord joins loose-leaf pages, single and or multiple signature folds together and also lies flat when open.

TIP: Perfect binding works best for binding books with at least 30 pages, otherwise the glue will leak with too few pages.

Practice folding & binding on scrap papers before you work on your final.

TIP: Books bound by saddle wire lie flat when open, so remember to keep the number of pages under 24.

Stitch and Sew
I.E. SADDLE WIRE/STITCH, CHAIN STITCH

A saddle wire or saddle stitch is a metal stitch such as a staple that is punched through the centerfold of a single signature— for instance, a magazine.

Coptic stitch (also known as chain stitch) is extremely flexible since it consists of an open spine and multiple signatures bound with individual boards as covers, instead of a wrap around cover.

TIP: You can replace thread with ribbon for a more elegant stylistic approach.

Hardcover or paperback?
Depending on whether you want your book to be durable and or formal, choosing hard covers can work effectively with the nature of your piece. You can cut out pieces of illustration board as covers— they can be found at many art stores.
PAPER SELECTION

Paper comes in hundreds of different sizes, weights, shapes, textures, thicknesses, colours, and can be made from many different materials. Your options are endless when it comes to choosing what kind of paper to use for your piece.

COMMON TERMS

Cover stock i.e. Card stock:
a type of thick paper that comes in many weights that is more durable than regular paper, such as Bristol board, and can be used as a flexible, paperback cover

Matte: without shine

Glossy: shiny and smooth

Bleed: printing method that prints to edge of page

COMMON PAPER SIZES

The chart below illustrates the most common paper size ratios defined by international standards. This is a sample of the A series paper sizes.

<table>
<thead>
<tr>
<th>Paper Size</th>
<th>A0</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
<th>A5</th>
<th>A6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter</td>
<td>8.5” x 11”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal</td>
<td>8.5” x 14”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabloid</td>
<td>11” x 17”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabloid Extra</td>
<td>12” x 18”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A0</td>
<td>33.1” x 46.8”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>16.5” x 23.4”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>11.7” x 16.5”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td>8.3’ x 11.7”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A5</td>
<td>5.8” x 8.3”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6</td>
<td>4.1” x 5.8”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HANDLING PAPER

To get a precise, creaseless, and neat fold, try using a bone folder – a flat, smooth tool – to score your paper.

Caring for your printed works is important for preservation since some kinds of paper may fall apart from over handling and begin to yellow over time, especially newsprint. When storing your projects, keep them in a cool, dry place – preferably an acid-free archival box. Avoid using rubber bands and clips, as they can permanently damage the quality of the paper and leave unwanted dents and marks.

Paper cutters are more efficient than scissors when cutting stacks of paper because they are more accurate and produce cleaner, more precise cuts with the help of the built-in ruler. There are two types: the guillotine, which is one large blade that chops paper, and the sliding/rotating blade that slices paper. The first is used for thick, heavyweight volumes and boards, and the latter for trimming thinner volumes.

TIP: Ensure that the paper product you purchase specifies that it is made from as much PCW (post-consumer material) as possible to help reduce the use of landfill and to support the markets for local recycling collection systems. Check the label on your paper product for the indication.

TIP: Help save and preserve forests by purchasing paper products that have logos from FSC (Forest Stewardship Council) and SFI (Sustainable Forestry Initiative).

FUN FACT

Bone folders were originally made from whalebone, but nowadays are made from cow bone or plastic. You can substitute a bone folder with a wooden spoon.

http://www.castlepriint.co.uk/paper_sizes_UK.html
**TYPES OF PAPER**

**Patterend & Textured**
Paper with various textures and repeating patterns such as Japanese papers (Washi, Yuzen) can add ornamental beauty to your project.

**Paper Vellum**
Made from plasticized cotton, this translucent paper is often used for architectural sketching such as blueprints. Nonetheless, you can still use it to print on multiple sheets for a unique layering effect.

**Recycled**
Recycled paper is not only eco-friendly, it’s also commonly celebrated for its variety of grainy textures. It give off a grungy and organic look, depending on the theme of your project.

**Newsprint**
Newsprint is the cheapest type of paper because it is made to be used for pieces with a short life span such as newspapers.

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**PAPER FOLDING TECHNIQUES**
These simple paper folding methods are just a few out of many that you can try out for your book. Other more complex techniques can include pop-up figures, shapely and diagonal folding and much more.

**Accordion Fold**
An accordion fold resembles an accordion where paper is folded into a zig-zag formation with parallel folds facing the opposite direction.

**Multiple Signatures**
A signature consists of many groups of pages that are folded and nested down the middle. They are usually attached by stitching or thread, and can be found in most hardcover bound books.

**French Fold**
This method is created by folding an individual page in half and binding it at the open edges instead of the crease, and is used to avoid double-sided printing.

**TIP:** To create a longer spread, you can glue two or more accordion folds together.

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**FUN FACT**
Vellum was the primary material for writing and printing on during the middle ages and was prepared by cleaning, stretching, bleaching, and drying mammal skin. Following into the fifth century and onwards, Western books were bound with hard covers made of leather and would be clasped shut with a strap because the vellum would swell dramatically from humidity. When paper production further developed and bookbinding craftsmen began to use paper made from wood pulp, the use of straps was no longer necessary.
COVER IDEAS
These are just a few ideas of how to create a cover for your book. Covers can tell you a lot about a book, so keep this in mind when you are creating yours. The options are endless!

Photographic, Illustrative, Typographic
You can effectively use photos or your own drawings, paintings, and sketches as a cover, or even use typographic elements (text-based).

Upcycled & Collage/Photomontage Cover
Upcycling is when you transform waste materials or products into something new. You can cut out magazine or newspaper clippings, recycle old pages from a book, re-use labels, buttons, packaging, stickers, fabric, or create a collage by pasting these objects onto your cover. There are no limits so try anything and everything!

TIP: For other smaller objects such as buttons, use a hot glue gun, or even try sewing and stitching with a needle and thread. For collage art, decoupage medium works well because it is an all-in-one adhesive and sealing glue. Bigger and heavier materials require thick craft glue.

Stencil Cover
Stenciling is a highly efficient technique for reproducing copies of work—you can cut your own stencils of an image and or text and spray paint or silkscreen your covers this way. Look for our zine on stenciling for more information.

TIP: You can use aerosol spray paints or regular acrylic or poster paints to create your stencils. Use a craft blade for precise cuts of the stencils and ensure the blade is not dulled.

TIP: Paste papers using rubber cement for damage-free removal and high quality finishing. Because rubber cement is not water-based, it will not cause paper to wrinkle, swell, or shrink. However, rubber cement will damage photographs and paper over a long period of time because it is not made for archiving.
CHOOSING A BOOKBINDING STYLE

Different book structures and folding techniques can enhance and help structure the message of your story, so be thoughtful in your decision! Through many trials and personal modifications, you will soon find the method and style that suits your work the most. Let the binding style adapt to your particular project.

USE THIS FLOW CHART TO HELP YOU CHOOSE A BINDING STYLE FOR YOUR PROJECT:

Consider and reflect on why you’re creating this piece and how the theme, content, style and subject matter will affect viewers.
Worksheet

PROJECT MANAGEMENT

IT’S IMPORTANT TO CAREFULLY PLAN IN ADVANCE WHAT TYPE OF BOOK IS RELEVANT AND APPROPRIATE TO YOUR PROJECT’S NEEDS.

Project title: ____________________

My goals: What is the purpose of my project?

Due date: ____________________

Budget: $ _____ – $ _____

Intended audience: Who will be reading my book?

Page count: ________________

SKETCHES

Bookbinding system:

Paper folding technique(s):

List of materials | Approx. Cost
-------------------|-------------
☐ __________________ $ ____
☐ __________________ $ ____
☐ __________________ $ ____
☐ __________________ $ ____
☐ __________________ $ ____
☐ __________________ $ ____
☐ __________________ $ ____

TOTAL COST: $
Step-by-step guide

SADDLE STITCH

This typographic zine is 8.5” X 11”, or letter size. Make sure there are no bleeds because printers will always leave a white border around the edges. To create bleeds, you need to make crop marks to trim the borders after printing. This zine consists of 3 double sided spreads. Including the two covers, there are 12 pages in total.

Materials & Tools:
- Bone folder
- Stapler
- Metal edged ruler
- Bulldog clips
- Utility knife
- Letter size papers

Steps:
1) After printing your zine, measure and fold each page down the middle with a bone folder and ruler. To use the bone folder, hold down the ruler and firmly run the folder up and down until there is a clear crease.

TIP: Practice on a few scrap papers to get used to using a bone folder.

2) Collect all the pages together and clip one open edge, making sure the pages are straight.

TIP: Collecting the pages together into a booklet is also called a signature.

3) If you do not have access to a long-edged stapler, fold over one side of the zine in half without creasing into a full fold and insert into the stapler. Then, staple down the spine near the top and the bottom of the zine.

TIP: Make sure that you staple with the booklet open facing down so the smooth side of the staple is visible.

Check out the public’s zine on zines for more information on printing spreads and setting up documents.
5) Close the book and then with a ruler and utility knife, trim the edges if they are uneven or if there is a fore edge creep.

**HARDCOVER ACCORDION FOLD**

The pamphlet is the same dimension of a tabloid piece of paper, 11" X 17", if it were folded in half horizontally. There are 4 panels; each are 4.25" in width and 5.5" in length.

3) Once printed, measure and mark down 4.25" panels and score the folding lines with the bone folder and ruler and proceed to fold in the creases.

4) Close the booklet and trim the excess edges with a utility knife and ruler.

**Materials & Tools:**
- Bone folder
- Metal edged ruler
- Bulldog clips
- Utility knife
- Rubber cement
- Hard board or illustration board
- Tabloid paper

5) Cut out the covers. Then, measure the dimensions of a panel and trace a box on the illustration board and cut out. Do this twice for the front and back cover. Because of the thickness of illustration board, you will need to make multiple cuts.
6) Apply the glue on the back of the cover and on the cover panels. Let the glue to air dry for 10 seconds until tacky, and then assemble the covers.

7) Lastly, attach the covers to the brochure by glueing once again. You’re done!

**TIP:** When pasting, place a scrap piece of paper underneath so that you don’t get glue on the table or on your next pasting job.

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**HARDCOVER FANBOOK WITH STUD**

The dimensions of this fanbook is 2” X 6” and consists of two hardcovers. The screw post comes in 2 pieces and is 0.5” in length.

**Materials & Tools:**
- Binding stud
- Metal edged ruler
- Bulldog clips
- Utility knife
- Rubber Cement
- Letter size cardstock
- Hole puncher

**Steps:**
1) Cut out the front and back covers with a utility knife and ruler.

**TIP:** Use crop marks to indicate where to make cuts around an image. They look like this:

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2) Paste the covers onto the illustration board—with the same technique as mentioned in the previous section—then cut out the covers using the utility knife and ruler, with the cover as a guide.

3) For the content pages, clip a thick stack of the cardstock together with the cover as a guide, and cut them out for the inner pages. You may need to do this several times to have enough paper to stack up to a width of 0.5”

4) To make holes, line up a thin stack of the inner pages and punch using an office hole puncher. You will need to separate the entire stack if it does not fit in the hole puncher.

5) Because illustration board is so thick, you will need to cut out a square with a utility knife instead of placing in the hole puncher. Make a mark with a pencil to specify the hole size, then create the hole.

6) Finally, line up the book to the hole and screw in the stud. Adjust the page count by adding or removing pages if it does not fit the stud.

TIP: Keep your work station clean and tidy, spilled glue can ruin your piece!

TIP: Take your time when measuring. Always measure twice and cut once to avoid mistakes.

TIP: Safety first! Always cut in a direction away from your body, not towards.

TIP: Binding supplies can be found at many art stores. See page 33 for a list of shops.
ADDITIONAL PAPER FOLDING TECHNIQUES

Try some of these alternative olding techniques for brochures and other handouts. Spread the word against racism, gender inequality, sexism, and other forms of oppression through printed matter!

- 4-pg
- 6-pg letter
- 6-pg accordion
- 8-pg parallel
- 8-pg roll
- 8-pg french
- 8-pg map
- 8-pg accordion
- 10-pg accordion
- 10-pg parallel
- 10-pg roll
- 12-pg signature
- 12-pg broadsheet
- 16-pg broadsheet
- gatefold
- closed gatefold

LAST WORDS

You have the power to generate your own work, and if you make a mistake, it’s ok! Allow your book and vision to evolve and transform, because there is no right or wrong way – there is only your way, and if it works for you, then it works.

So have fun, get hands-on experience, share your work, and spread your message for social justice and empowerment!
What’s out there

MATERIALS, TOOLS, EQUIPMENT

You can purchase bookbinding as well as arts and craft necessities from most art supply stores in your area. Simple bookbinding methods such as coil binding and perfect binding can easily be done at any printing, shipping offices, and office stores, for example, FedEx, Staples, The Printing House etc. You can also shop and order supplies and tools online and in person at the following retailers:

• Michael’s Crafts michaels.com
• The Paper Web artpaper.com
• Pearl Arts and Crafts pearlpaint.com
• Rag and Bone Bindery ragandbone.com
• The Paper Place thepaperplace.ca
• Curry’s Art Store currys.com

PRINTING SERVICES

• Fedex fedex.com
• The Printing House tph.ca
• Staples staples.ca

WORKSHOPS

For upcoming workshops and registration, check online or call in at art schools, community centres, and art galleries in your area. Additionally, some paper and arts and crafts stores offer workshops and classes as well. Keep in mind prices vary (some are free, some are not) and some courses require early registration.

In Canada
• Michael’s art stores hold creative classes in store from fine arts to culinary arts. For more information, visit canada.michaels.com

In Toronto
• OCAD University in downtown Toronto offers free bookbinding workshops with demonstrations. Check their website for registration and upcoming classes ocadustudentpress.com
• The Paper Place located on Queen St. W also offer workshops for bookbinding as well as other artistic techniques such as image transferring and pop-up cards.

Prices for registration range from $45-$65 online at thepaperplace.ca/workshops.php
Follow their blog for more crafty how-to's: thepaperplace.ca.wp
• ARTiculations is an art store in downtown Toronto that not only provide art supplies, but also offers hands-on workshops. Prices vary. View their workshops and courses calendar to register: articulations.ca/workshops-courses/
• Xpace Cultural Centre hosts mostly free art workshops, panel discussions, screenings and more. Current and upcoming events can be viewed at xpace.info/events/

In Vancouver
• Opus Art Supplies online is a great resource for videos and articles on their site on how-to’s and demonstrations, as well as community workshops and classes on location around Vancouver. Register at opusartsupplies.com/how/workshops-classes
Selected resources

BOOKS
LOOK FOR THEM IN YOUR LOCAL PUBLIC LIBRARY!

- Indie Publishing: How to Design & Produce Your Own Book edited by Ellen Lupton
- Bookcraft: Techniques for Binding, Folding, & Decorating to Create Books and More by Heather Weston
- Bookbinding: Its Background & Technique by Edith Diehl
- Japanese Bookbinding: Instructions from a Master Craftsman by Kojiro Ikegami
- Re-Bound: Creating Handmade Books from Recycled & Repurposed Materials by Jeanine Stein
- Basic Bookbinding by Arthur Williams Lewis
- Non-Adhesive Binding Books without Paste or Glue by Keith A Smith
- Craft of Bookbinding by Manly Bannister

ONLINE TUTORIALS & INSPIRATION

- youtube.com/sealemondiy
- behance.net
- etsy.com
- designinspiration.net

VIDEOS
INFORMATIONAL VIDEOS ON BOOKBINDING AND MORE:

- The Machine that Made Us narrated by Stephen Fry: documentarystorm.com/the-machine-that-made-us/
- Bookbinding by Simon Goode at the Centre of Book Arts: vimeo.com/56828989