

PROJECT3

*“Real museums are places where
time is transformed into space”*

Web, Video, Graphic Design

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RESEARCH



Name of medicine

ASPIRIN

OC(=O)c1ccccc1.O=C(C)OC(=O)C>>OC(=O)c1ccccc1OC(=O)C.CC(=O)O

Aspirin Salicylic Acid Acetic Acid

Extractive

Salicylic acid in willow bark

Salicylic acid reacts with acetic anhydride to form aspirin. The reaction takes place in a slightly acidic or slightly alkaline environment and is usually catalyzed by sulfuric acid or pyridine. The carboxyl group in the salicylic acid molecule undergoes esterification with acetic anhydride to form acetylsalicylic acid which is aspirin. The product is purified through steps such as crystallization and filtration after the reaction. This process is simple and efficient, and it is the main method for industrial production of aspirin.

Name of medicine **PENICILLIN**

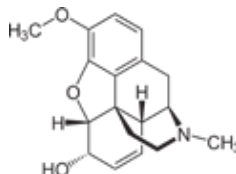
Penicillin G

Extractive

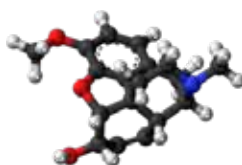
Penicillin is an antibiotic produced by Penicillium and was discovered by Fleming in 1928. At that time, he found that staphylococcus could not grow in the mold-contaminated culture dish and inferred that the mold-secreted substances inhibited bacteria, naming it penicillin. This discovery ushered in the era of antibiotics and saved countless lives

Inoculated Penicillium into the culture medium, and controlled the temperature, pH value and dissolved oxygen content to promote the production of penicillin.

Name of medicine **CODEINE**




The image shows the chemical structure of Codeine, a pentacyclic alkaloid. It features a morphine-like skeleton with a methoxy group (H₃C-O-) at the 3-position, a hydroxyl group (-OH) at the 6-position, and a dimethylamino group (-N-CH₃) at the 4-position. Stereochemistry is indicated with wedges and dashes at the 5 and 6 positions.




A 3D ball-and-stick model of the Codeine molecule. Carbon atoms are represented by grey spheres, hydrogen by white, oxygen by red, and nitrogen by blue. The model illustrates the spatial arrangement of the atoms in the pentacyclic structure.


Extractive




A photograph of a Codeine syrup bottle and its packaging. The bottle is dark with a white label that reads 'CODEINE' and '100 mg'. The box is white with 'EUPHORBIA' and '100 mg' printed on it.



A photograph of a Codeine injection vial and a syringe. The vial is small and clear with a black cap, labeled 'CODEINE' and '10 mg/ml'. The syringe is glass with a metal needle.



A photograph of two Codeine tablets. One is a white, round tablet with '10 mg' printed on it. The other is a white, oval tablet with '10 mg' printed on it.

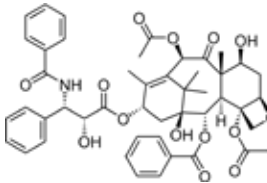


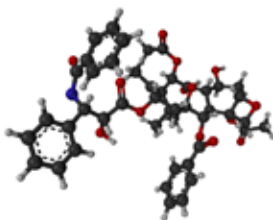
A photograph of a poppy plant and its flowers. The plant has green leaves and a large, bright red flower. There are also several green seed pods (capsules) and a few smaller white flowers visible.


Codeine is extracted from poppy plants and requires steps such as raw material processing, solvent extraction, chromatography or crystallization purification. Its production and use are strictly regulated by regulations. It is an anesthetic drug with a high risk of abuse. Illegal extraction is illegal and dangerous. It is recommended to obtain it through regular medical channels to avoid health and legal risks.


Name of medicine


TAXOL
















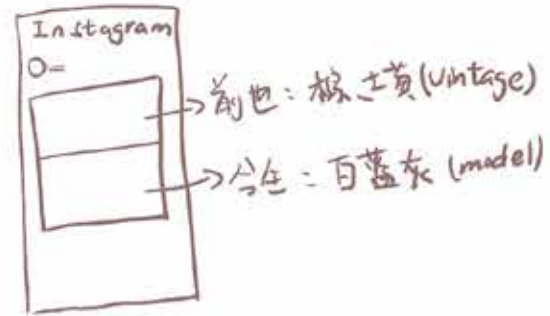
Extractive

Taxol was initially extracted from the bark of *Taxus Pacific*, but its content was extremely low (1 gram from 10 to 50 kilograms of bark), and it required complex steps such as crushing, solvent leaching, column chromatography, and crystallization. Due to the scarcity of resources, semi-synthetic methods are now mostly adopted. Key intermediates extracted from leaves are used as raw materials to synthesize paclitaxel through chemical transformation, in order to protect tree resources and improve efficiency

MINDMAP

P1: 现代意义对照页



扫码“微观原子结构视频”

细菌分解视频

阿司匹林: 柳树皮中的水杨酸

青霉素: 发霉的面包

右待因: 罂粟提取物

Taxol: 太平洋紫杉树皮

实验日志: 金鸡纳树皮中的秘密.

Pic: 奎宁试剂瓶插图. 笔迹覆盖. 折页感

PAGE 1: P.J. Pelletier 1820 PARIS

P 2: 提取树皮有效成分 → 用于医学.

P 3: 步骤图 ① 树皮研磨 ② 酒精溶解 ③ 过滤沉淀 ④ 白色粉末结晶

参考 老式解剖图
炼金术手册页

P 4-5: 标出“观察事项” ① 药物有淡黄色结晶性粉末, 略带苦味
② 患者服用后, 病状明显减轻

P 6: 药物流通世界航线图

实验笔记.

① 贝5纸包

② 折页

③ 档案袋

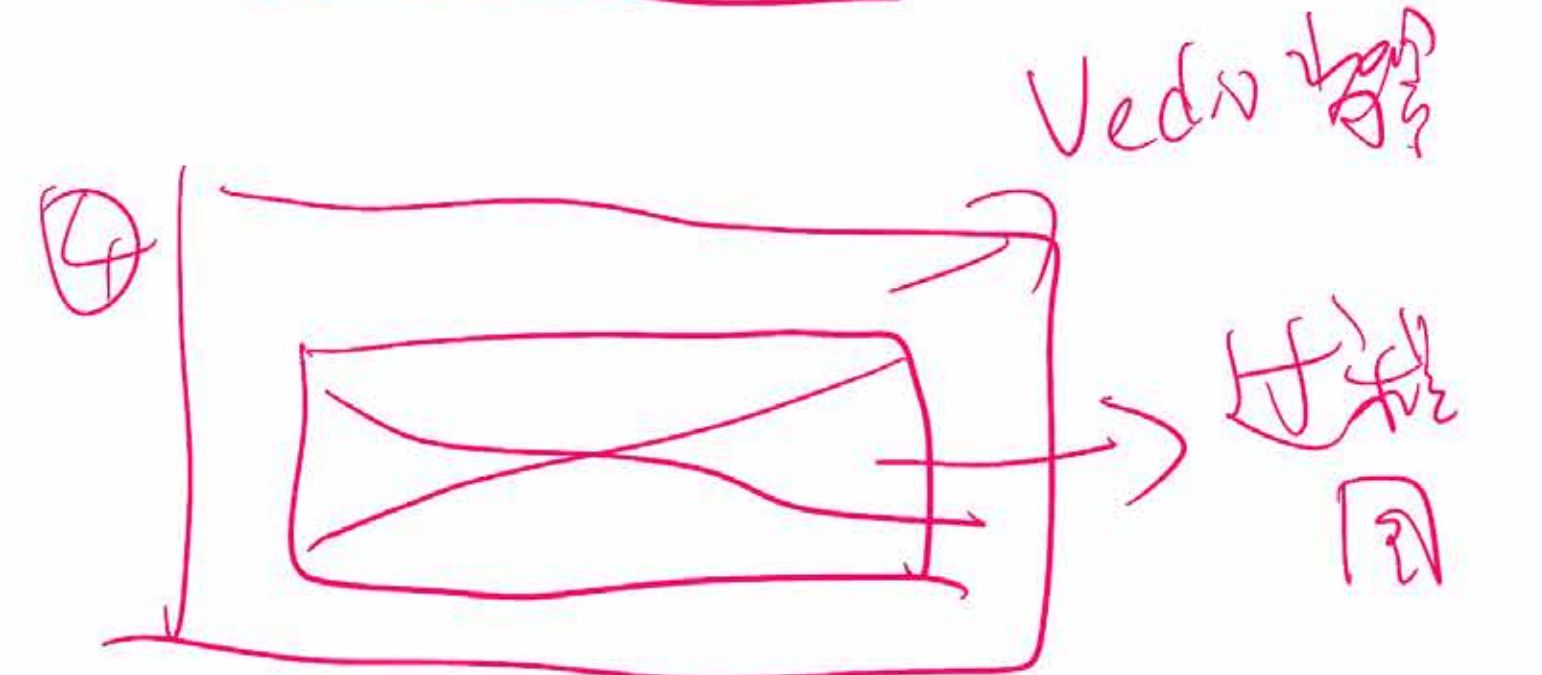
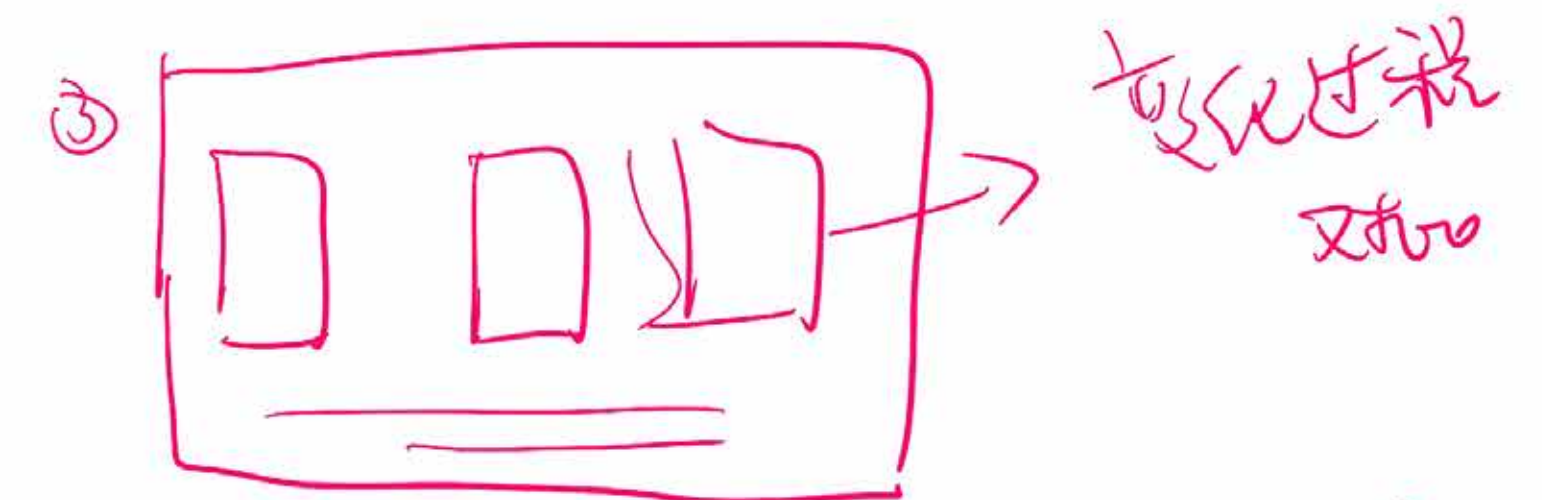
④ 药品铁盒.



Video:

① 分解视频 → 细菌

② 做实验过程



讲述故事 → 历史
→ 如何提炼.
→ 初世今身

Theme positioning

- ① How to scientific discovers change destinies
- ② The first step in fighting malaria
- ③ How to extract?
- ④ Encountering nature from the laboratory.

color scheme

① The feeling of the medicine
↓
white buff dusty blue

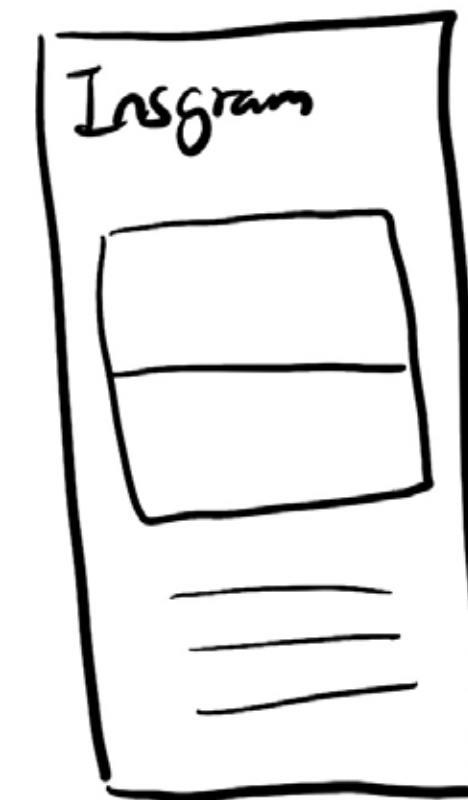
② Retro feel

Picture element

- ① Illustrations / photos of test tubes
- ② Chemical structure diagram
- ③ Silhouettes of various plants
- ④ Chemical experiment manuscript notes.

Video =

1. Chemical experiment process
2. The origin of drugs
3. Beginning: Do you know that this medicine was once bark?

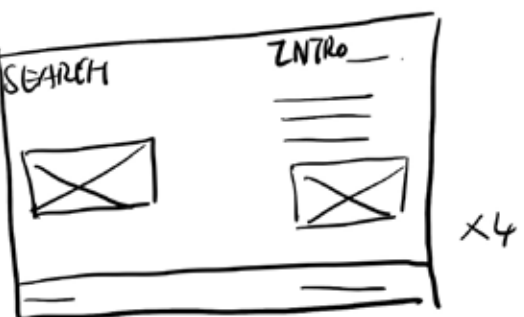
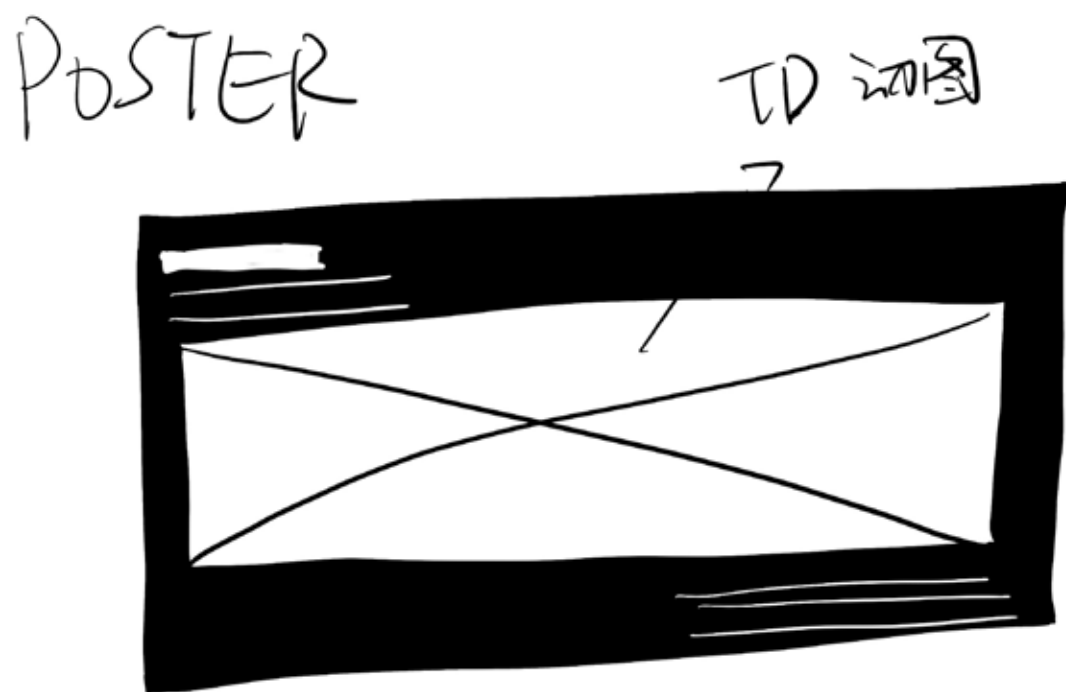
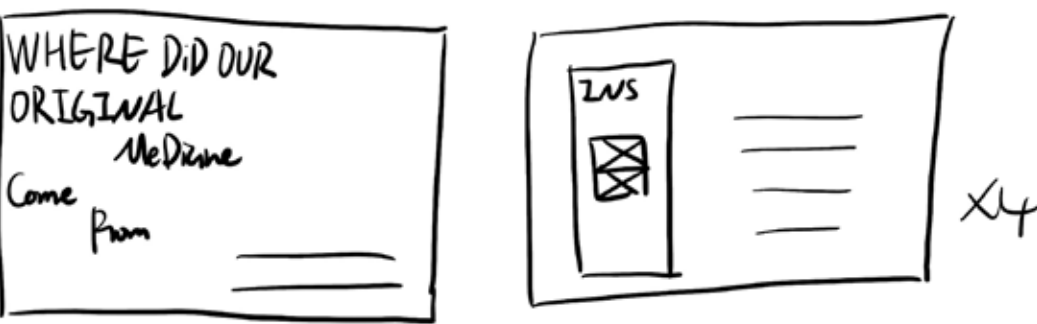


模拟 第一步 1. 历史 2. 如何

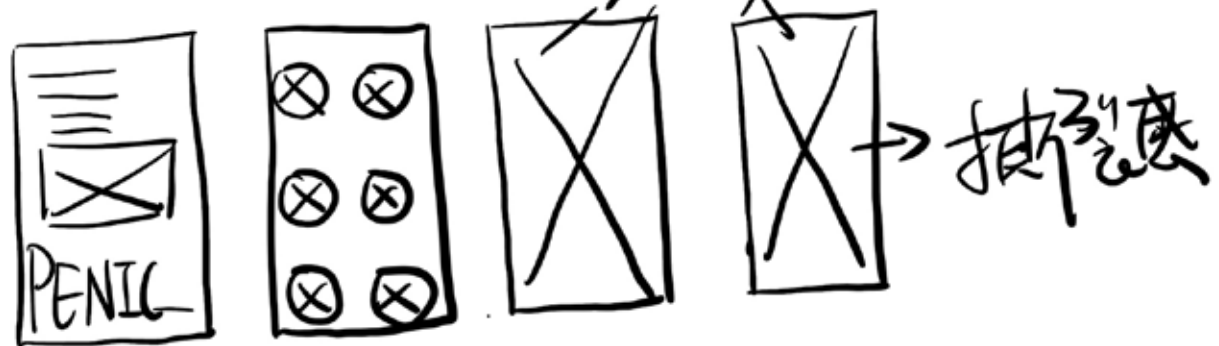
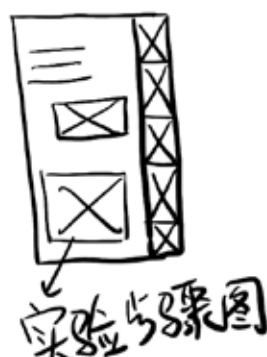
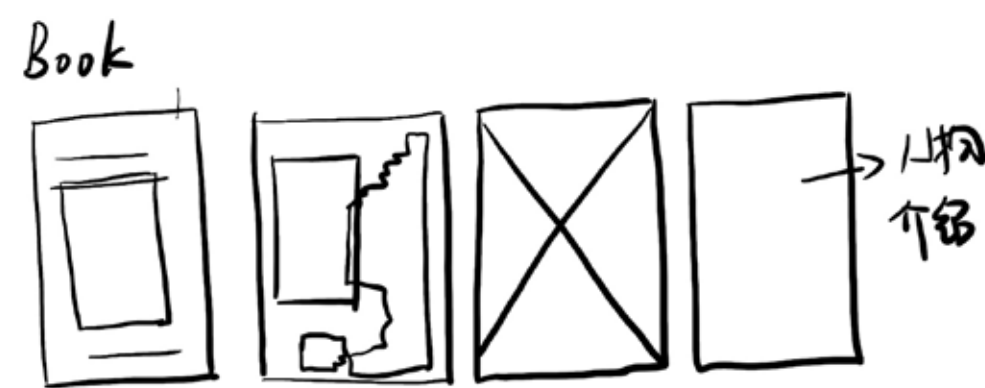
The analysis of the overall project in terms of color, layout and elements ensures the unification of the overall tone style, etc.

DRAFT

This part is divided into three types of drafts in total: web design, video design, poster design and experimental manual design



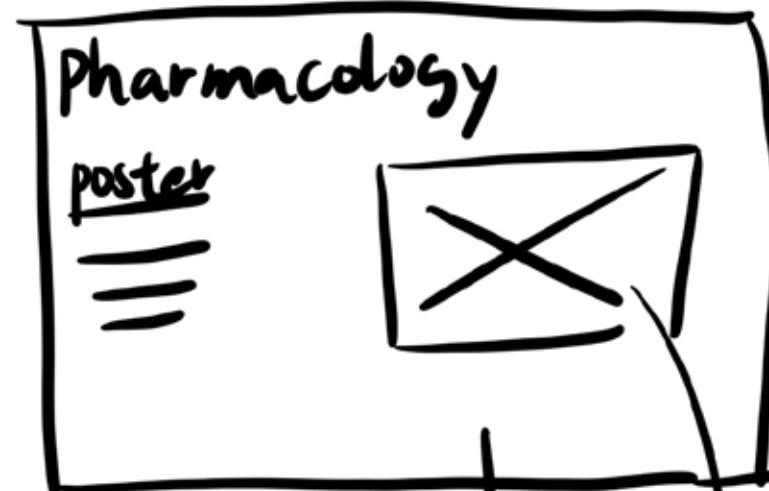
VIRGO DESIGN



颜:

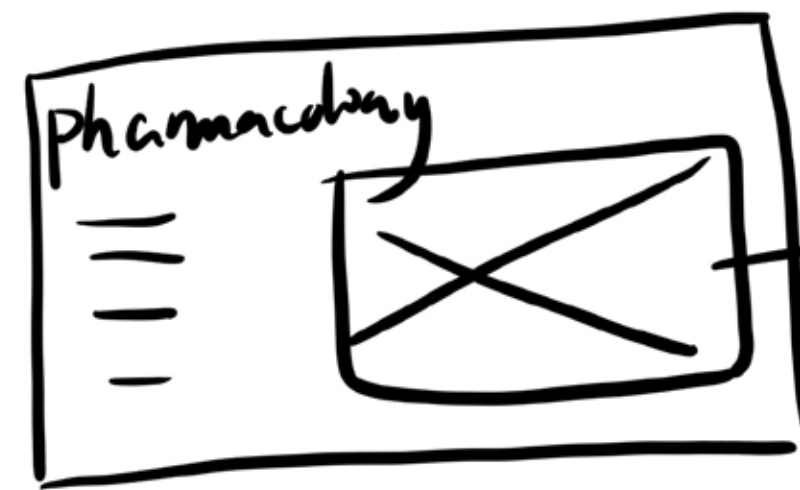


DARK



Light

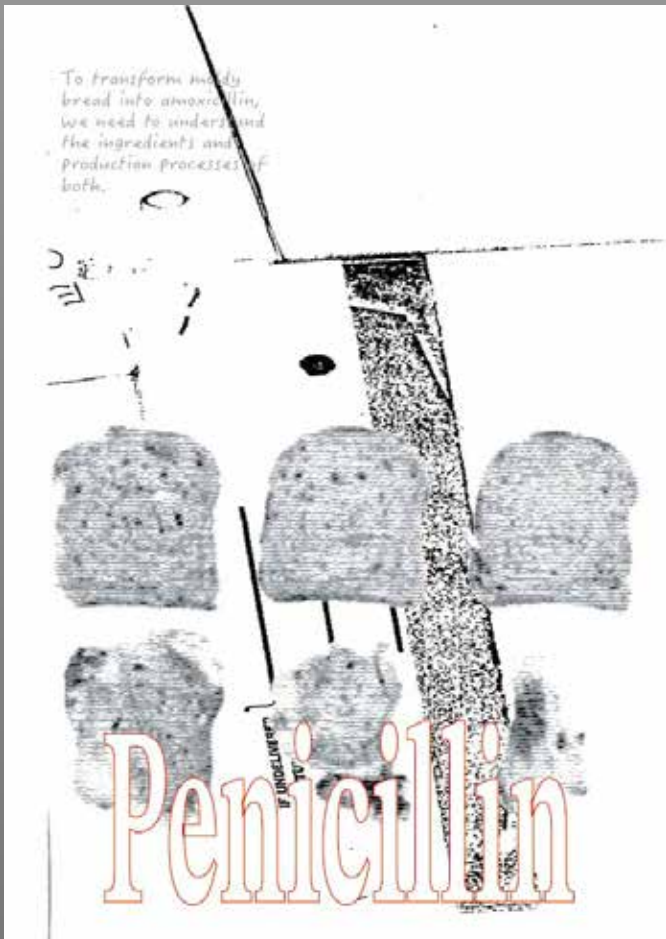
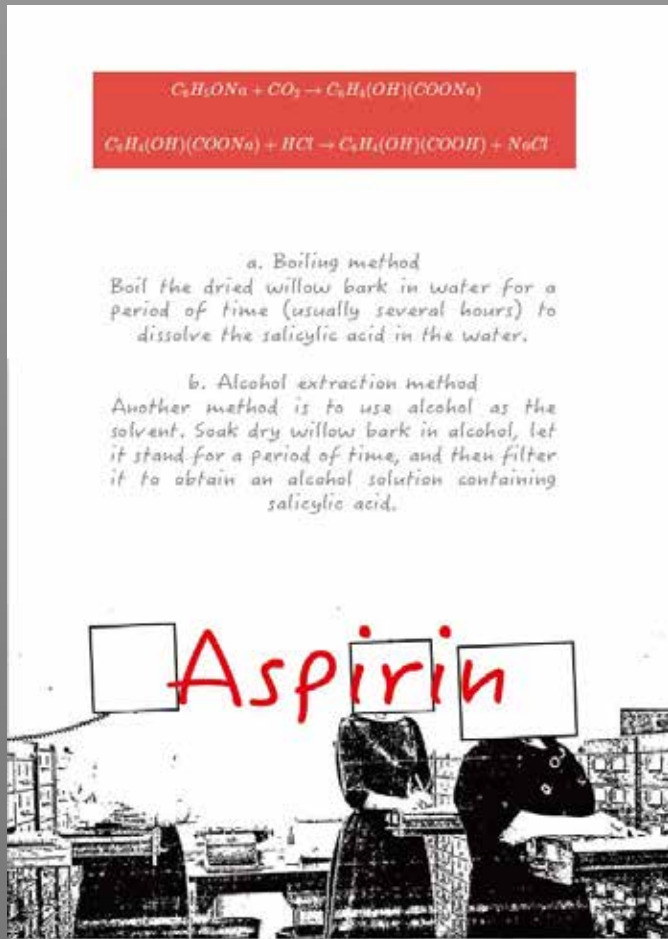
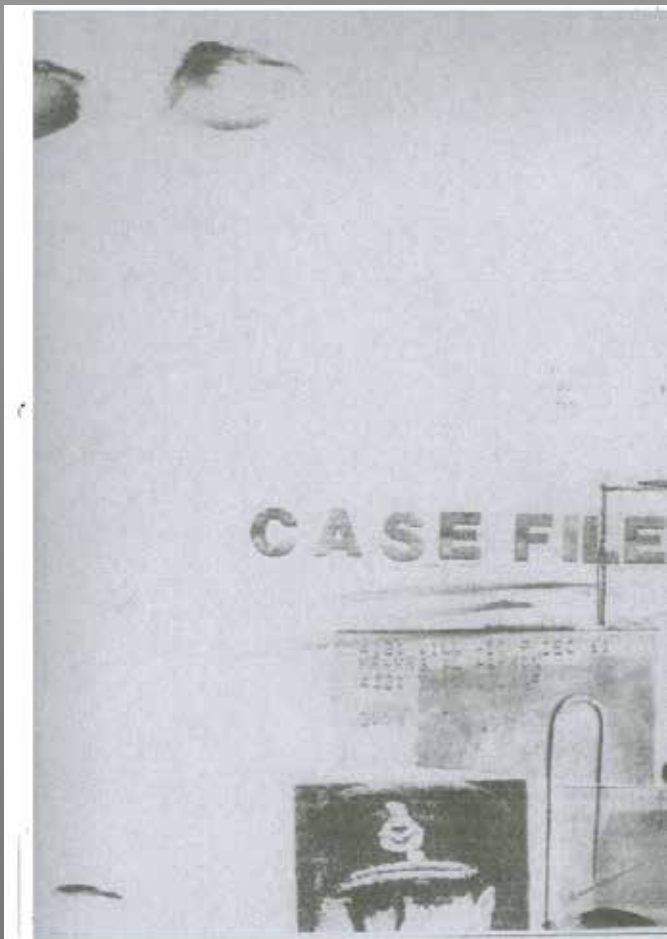
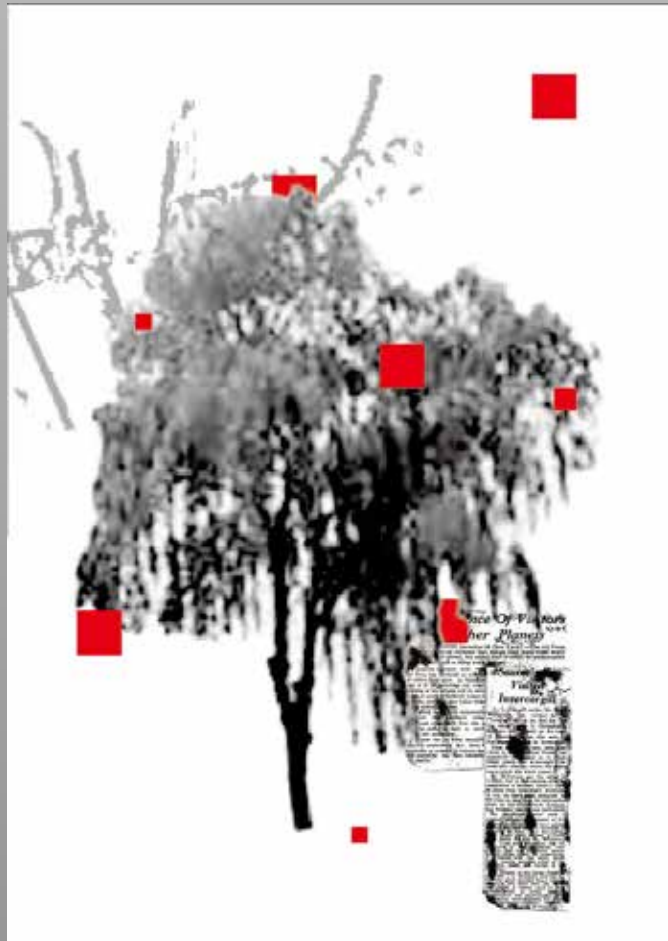
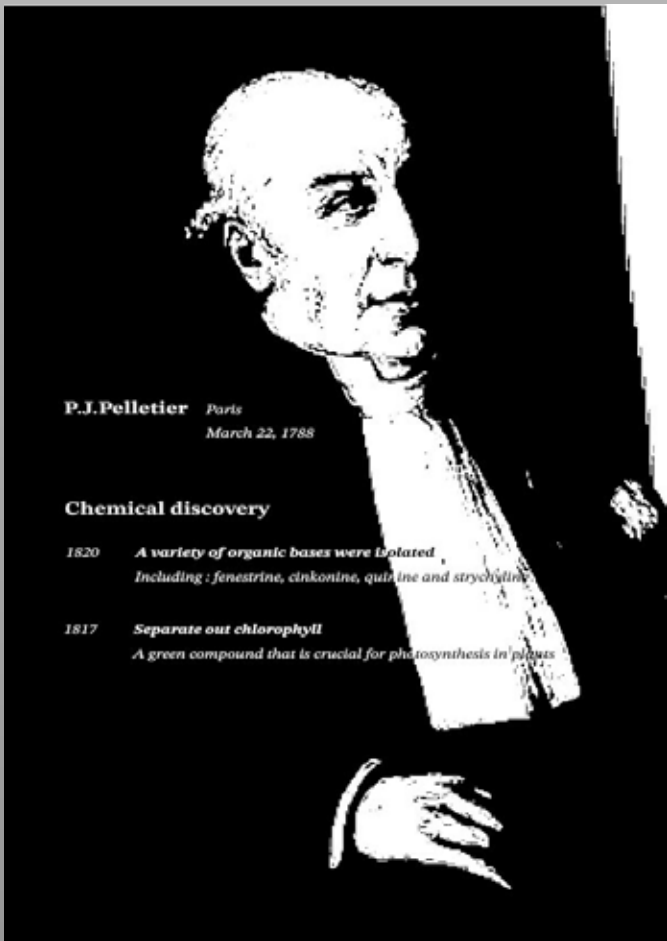
Pasteup



Every page

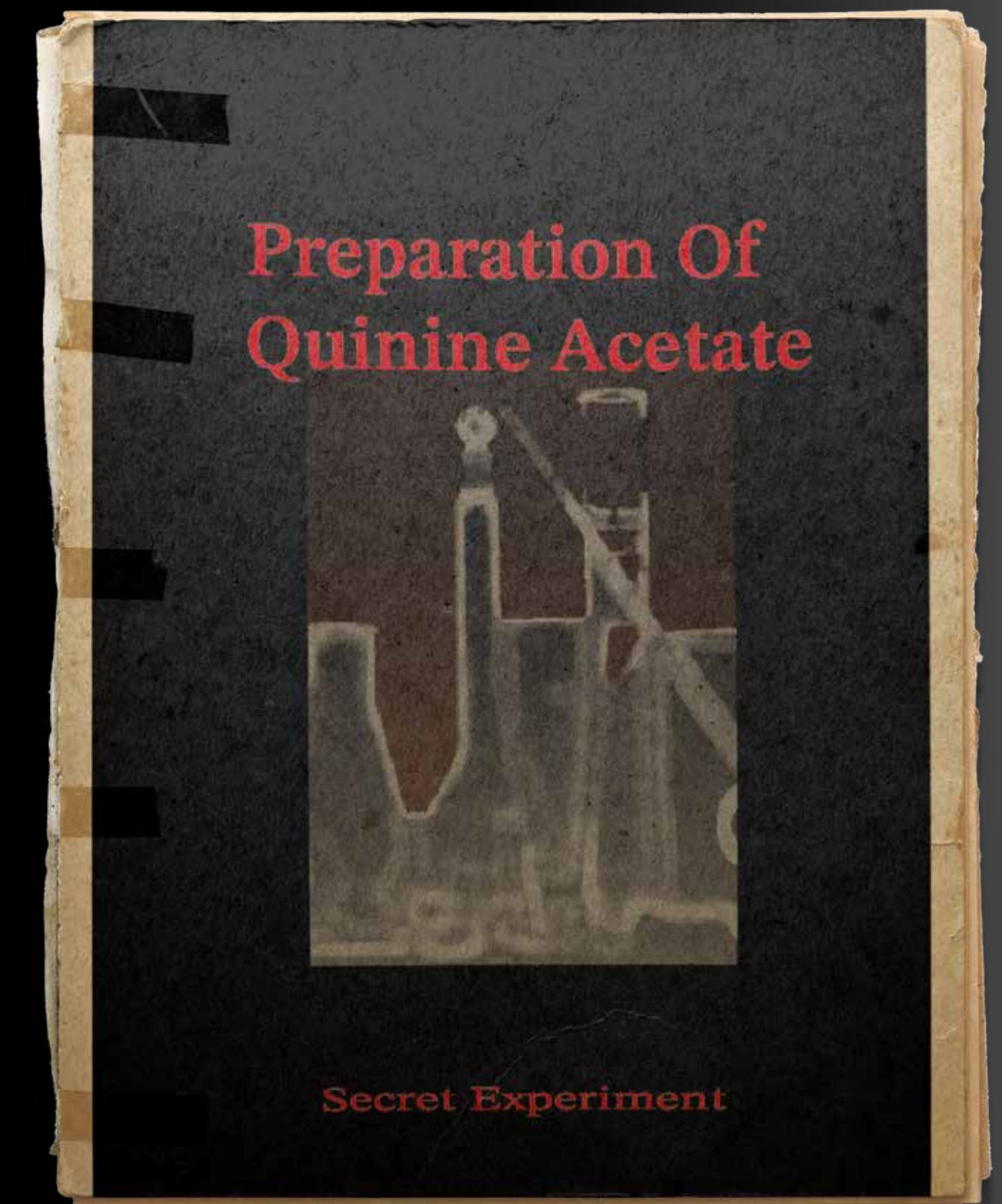
GRAPHIC DESIGN

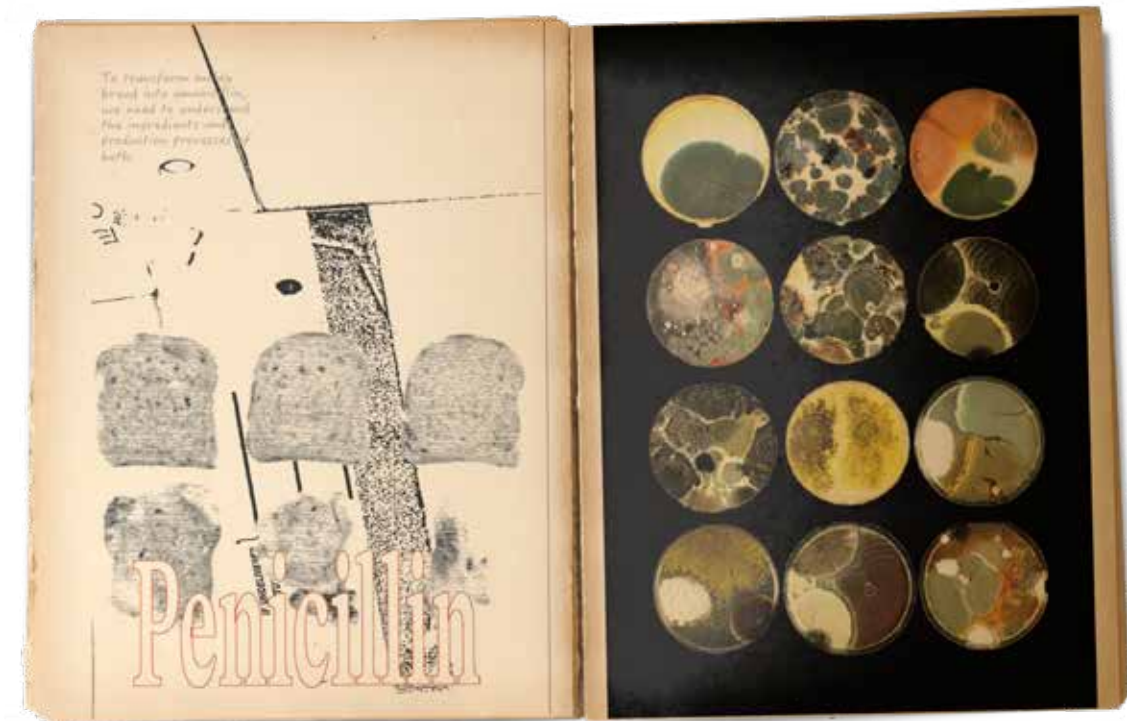
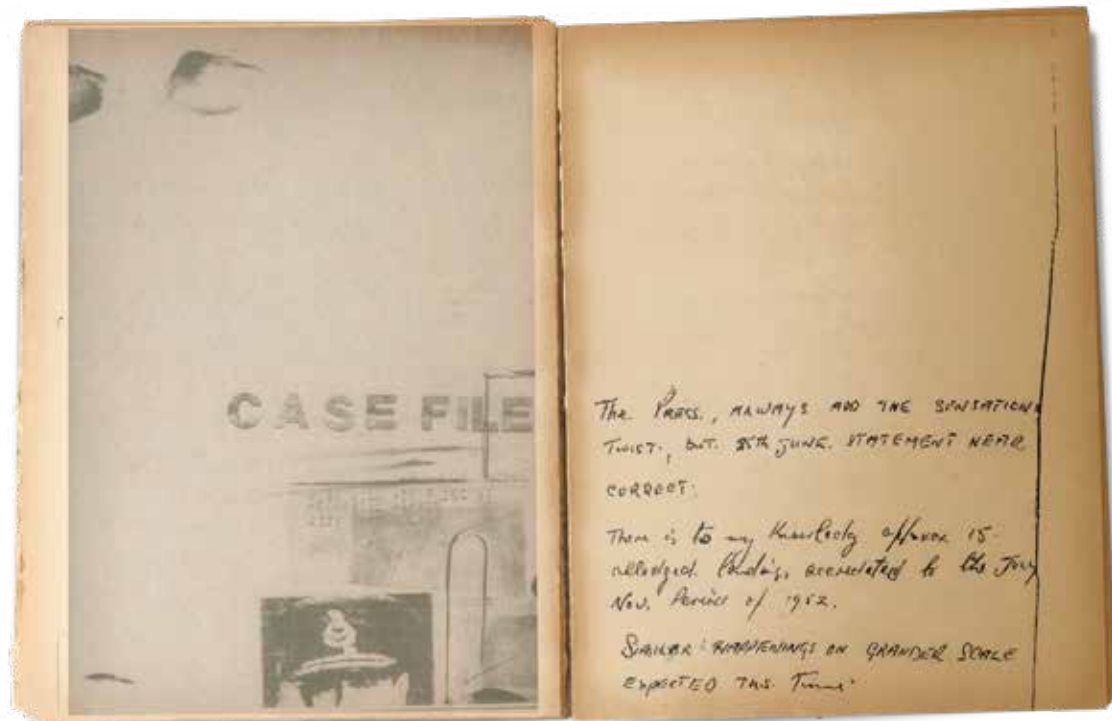
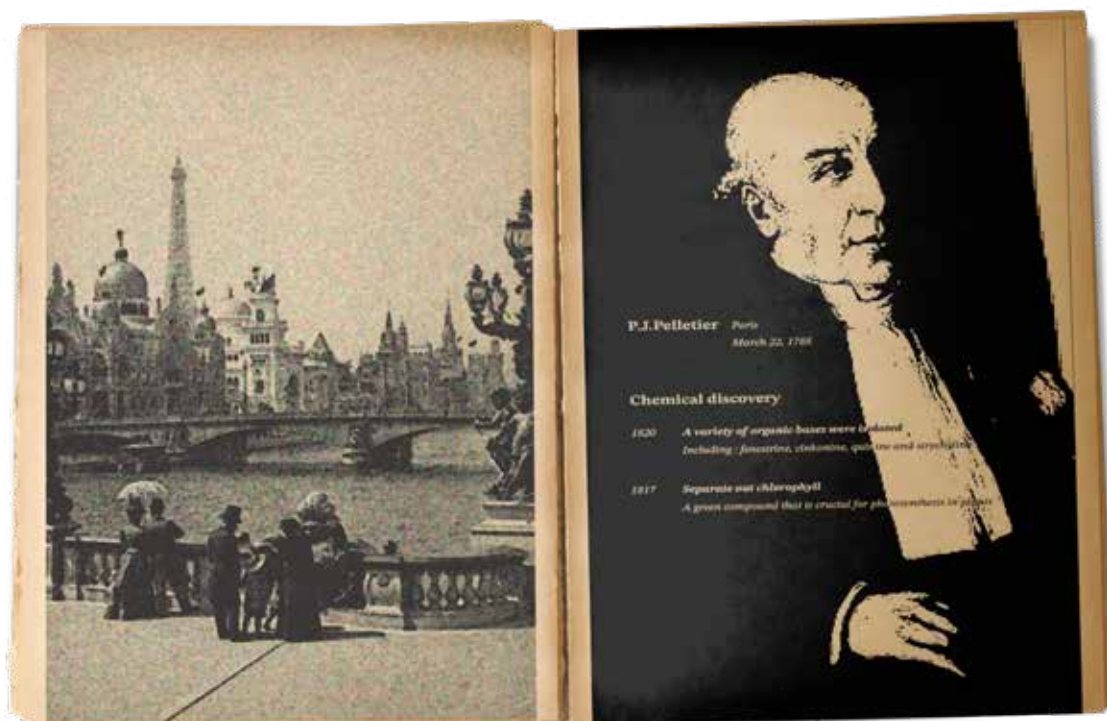
This is the inner page design of the experimental manual, which includes the drug extraction process, as well as the experimental records and photos during the decomposition, in a retro form

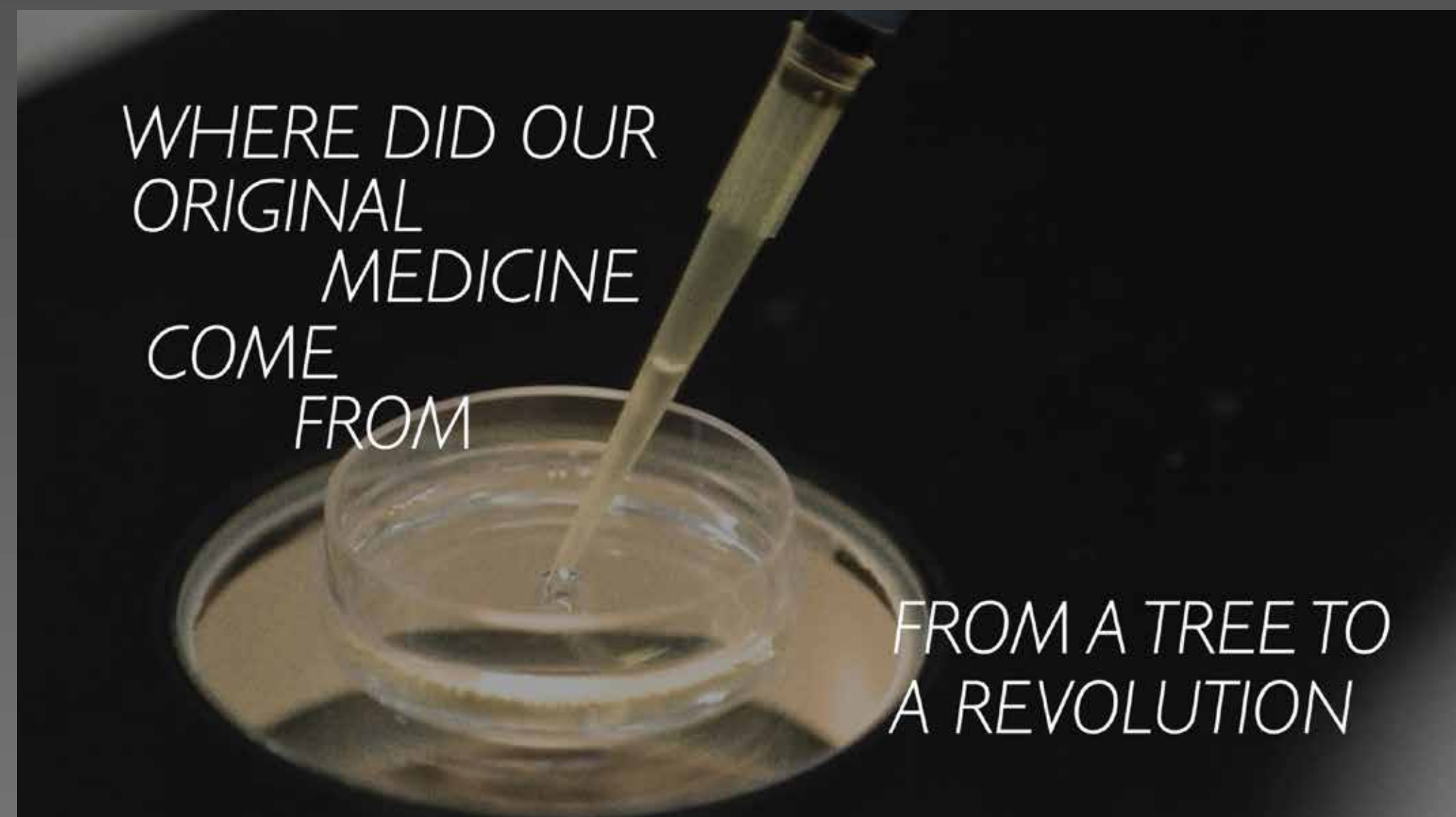


BOOK BINDING DIAGRAM

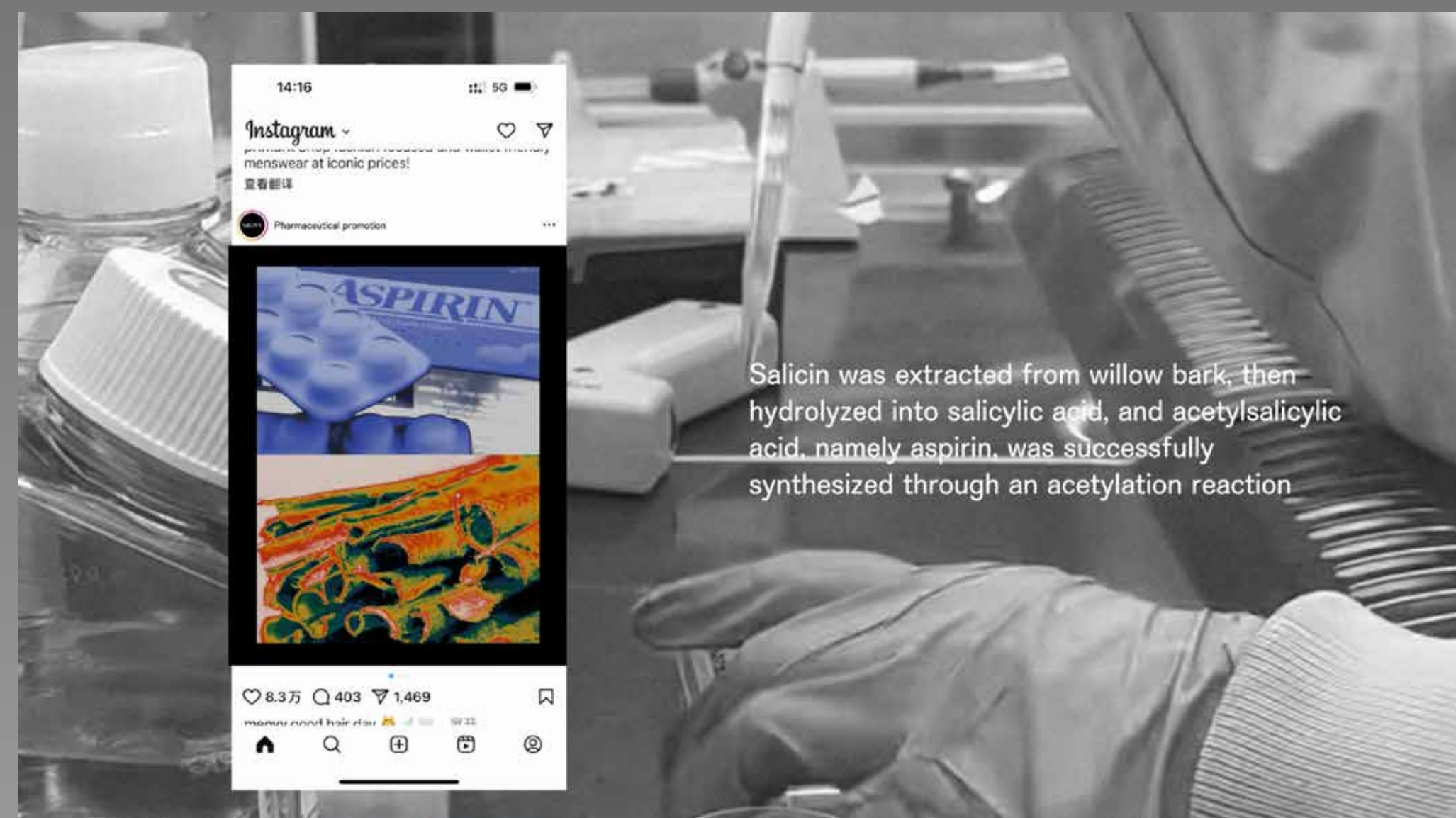
Record the evolution process of pharmacology and how some drugs are extracted, what the "past life" and "present life" are like, as well as the experimental steps imitating the old-fashioned anatomical diagrams and handwritten notes. The entire book adopts a retro effect because it aims to create an experimental manual, immersing the audience in the experimental scene, as if they were flipping through the experimental notebooks of the experimenters.







This is a screenshot of a part of the video introduction. The entire video describes the experimental process, precautions and a brief introduction of the medicine. The style of the entire video is unified. When introducing the "past and present" of the medicine, the very popular ins style is adopted now. The upper part of the picture is the "present life" picture, mainly in a cold and modern style with blue, white and gray, while the lower part is the "past life" picture in a retro and natural style



SEARCH FOR

INTRODUCE

This is a bottle containing quinine dihydrochloride tablets. Quinine is a drug used to treat malaria, and dihydrochloride is one of its chemical forms. This bottle might have been the container used in history for storing and distributing these tablets. Quinine is a natural product extracted from the bark of cinchona tree and has historically been widely used to treat malaria, although there are now more modern drug alternatives. This bottle might be part of the collection of the Science museum, showcasing the development of medicine and medical history.

WEB DESIGN

Web Page Usage Tutorial: <https://www.youtube.com/watch?v=PNeEZQUYdrQ>

These are the main interfaces of web design. The most complex part is the handwritten experiment steps section, where there is an interactive device that can turn pages

