



THROUGH THE LENS OF
RICE

Thesis Proposal: Through the Lens of Rice

** This is the final version of my thesis proposal. Note that before I decided to focus on rice, I was researching into both rice and sugar of Taiwan, which explains why part of my research and making is related to sugar.*

“Rather than simply tracing and presenting history... I am interested in creating a space that allows for more diverse and personal discourse, to prompt people to view history as not just as a thing of the past, but something that we continue to experience, live, and shape.”

When people talk about studying history, the image that often comes to mind is that of a person reading a thick history textbook or getting lectured in a classroom. The idea that history can be studied as a series of major historical events or movements propelled by key figures is reinforced in much of our educational system, and hardly challenged until perhaps in higher education, which of course has its own value as a teaching method, but I believe also shapes and limits what we view as worthy to be studied in the discipline, leading us to overlook the fact that every object around us has its own history.

In the past few years, books such as “Milk: A 10,000 Year Fracas” and “A History of the World in 6 Glasses”, as well as courses I did as a part of my art history minor have expanded my perspective on what is and can be history, and therefore posed many questions about how “history” is determined and who determines it. Consequently, I have developed an interest in the history of mundane objects that feels familiar and close to our everyday life, and how it is shaped by the common public. Rice in Taiwan specifically will be the focus of this project. As a Taiwanese that hasn’t lived in my hometown since eight, I seek to develop a deeper and more historically informed understanding of Taiwan through the lens of this widely consumed good, and help others, too, to have a more accessible and engaging way to detangle a small part of the island’s complex history. Rather than simply tracing and presenting their history, which establishments like past sugar factories that have transitioned into tourism and cultural

industries already do fairly well, I am interested in creating a space that allows for more diverse and personal discourse, to prompt people to view history not just as a thing of the past, but something that we continue to experience, live, and shape.

To reach the aims explained above, I will design a digital platform, where people could gain a deeper and more nuanced understanding of Taiwan’s rice, including its history and culture, and more importantly, have a chance to express and share their collective or individual memories relating to this not only widely consumed by also very historically important commodity. Three areas that I wish to pay special attention to are: (1) Individual and collective memory and experience, (2) Making history more digestible and relevant, and (3) Encouraging participation and creating community. Two main questions that I will constantly ask myself throughout the process in relation to the listed areas are: (1) How can learning and consuming history be more engaging and interactive, instead of a one way information-transfer?, (2) How can we evoke thoughts and conversations about mundane things, like rice, and reflections on how we internalise history and culture differently despite being in the same overarching social environment?

**First round of
research.**

Overview: History of Taiwan

I am still continually reading and learning about this, and given how complex and controversial it is, it's difficult to outline in just a page, but we can look at it through different periods segmented by the governing power, since the history of Taiwan if put extremely simply is largely just getting colonised by multiple foreign powers successively. We have to acknowledge that although by doing so it's easier to recount and grasp what happened and its impacts, it effectively eliminates the life of Taiwanese indigenous peoples before colonisation from the conversation.

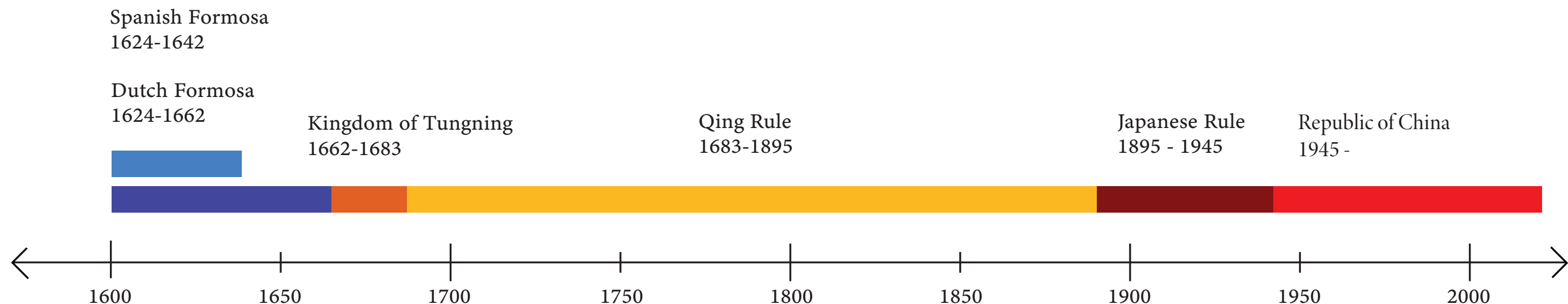
Taiwanese indigenous peoples now account for only about 2.38% of the island's population. They may have been living in Taiwan approximately 5,500 years in relative isolation before more major Han Chinese immigration from mainland China began in the 17th century. They're Austronesian peoples, a large group of peoples spread around Southeast Asia, Oceania, Madagascar, etc., who based on current scientific consensus, migrated from Taiwan around 5000 to 1500 BC (Austronesian expansion theory that believed Austronesian peoples originate from Taiwan). There is little record of their life and history before 17th century, and 17th century onwards their recorded history has often been dominated by perspectives of foreign

powers and the non-indigenous. And I think this is something to be really conscious of : who is determining and telling the history that we're learning about, and as a result what part of the past are we likely not to know about? Another example of how the methodological preference for written record affects what we get to see and not is the case of pirates. Starting around 15th and 16th century, other than the indigenous peoples, there are also some Dutch, Spanish, Japanese and Han Chinese that would come to Taiwanese, and most of the Chinese were pirates (in nature more like merchants that do illegal trade, so they were often called 海商, or marine merchants). As a result of the implementation of the 朝貢制度, many Japanese and Chinese merchants resorted to illegal trade, but obviously the Ming tried to arrest them along the coastal area of mainland China, so they tried to found nearby islands, and they went further and further away to stay safe, eventually reaching Taiwan and making their base there. (Fun fact: pirates also indirectly facilitated Dutch's rule in Taiwan)

More mass Han Chinese immigration took place during Dutch rule, when the Dutch encouraged the immigration for the cultivation of rice and sugar cane. What ruled Taiwan was not the Dutch state itself, but the Dutch East India Company.

Dutch rule in Taiwan can be roughly divided into three periods (1) 1624-1635 when they didn't really wanted to spend extra effort to manage the island, viewing it just as one point in their Asian trade network (2) 1635-1645 when the Dutch expanded its military base in Taiwan and began conquering indigenous peoples and the Spanish in northern Taiwan, also beginning to build its political system (3) 1645-1662 Dutch was effectively the ruler of the island, but conflict with Han Chinese escalated.

"Kingdom of Tungning" came after afterwards. It was called a kingdom, but it was basically Koxinga and its army. Koxinga was a Ming loyalist and fought to restore Ming Dynasty (he was Zheng Zhilong's son btw, a really powerful and probably the most famous pirate from that time, who had its base in Taiwan and also traded with the Dutch. He eventually surrendered to Qing in 1646, but still got killed in 1661). For Koxinga, Taiwan was a base from which he hoped to conquer China and restore Ming, thus every of his policy and strategy in Taiwan followed this central aim. Although the reign was very short, the Kingdom of Tungning laid the foundation for what would become Taiwan's culture today, one that is majorily based on Han culture.



Overview: History of Taiwan

Kangxi Emperor once expressed that Taiwan was “the size of a pellet, taking it is no gain, not taking it is no less.” Many Qing officials, too, advocated for not conquering Taiwan, and instead just reinforce Haijin and coastal area defence, because Qing was not particularly adept at waging marine wars, but seeing the civil conflict within the Zheng family, they saw a chance. Qing’s early strategy to rule Taiwan was being passive, because they didn’t necessarily conquer it because they wanted it as their territory or because they saw Taiwan as being economically important, but because they were afraid the Dutch might conquer Taiwan again and threaten their mainland coastal borders, hence they wanted to have control of the island but not spend too much effort or money on it. Qing restricted immigration to Taiwan unless for special reasons, and only men were allowed to immigrate, so that the population doesn’t increase too much. However, Taiwan was still extremely attractive to poorer citizens of regions like Fujian and Guandong, so many immigrated illegally, becoming the ancestors of many Taiwanese today. Uprisings were quite common during Qing rule. Most Qing officials refused to work in Taiwan, so most of those who went were lower class officials with not so great education and reputation, hence corruption was rampant. Since most immigrants in Taiwan were single men, they usually lived and formed groups with people from the same hometown. This culture of being loyal to “fellow brothers” meant when there were conflicts between different groups, it often became violent. The strong provincial loyalties held by immigrants also made it difficult to govern, a foreign invasions were not uncommon. Qing ruled about a little less than half of Taiwan, the rest lightly populated by indigenous tribes that had distinctively different cultures from Han people.

As a result of Qing’s defeat in the Sino-Japanese war, the empire ceded Taiwan to Japan on April 17, 1895. There is a lot that we can talk about Japanese rule, but I’m going to talk more about cultural and economic development. Since Taiwan was a colony, policies were determined from the perspective of Japan and for the benefits of Japan. For example the slogan

“Agriculture Taiwan, Industrial Japan” shows pretty clearly the economic impact of the coloniser-and-colonised dynamic. Around late 1930s, following the arrival of the 17th governor-general, Seizo Kobayashi, and as Japan became more involved in the war, major changes in the governance of Taiwan took place. The governor-general proposed three principles of governance: “the Kominka movement (japanisation, or literally “to make people become subjects of the emperor”), industrialisation, and making Taiwan the base for southward expansion”. Before the Kominka movement, local Taiwanese were essentially viewed as aliens and second-class citizens, but due the pressures of the war, the government needed Taiwanese to participate in war efforts, hence the grandiose efforts to japanise Taiwanese. Policies were often more favourable for the Japanese than the Taiwanese even then, and discrimination was a big problem, but Japan also pushed Taiwan into modernity, with new infrastructures, advanced medical technology, new education systems, etc. The Meiji Restoration also made big changes to the island, bringing many Western goods and ideas into Taiwanese society much earlier than many other Asian countries.

1945, Japan surrendered, and the Republic of China received Taiwan, but the troops didn’t move (it’s more like fled) to Taiwan until 1949, when they lost the Chinese civil war. This exchange of power, like every previous ones had massive impacts politically, culturally, economically, and socially. Lol I don’t know if anyone would even read till here, everything after the war becomes so sensitive and controversial, I don’t really want to put anything down on paper.

The food of Taiwan today is obviously influenced by all this history that I talked about. Taiwanese cuisine is difficult to explain not only because it’s a mix of different cultures, but also because in different periods in history, the people that had the power to define what “Taiwanese cuisine” is were different and had different motivations. This is what I’m interested in exploring when I research the history of rice in Taiwan.



Top: An old map of Taiwan from the Japanese era

Rice under Japanese rule

The Japanese period was very critical to Taiwan's development, obviously politically but also economically and culturally. Although Qing Dynasty ruled the island much longer, according to many historians they took a rather passive approach for a long period, restricting communication and immigration between Mainland China and Taiwan, and did relatively little to actively push the economy. The government did change for a more active strategy later on in late 19th century under the pressures and fears amplified by the First Opium War (many view the Mudan Incident in 1871 as an especially important turning point at which Qing became fully aware of the danger of not having recognised sovereignty over its territory), however it is a pretty agreed upon thing that Japan was the one that built more modern infrastructure and transformed Taiwan's economy drastically in terms of system, structure, and scale with the powerful motivation of proving themselves as a capable coloniser.

Worthy to mention is how Japanese businesses were able to beat foreign and domestic competition with the Japanese government's help, a reflection of the dynamic between the coloniser and colonised. With many policies and benefits, including the cutting of tariff between Japan and Taiwan, increased restrictions on foreign businesses, and the support of Taiwan bank for Japanese businesses, Taiwan's export to other countries decreased sharply, and Japan became the most significant export destination. Under the Japanese, rice transformed from a simple food crop into a cash crop. Consequently, local Taiwanese who originally hold quite a lot of power over the rice industry, lost most of its power and market share to Japanese, especially after the dominant rice cultivar grown became *Oryza Sativa Japonica*.

Japan was very eager to increase rice production in Taiwan, because of concerns of famines and also of course the economic profits that come with it. When Japan first received Taiwan, local military resistance and building government infrastructure made managing Taiwan a huge financial burden for Japan,

so it tried to find ways to make Taiwan financially independent. In the beginning stages, they got money from Taiwan mainly with heavy taxes and state monopoly on important goods, but these are not plausible long term plans. In order to truly develop a sustainable economy, productivity must be increased and tax source expanded. Plus, they saw potential of using Taiwan to support Japan's food supply so that the mainland can instead focus on developing their industrial and military sector.

WHY DO WE EAT THE TYPE OF RICE WE EAT TODAY?

There are four main types of rice consumed in Taiwan today..

- *Oryza sativa japonica* (Short grain, chewier and stickier, good for eaten plain, sushi, and porridge)
 - *Oryza sativa indica* (Long grain, slender and somewhat flat, drier, not sticky, good for fried rice)
 - *Oryza sativa glutinosa* (Both short and long grains, opaque, very sticky)
 - *Oryza sativa javanica* (Broad and thick grain, suitable for tropical areas, sometimes nicknamed tropical japonica)
- ... with Japonica being the dominant one, especially when we're talking about just the good ol' plain bowl of rice. But why is this? Where did the types of rice come from? Since when did people in Taiwan begin to grow them and consume them?

As explained, Japan was very eager to increase rice production in Taiwan, however they soon realised that indica rice, the variety that was cultivated in Taiwan, was very different from what they were used to eating, so the government hired scientists to find a way to plant japonica rice in Taiwan's subtropical climate, the most prominent of them being Iso Eikichi and Jin Suenaga. After years of effort they succeeded, and it began to be widely cultivated, the preference for it continuing to today. As you can see, the preference Taiwan have for japonica rice really is a result of colonial history.



Top: 3 main varieties of rice consumed in Taiwan

References

- <https://www.thenewslens.com/article/122375>
- <http://iso-house.agron.ntu.edu.tw/iso.html>
- <http://blog.press.ntu.edu.tw/?p=3597>
- <https://www.ntl.edu.tw/public/Attachment/0123115135764.pdf>

What are some common Taiwanese rice cultivars today?



臺稞2號 / Taigeng #2

Main Production Region: Hualian, Jianan Pingyuan
Characteristic: Large grain, soft but chewy

臺稞9號 / Taigeng #9

Main Production Region: Zhanghua
Characteristic: Most commonly seen cultivar in Taiwan, cross-breed between Japonica and Indica, doesn't become dry and hard even after it's no longer hot

益全香米 / Yiquan Xiangmi

Main Production Region: Taizhong
Characteristic: Most important fragrant rice in Taiwan, signature taro fragrance, crossbreed between Japanese and Taiwanese cultivars

臺中秈10號 / Taizhong Xian #10

Main Production Region: Taizhong
Characteristic: Most commonly seen Indica rice in Taiwan, drier but still soft, great for fried rice

臺南11號 / Tainan #11

Main Production Region: Hualian, Jianan Pingyuan
Characteristic: Has largest cultivation area in Taiwan, versatile for cooking, appointed cultivar for export to Japan to aid the Fukushima nuclear disaster

臺南16號 / Tainan #16

Main Production Region: Hualian, Jianan Pingyuan
Characteristic: 95% resemblance to Japanese cultivars, sticky and chewy

高雄145號 / Kaohsiung #145

Main Production Region: Kaohsiung
Characteristic: Crossbreed between Kaohsiung #139 and Japanese cultivar Juanguang, sticky

臺農糯73號 / Tainong Nuo #73

Main Production Region: Taidong, Hualian
Characteristic: Glutinosa, short grain, very sticky

References

- <https://www.unionrice.com.tw/RicePage?id=17>
- <https://www.gvm.com.tw/article/41812>
- <http://yummy.greeninhand.com/archives/3211>
- <https://food.ltn.com.tw/article/2786>
- https://kmweb.coa.gov.tw/knowledge_view.php?id=6731

The Rice and Sugar Rivalry

This rivalry refers to a common situation during Japanese rule (1895-1945), where rice price tends to affect the price at which sugar factories need to spend to buy sugar cane from farmers, because farmers make the decision between cultivating rice or sugar cane mostly depending on how much profit they could gain. The ability to choose is obviously good for the farmers, but this also means the sugar factories need to consider the farmers' opportunity cost when setting the price for sugar canes. Different sugar factories actually take different strategies and cater to the different regions.

Usually, sugar factories use three things to encourage farmers to cultivate sugar canes. There's of course the base sugar cane price. Then, the subsidies and award money, which are more flexible and aimed at more specific things.

Table showing the price of rice in Taiwan from 1875 to 1897. The table is organized by year (from 1875 to 1897) and lists prices for various types of rice (e.g., 花螺, 米種) and sugar cane. The prices are listed in traditional Chinese characters and numbers, such as '五元九十三錢'.

年	1 在來 米價	2 蓬萊 米價	3 蔗價	4 台灣 物價指數	5 製糖率	6 甘蔗 生產力	7 在來米 生產力	8 蓬萊米 生產力	9 日本 糖價	10 日本 物價指數
1910	3.67	—	3.04	74.65	10.95	35.13	13.51	—	15.90	47.1
1911	5.04	—	2.81	82.65	10.60	32.61	13.99	—	15.50	52.9
1912	6.15	—	3.50	90.23	10.50	25.95	12.50	—	17.40	57.1
1913	5.84	—	4.33	88.18	9.50	14.06	15.52	—	17.30	59.4
1914	4.67	—	4.30	86.62	11.00	21.43	13.81	—	18.90	55.9
1915	3.58	—	4.44	79.79	9.90	28.58	14.52	—	20.39	53.1
1916	3.97	—	4.18	84.48	10.11	31.00	14.76	—	21.30	57.7
1917	5.83	—	4.03	101.89	9.62	40.50	15.49	—	24.89	72.0
1918	8.31	—	4.81	126.84	9.30	28.03	14.26	—	27.90	97.6
1919	11.61	—	6.47	155.48	9.48	28.93	14.82	—	35.89	130.0
1920	10.98	—	11.12	136.98	9.72	25.02	14.45	—	48.89	132.2
1921	6.89	—	10.01	121.63	9.45	25.48	15.03	—	31.30	122.3
1922	7.69	—	8.03	113.47	9.54	29.41	15.98	—	26.20	119.5
1923	7.10	—	6.86	109.46	9.57	35.07	14.39	—	31.51	119.6
1924	8.83	—	6.86	117.36	10.31	39.12	16.86	—	27.80	120.6
1925	10.68	14.37	6.92	124.86	9.79	41.84	17.04	20.64	27.01	124.0
1926	10.13	12.38	7.47	121.83	10.49	43.18	16.56	15.62	27.00	118.6
1927	8.30	11.49	7.84	113.77	10.34	45.16	17.42	18.11	26.91	113.3
1928	8.22	9.59	7.32	115.61	11.13	55.38	16.83	17.82	24.83	110.7
1929	8.39	9.48	7.29	115.90	11.73	63.36	16.53	18.65	25.33	107.5
1930	7.08	8.81	6.98	103.10	12.76	65.70	17.24	19.67	22.65	98.6
1931	4.55	5.58	6.12	91.40	13.59	68.32	17.17	19.07	19.90	86.7
1932	5.85	6.89	5.63	87.30	13.10	75.78	18.82	22.35	20.98	88.4
1933	6.17	7.10	4.39	89.70	13.45	64.64	16.94	21.25	22.65	91.6
1934	6.89	8.00	4.53	92.00	14.17	60.28	18.07	23.42	20.70	96.1
1935	9.08	9.98	4.86	100.30	13.24	68.55	18.02	21.71	20.70	100.7
1936	9.47	10.53	5.21	107.70	12.72	63.58	19.01	22.85	21.60	103.2
1937	8.98	10.68	5.48	113.90	13.15	70.88	18.19	22.54	22.50	111.5
1938	9.92	11.35	6.17	142.97	12.26	69.61	20.27	25.04	24.30	122.6
1939	—	—	6.39	—	12.02	79.04	19.52	22.31	—	—

Left: Price of rice in Taiwan from 1875 to 1897
Right: Japan's commodity price index, and the price of indica rice, japonica rice, sugar cane in Taiwan from 1910 to 1939

References

- <https://www.thenewslens.com/article/122375>
- <https://buzzorange.com/2017/04/21/taiwan-meters-japanese-occupation/>
- <https://ndltd.ncl.edu.tw/cgi-bin/gs32/gsweb.cgi?o=dnclcd&s=id=%22091NTNU0136021%22.&searchmode=basic>
- <http://homepage.ntu.edu.tw/~ntut019/ltes/Sugar-Rice.pdf>
- <http://rportal.lib.ntnu.edu.tw/bitstream/20.500.12235/94437/2/020302.pdf>
- <https://www.th.gov.tw/epaper/site/page/155/2281>
- <http://homepage.ntu.edu.tw/~ntut019/ltes/CPI.pdf>

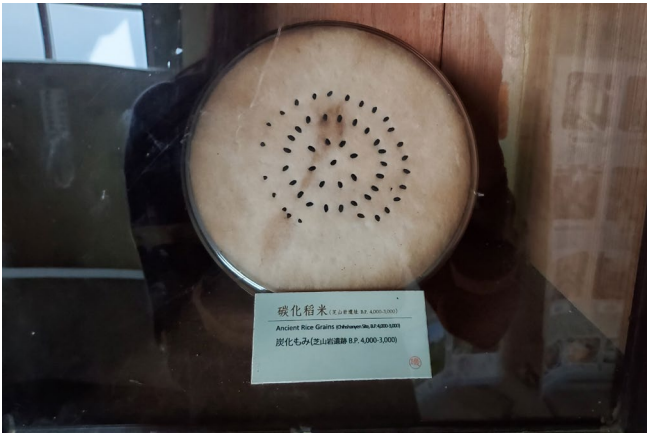
Rice Dishes

1. 筒仔米糕
2. 碗粿
3. 蘿蔔糕
4. 油飯
5. 飯糰
6. 八寶飯
7. 米苔目
8. 爆米香
9. 米粉
10. 板條
11. 芋粿巧
12. 麻糬
13. 麻米老
14. 湯圓
15. 肉圓
16. 鹹水粽
17. 肉粽
18. 艾草糰
19. 發糕
20. 菜包粿
21. 米血糕
22. 茯苓糕
23. 紅龜粿
24. 甜米糕
25. 九層糕
26. 爆米香
27. 狀元糕
28. 滷肉飯
29. 雪片糕
30. 鳳片糕



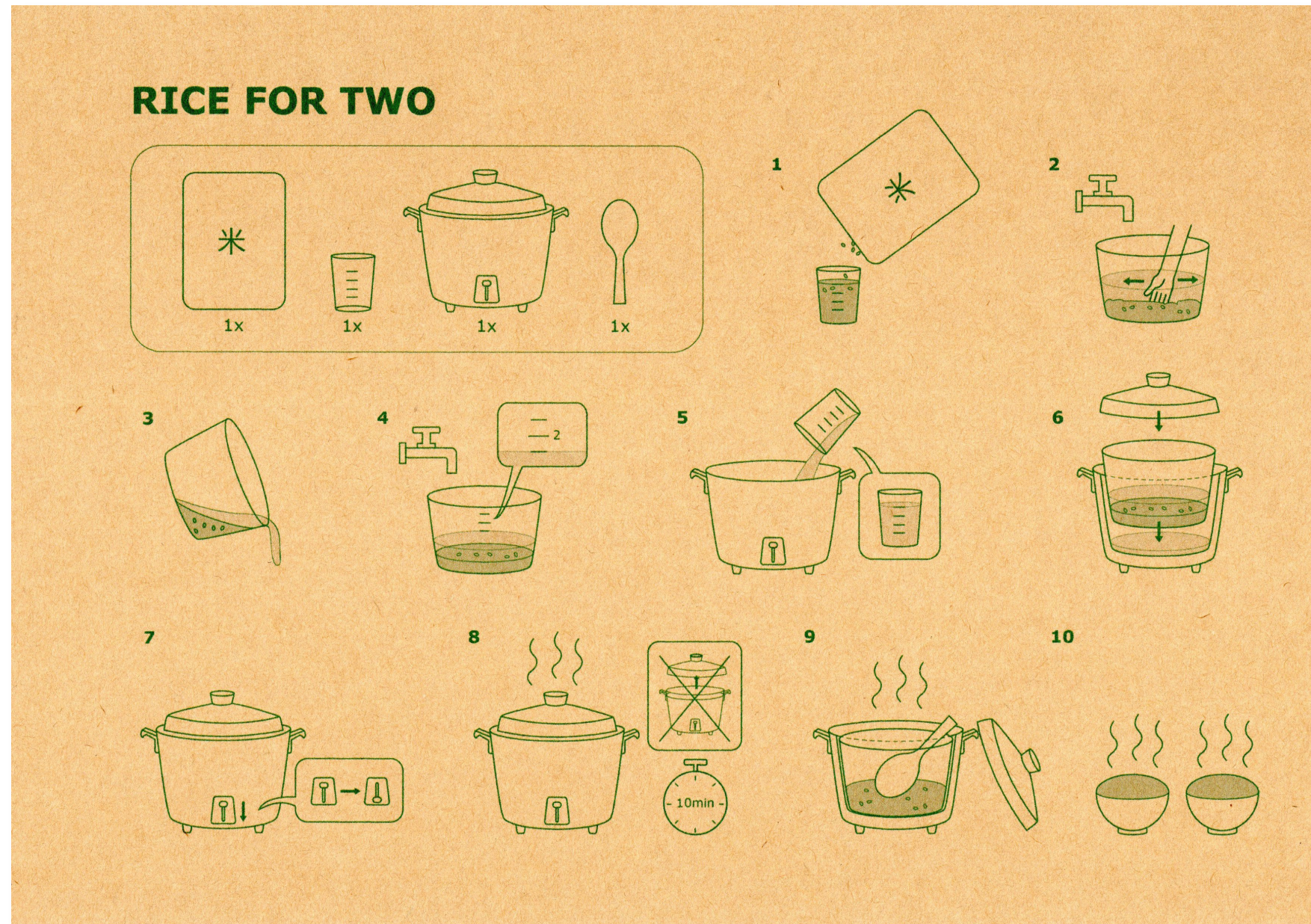
磯小屋 House Iso

I visited a little house now part of the National Taiwan University, where Iso Eikichi, the leading scientist who discovered how to grow japonica rice in Taiwan, worked a century ago.

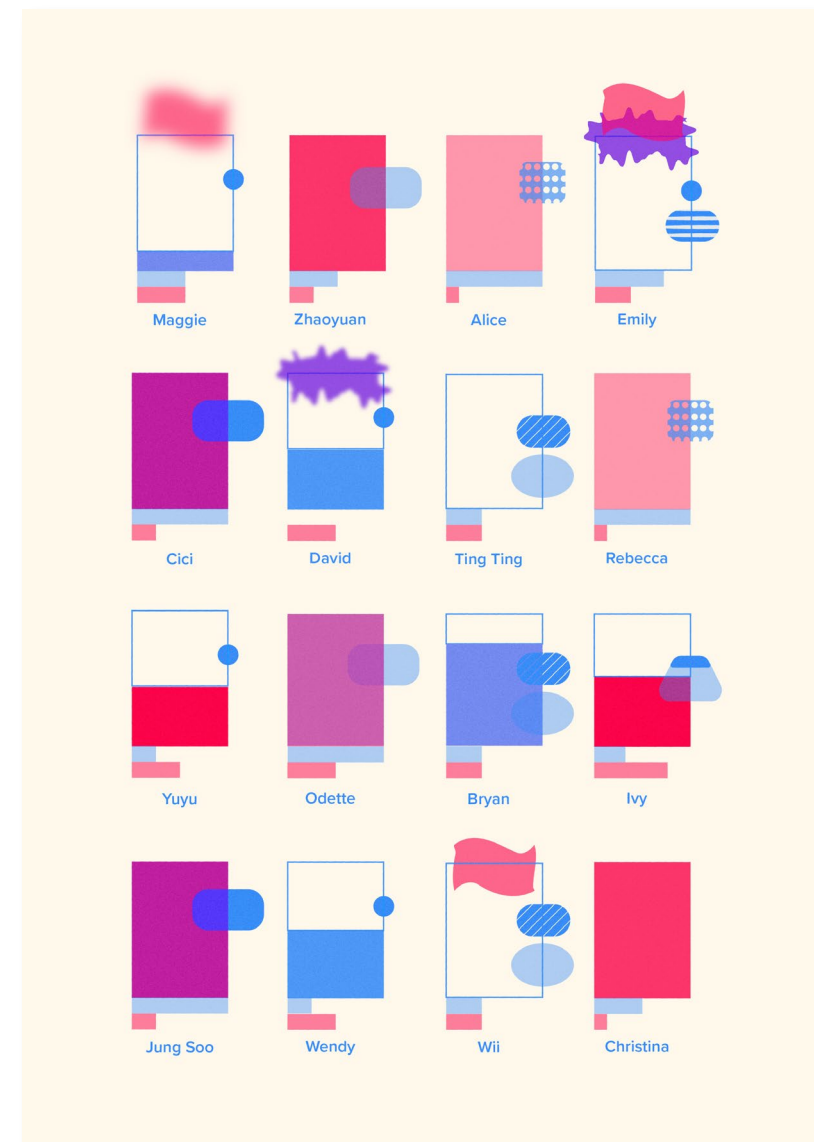
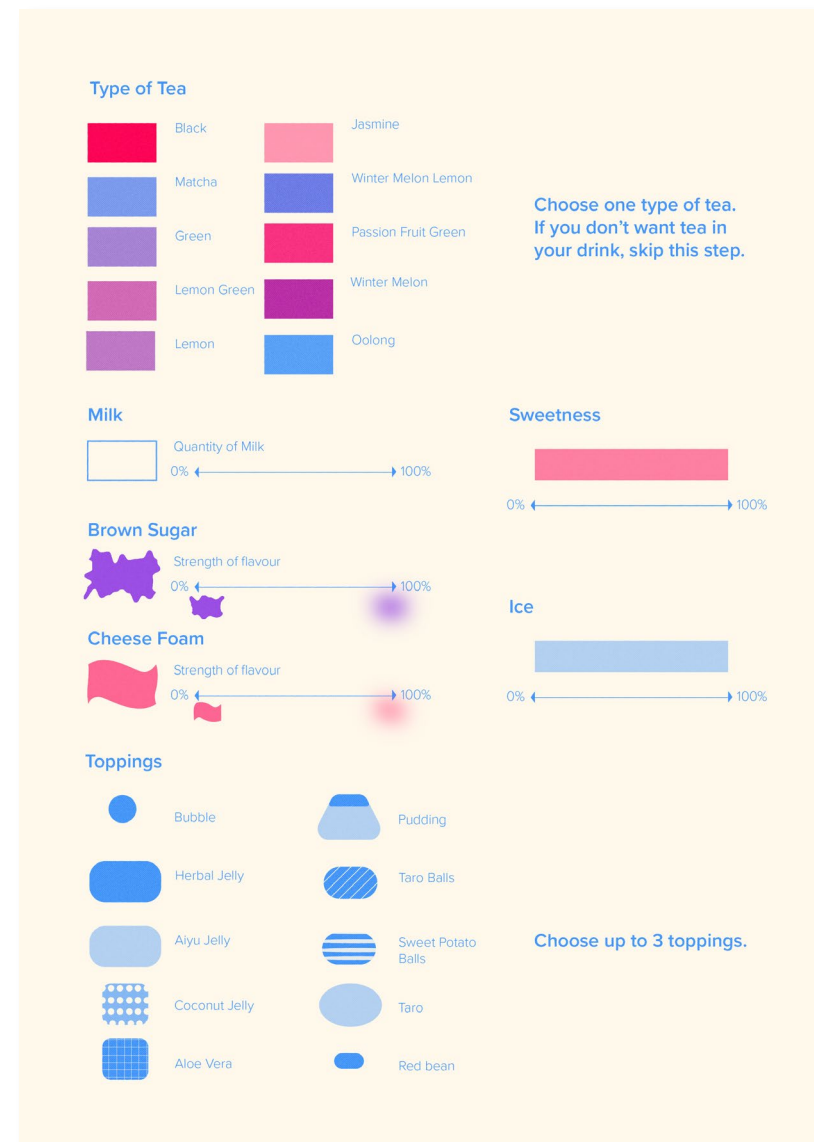


Experiments.

An Ikea-inspired instruction manual for cooking rice.
After watching Uncle Roger's viral reaction video to a BBC food presenter making fried rice and the following outrage in the Asian community, I found it interesting how closely we hold the way we cook rice to our cultural identity.



Data visualisation of people's signature bubble tea order.
 This was made when I still haven't narrowed on rice yet, and was researching into both rice and sugar. I was curious about how individuals consume sugar in their daily life, their sugar footprint basically. Different elements of a bubble tea order were assigned different visual elements, and the graphics were created based on what people chose.



*Tiny story series of people's memories of rice.
I was curious about how different individuals experience the
same thing differently, so I asked family members and friends
about their memories or experiences of rice.*



"Dad, why don't you like eating mochi, even though you're Hakka?"
"He got traumatized from choking on it when he was little hahahaah", mum laughed.
"Hey! I was legit choking!"



"At night, my dad always asked us if we wanted some snacks. And I'll go to the market nearby to buy rice noodles," grandmad said, "Then I run right back home! Because the roads are so dark at night."



"When I was little, we pretty much only get to eat gui once every year during Chinese New Year, but I hated eating it, because it meant that I'll have to mill the rice. It took hours!" grandpa exclaimed.

Reflections

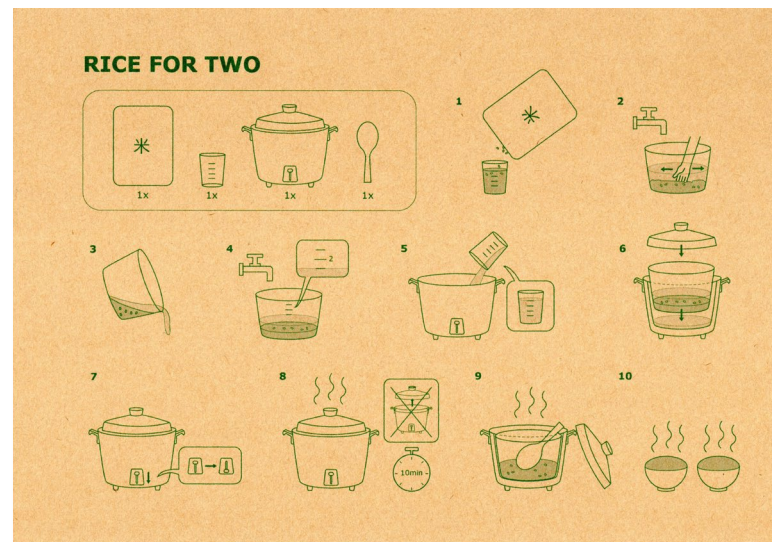
After the experimentation, there are three main things that I realised I'm interested in focusing on after making some experimentations.

1. Individual and collective memory and experience
2. Making history more digestible and relevant
3. Prompting conversation

In the next stage of research, I will be reading on theories about historical distance and the role of memory in history. How do how we view historical distance influence what we treat and take away from history? What can be the value of memory in the study of history? What are some ways people have used to make the education of history more relevant to our daily life?

The medium of the deliverables for my thesis will be determined after a more thorough exploration of how people learn, consume, and internalise history. I wish to combine illustrations into my project.

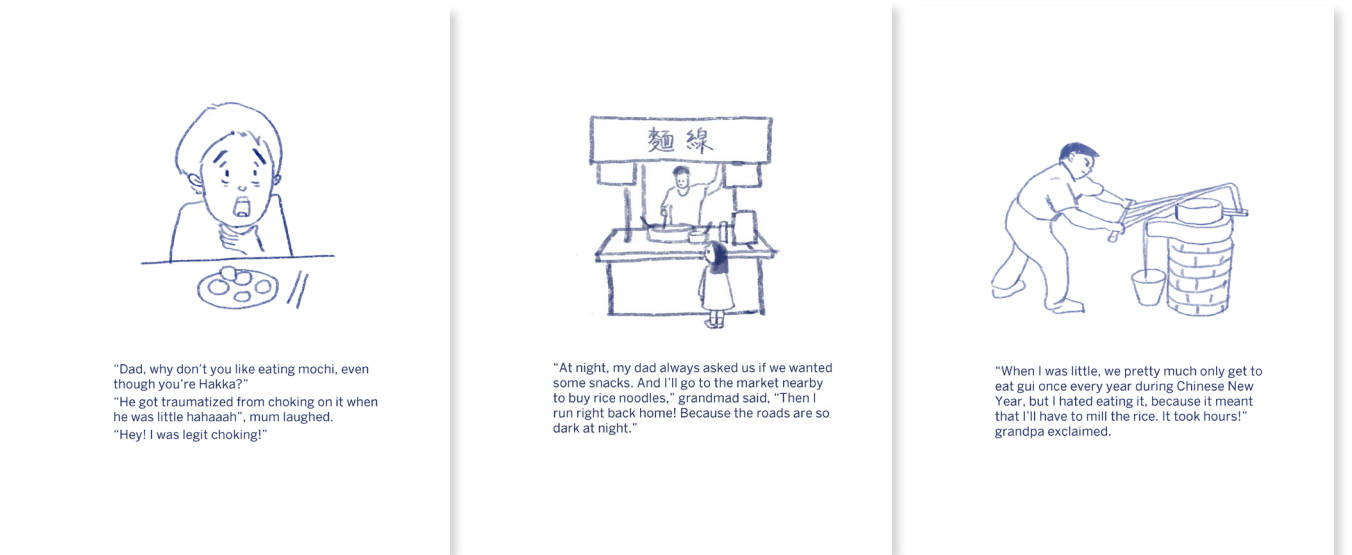
Food and cultural identity



Personal footprint and preference



Individual memory and history



**Second round
of research.**

“Introduction: The Metaphor of Historical Distance”

- “Historical truth is, as it were, rather like the clouds which take shape for the eye only at a distance.”
- Emphasis on distance - methodological preference for written source materials (rather than oral testimonies for example)
- Historical distance not as a concept but as a metaphor
- Minimiser vs. Maximiser perspectives
 - Difference in what they view as historical distance and also in how we should approach it
 - Is it ok to approach the past with their own current historical context?
- Historical objectivity
- “The historians’ task... is rather to engage in dialogue with the past so as to develop a conversational situation where both the past and present are transformed.” p.7
- Presence rather than pastness - does this have applications for non-traumatic situations

WHAT THIS MEANS FOR MY THESIS

What does it mean to say history is “something that we continue to experience, live, and shape”? Am I more on the minimiser or maximiser side? The fact that I think memory is valid in how we interpret and internalise history shows that I’m less interested in so-called historical objectivity, and instead more interest in what history means for contemporary people. I seem to agree more with the maximisers that “clear distinction between past and present do not exist, if only because the present is so much a result of the past that it is hard to say where the past stops and where the present begins”, but I’m not sure if “historical understanding is all about creating distance”. The whole point of the exhibition is to (1) Make history more relevant to people’s daily life (in other words reinforcing the idea that the present is a continuation of the past) (2) Encourage people to reflect on how they internalise culture and history (3) Explore the relationships between history, individual and collective memory, and cultural identity.

“Finding Meaning in Memory... Collective Memory Studies”

- Collective memory as the result of the interactions between:
 1. Intellectual and cultural traditions that frame our representations of the past
 2. Memory makers who selectively adopt and manipulate these traditions
 3. Memory consumers who use, ignore or transform such artifacts according to their own interests
- Diversity of terminology meant to diverge from the “sociologically occupied conception collective memory by Halwachs”
- To what extent can history and memory be seen as “academic and non-academic representations of the past”?
- Collected memory ≠ Collective memory
- At what point can we see something as collective memory? Does it depend on the quantity of people or the scale of its social impact?
- “collective memories work by subsuming individual experiences under cultural schemes that make them comprehensible, and therefore, meaningful.”
- Assumptions to be aware of: “Memory studies presuppose a rarely acknowledged but not particularly surprising desire for cultural homogeneity, consistency and predictability.”
- Key word: historical representation
- * Tends to focus on the role of media and underlying political motives behind “memory making”

WHAT THIS MEANS FOR MY THESIS

Do I want to “find meaning in memory” or just make people conscious of their memory and the possible cultural and historical frameworks under which they made this memory? I don’t think I need to necessarily know what people’s collective memory of rice are, I want it to be a platform or space where people themselves can make these statements or thoughts, to see their similarities and differences I think is more interesting than the unified homogenous idea of “collective memory”.

“Writing the Individual Back into Collective Memory ”

- “Focus on the way individuals experience themselves as historical entities”
- Collective memory vs. Historical memory
 - “... marked by the creation of a distinction between a lived experience and the presentation of that experience...”
- The possible nationalist, revisionist temptations of collective memory
- Key figure in collective memory studies: Maurice Halwachs
 - Believed that individual memory can only be recalled in the social framework within which it is constructed
 - Historical memory - “in which memory is loosed from its social moorings and becomes anchored instead in the abstract frameworks of chronology and factual detail.”
- Pierre Nora’s “Lieux of Memoire”
 - Lieux - sites that have become the fixed externalised locations of what was once an internalised, social collective memory
 - What determines what qualifies as a “lieu”? The will to remember
- Not everything is potentially valuable in the historical sense
- What if we consider the possibility that

WHAT THIS MEANS FOR MY THESIS

I think so far this is the essay that has the closest thesis to mine (in terms of the relation between individual and collective memory). It talks about why it is ok and indeed productive to relocate the collective back in the individual who articulate it. I think one revelation that I was looking for before and found in here is the reason or motivation or even purpose behind the act of interpreting history and expressing individual memories of it, and “the will to remember” is surprisingly simple but pretty valid. The only problem is whether or not the author confuses collected memory with collective memory in suggesting the role of the individual as a historical writer and actor.

Bodily memory and sensibility: culinary preferences and national consciousness in the case of Taiwanese cuisine

- Bodily memory and sensibility: culinary preferences and national consciousness in the case of taiwanese cuisine
- Focusing on the consumers rather than producers
- Is there a relationship between national identity and culinary preference?
- Crib poses the concept of “experiencing identity” to explain that identity is not only “one element or process within a self”, but also the way people experience the world
- Interactions between body and memory are better understood as a bi-directional process
- Bodily memory is individual not collective, but it can be transformed into social memory. it links the individual to shared collective memories
- Their perceptions of taiwanese cuisine and their food consumption behaviour are guided by the very sensibility by which they make sense of the world. it is on this basis that culinary preference and national consciousness can be linked (meaning that when consumers do not have coherent attitudes in political, ethnic, and aesthetic spheres, then there will be either no or weak coherence between national consciousness and food preferences)
- Consumer support of national cuisine cannot be fully explained by the influence of government and politicians

Rice as self: Japanese identities through time

- To explore how a people use the metaphor of a principle food to think about themselves in relation to other people
- Important statement that applies to my project as well: “I trust that the reader will exercise common sense and understand that ‘the Japanese’ doesn’t necessarily mean ‘every Japanese’. I also use the terms ‘Japan’ and ‘Japanese’ loosely throughout, realising that neither Japan as a nation nor the Japanese as a well-bounded social group have existed throughout history.”
- “the Japanese self was born through discourse with the other”
- the “others” represented as eating the wrong rice -> power inequality
- Government’s protectionist policies towards farmers and agriculture
- Paradox of urbanites’ opposing stance on rice importation and disdain for the double-subsidising of rice -> argues that Japanese attitudes and behaviours toward rice are not governed by economic rationale
- The debate as to whether or not rice is actually the main staple of Japan -> rice culture theory vs. miscellaneous grains theory
- Rice riots - chapter 3 p.38
- Affluence brought to light a basic paradox - continued importance of the qualitative value of rice but a decisive decrease in its quantitative value
- Presence of a small amount of rice is essential, but a large amount is desirable only when the standard of living is low
- Aesthetics of rice - “rice is not only beautiful, but its beauty is as quintessentially Japanese as the brushstrokes with which the Japanese often choose to present/represent their culture to outsiders” (chapter 5, p.76)
- Cooked rice - qualities of luster, purity, whiteness
- To maintain an agrarian identity when the country’s economy has diversified or has been urbanised and industrialised
- Rice growth as markers of seasons

- “Japan’s victory would guarantee abundant domestic rice rather than the ‘distasteful’ foreign rice whose consumption epitomised the suffering of the Japanese
 - Very interesting how the chapter eliminates the whole discourse of Japan growing rice in its colony and repositioning its economic strategy as “Industrial Japan and agricultural Taiwan”
 - During military era, rice were cleverly used for nationalistic purposes, e.g. rising sun lunches
- An individual self in five social context and the collective self of a social group defined in relation to another social group
- “a culturalised nature”
- If the self has undergone changes, then its meaning, too, has changed
- Rices as selves and rice paddies as “our land”

WHAT THIS MEANS FOR MY THESIS

As stated in the title of the book, it talks about how Japanese see rice as “self”. It provides an interesting perspective on how the (once) coloniser of Taiwan view their own relationship to rice and is a basis for reflection on whether or not, in what way, and to what extent does that perspective have an influence on Taiwan. I thought the emphasis on being able to consume domestic rice in abundance as a motivation during wartime was really interesting, one in the sense that of course Taiwan was completely eliminated from the discourse, but also provides a justification or perspective that explains why the Japanese put so much effort into cultivating Japonica rice in Taiwan. It was also an insightful look into how beliefs and identity are reflected in how the nation/ different groups of people interact with and consume a certain object. In addition, it provides examples of how to look at rice through its symbolic and aesthetic value. Why is rice portrayed in the way it is? What does this tell about our perspective of it, our motivations, and its place in culture?

Learning, consuming and internalising history

With research and mindmaps, I explore how we usually learn, consume, and thus internalise history. Here is a summary of the content.

WAYS IN WHICH PEOPLE LEARN ABOUT HISTORY

- Books - e.g. Historical fiction, biographies, autobiographies
- Primary sources - e.g. Objects and text from the time, such as contracts, and the text of contemporary writers
- Museums
- Podcasts
- Other people - e.g. when friends and family talk about their memories and experience
- Media - usually has the tendency of being more relevant to the present, often influences the perception, and therefore the perceived implication and consequences of events
- Social media - increasingly how we consume information
- Films - e.g. documentaries and historical movies
- Classes - often taught in a more linear manner, especially before college, and as a one-way input of info from the professor to students
- Travelling and experiencing culture - first hand, might lack context but is more direct

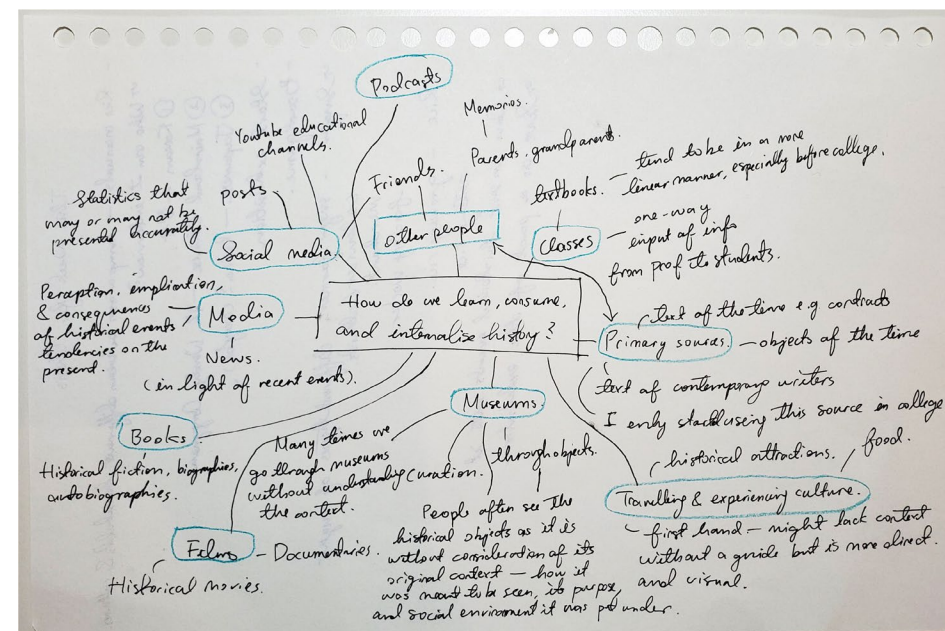
LEARNING HISTORY THROUGH MUSEUMS AND EXHIBITIONS

Usually people learn about history at museums through the objects of the time. However, people often see these historical objects as is without consideration or understanding of the original context, including how it was meant to be seen and its purpose. It is difficult to really learn history by viewing artworks without some prior context and knowledge. Take sculptures for example. White marble statues are often what comes to mind when Greek and Roman statues are mentioned, but this is not how they were originally like or how they were meant to be seen. The Greek original is often made out of

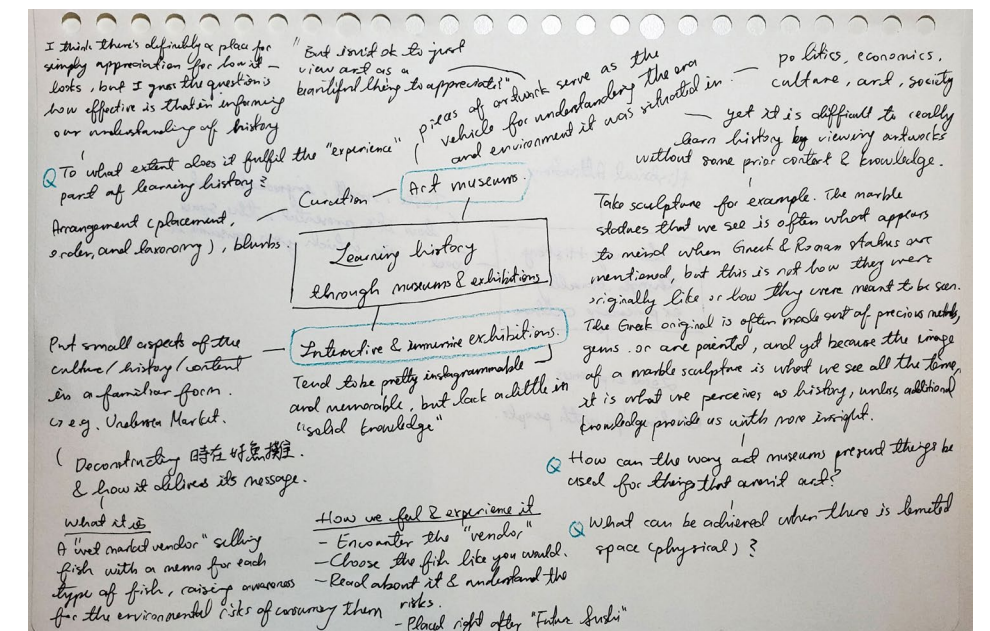
precious metals, gems, or are painted, but because the marble sculpture is what we see all the time, it is what we perceive as history, unless additional knowledge provides us with more insight.

Current methods and theories of curation is something that my thesis can learn from, the arrangement, placement, and taxonomy of objects that could optimise the experience and understanding of the subject matter exhibited.

Interactive and immersive exhibitions tend to do a better job of engaging the audience, but lack a little in "solid knowledge". A method that I found worked well in exhibitions I went to is to present small aspects of the culture or history that we want people to learn about in a familiar format.



Mindmap exploring ways in which people might learn about history, and the pros and cons of each method



Mindmap exploring how people learn history in museums and exhibitions

What is an exhibition?

What can it be?

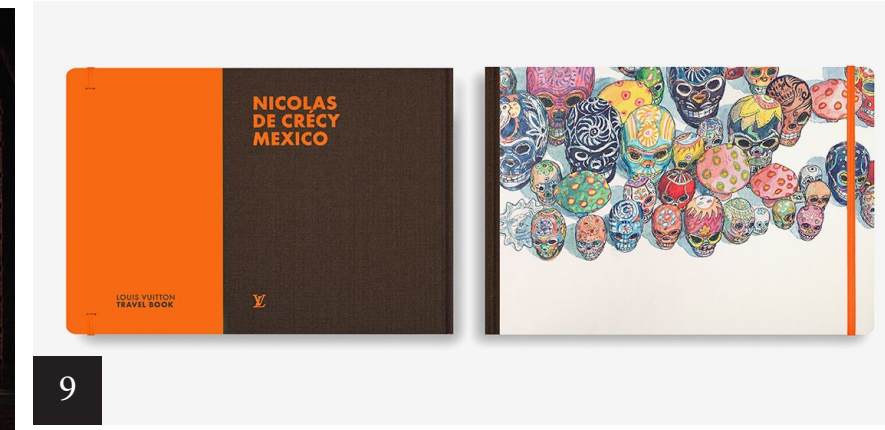
DEFINITIONS OF “EXHIBITION”

- a public display of works of art or items of interest, held in an art gallery or museum or at a trade fair
- a collection of things shown publically
- an act or instance of exhibiting
- organised presentation and display of a selection of items

* Key words: public display and organised presentation

WHAT FORMS CAN AN EXHIBITION TAKE?

1. **Billboards**
2. **Consortium 19:** An outdoor “Arcade” space makes history into a game by “putting into play” a large cast of characters and milestones of Quebec’s history.
3. **Art catalogs**
4. **Emotional Baggage Drop:** A participatory installation that mimics a physical baggage drop. The difference being that here visitors are invited to leave behind an emotional burden.
5. **The Fulfillment Center:** Black Cube explores what human fulfillment is in the digital age in a warehouse space, playing with the meaning of “fulfillment center”
6. **mmuseumm:** a non-conventional museum in downtown NYC (physical and digital version)
7. **Playing cards**
8. **Window Displays:** curated public display of objects
9. **Louis Vuitton Travelbooks:** a collection of sketchbooks each devoted to a different country, city, or journey as illustrated by a different artist from around the world, a collection of impressions expressed and presented through the form of a book of artwork

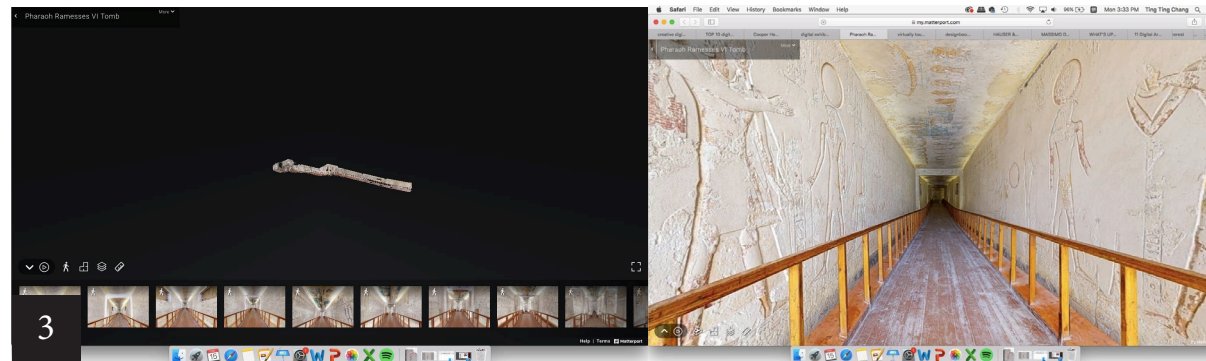


What is an exhibition?

What can it be?

WHAT FORMS CAN AN EXHIBITION TAKE?

1. **Letterpress Kit:** a kit consisting of two parts, one is a publication about the tradition and current situation of letterpress in Taiwan, and the other part is a hands-on box that allows you to experience letterpress and print your own business card
2. **Gough Street Neighbourhood Festival:** a community project that spans across the gough street neighbourhood in Hong Kong with posters and boards that encourage interaction
3. **The Tomb of Pharaoh Ramses VI:** a virtual tour
4. **What's Up/ Twenty Twenty:** a digital art exhibit set within fictional architectural worlds, with a total of 5 spaces
5. **Surprisingly This Rather Works:** the entire Knig Gallerie is transformed into a gaming environment inspired by the 1990s game show "American Gladiators", visitor turns into an avatar and interacts with the objects



References

- <https://www.dariamag.com/home/the-fulfillment-center>
- <https://blackcube.art/exhibitions>
- <https://www.mmuseumm.com/exhibitions>
- <https://indcontemporary.org/on-abstract/nontraditional-artspaces>
- <https://exmuro.com/en/artistes/consortium-19-quebec-et-rouyn-noranda/>
- <https://my.matterport.com/show/?m=NeiMEZa9d93&mls=1>
- <https://whatsuptwentytwenty.com/home>
- <https://www.manuelrossner.com/artwork/surprisingly-this-rather-works-2/>
- <https://www.designboom.com/art/manuel-rossner-konig-digital-gaming-exhibition-04-22-2020/>
- <https://www.behance.net/gallery/74159019/Gough-Street-Neighbourhood-Festival>

Takeaways from research into exhibitions

1. Participant rather than attendee
2. Curated presentation of a selection of items
3. Exhibition is a space, but the definition of “space” can be very broad. Doesn’t necessarily need to be a physical space, it’s more like a space that is set up to encourage people to immerse themselves in a specific subject
4. The size and form of the exhibition shapes who are likely to be involved and how they are likely to interact with the given subject

Questions for myself regarding the form of exhibition

5. Where do I want the exhibition to be?
6. What type of interactions do I want people to have with the exhibition? What form of exhibition can facilitate these types of interactions?
7. Do I want to involve VR or AR? Why?

Designing & making

01 Boardgame

A boardgame based on the problem of rice-sugar rivalry during the Japanese era

Research

More research into the rice-sugar rivalry, how did different parties deal with the problem.

Parties involved in rivalry

- Farmers: Can choose between growing sugar cane and rice
- Sugar factories: Needs to buy enough sugar cane to produce sugar; Sets the price for sugar cane
- Government: Encourages and discourages sugar cane and rice production based on demands and priorities of Japan

Factors farmers need to consider

- Water field or dry field
- Harvest cycle of potential crops (rice is about six months, while sugar cane is 12 to 18 months)
- Rice and sugar cane price
- Weather
- Policies encouraging or discouraging production of rice and sugar

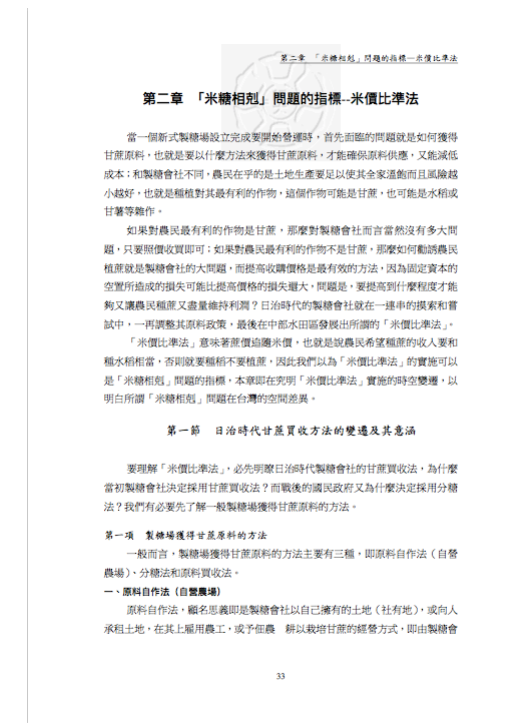
Factors that affect sugar cane price

- Sugar price in Japan
- Prosperity of sugar industry in Taiwan, Japan, and the world
- Priorities of the government (e.g. demands of war or demand for rice in Japan)
- Policy changes
- Weather

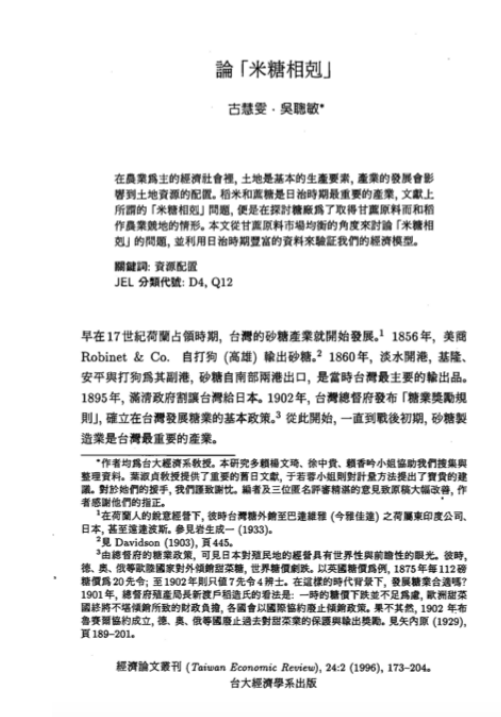
Expenses made by sugar factories to collect sugar cane

1. Base price of sugar cane
2. Loan to farmers before farming
3. Award for early growing
4. Sugar cane subsidy and loan
5. Fertiliser subsidy
6. Irrigation subsidy
7. Water land subsidy
8. Award for large cultivation area
9. Award for high yield
10. Award for quality of sugar cane

* Income farmers receive from sugar factories = Base sugar cane price + Subsidies + Encouragement money



“The areal differentiation of the contradictory relationship between rice and sugar in Taiwan sugar industry: 1895-1954”, Published in 2003



“On the Rice-Sugar Rivalry Problem”, Published in 1996

How to play (version 1)

Each player is a sugar factory. You need to try to buy the most sugar cane possible from farmers. Gain farmer cards by spending money cards that correspond to what is on the farmer cards. The first player to collect 1000kg sugar cane wins.

Farmer Cards

There are different types of farmers that produce different quantities of sugar cane and cost different money cards to attract.

Money Cards

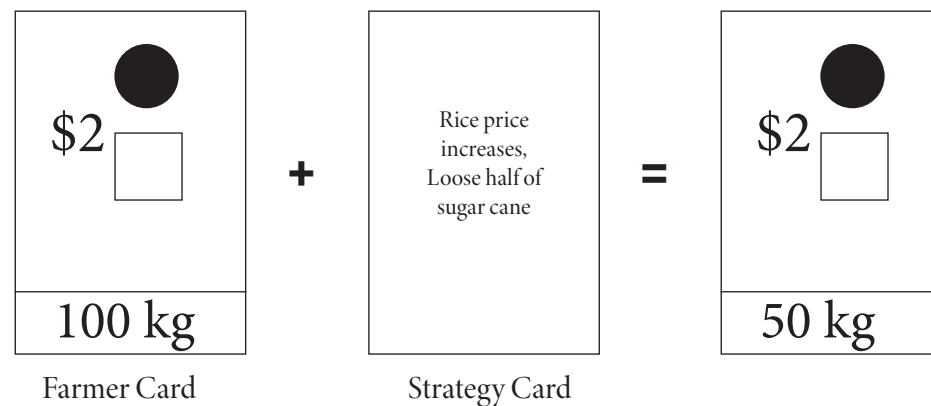
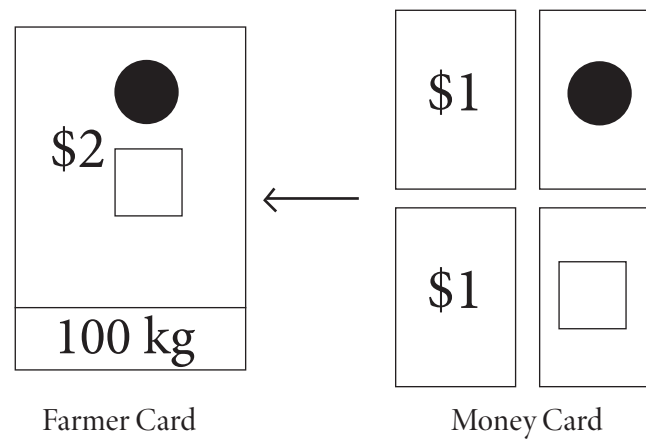
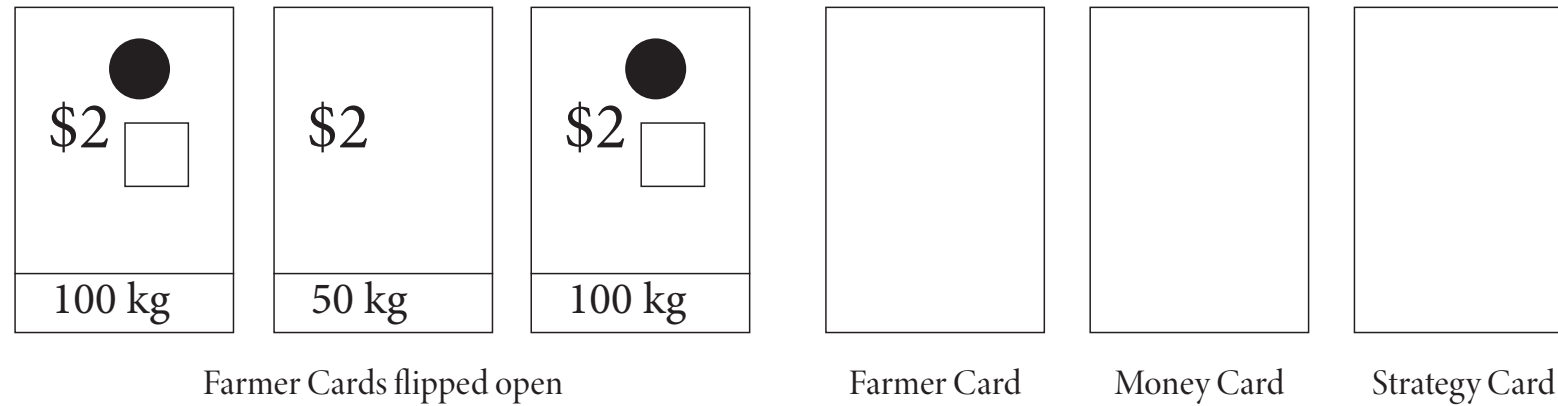
There is a base sugar cane price for every farmer card, and additional money cards, such as general subsidy and fertiliser subsidy.

Strategy Cards

These cards affect sugar cane price and productivity of farmers. Use them to attack and defend. You can buy one strategy card with \$3.

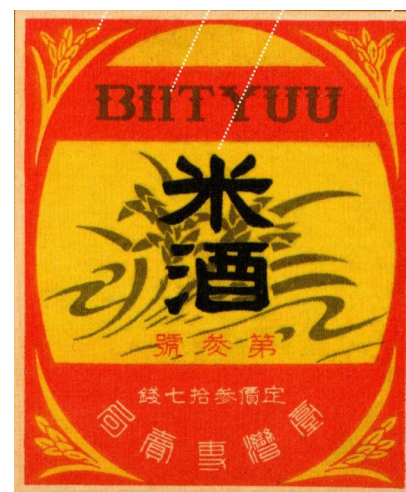
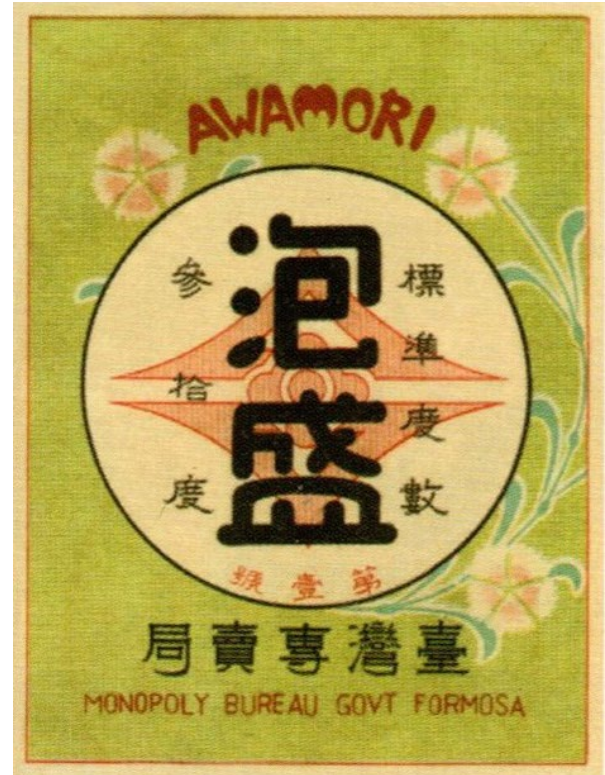
Setup

Each player gets 3 money cards and 2 strategy cards to begin with. Open three farmer cards, then keep the rest facing down. Keep the pile of money cards and strategy cards down as well. On your turn, take a money card, and decide your action.

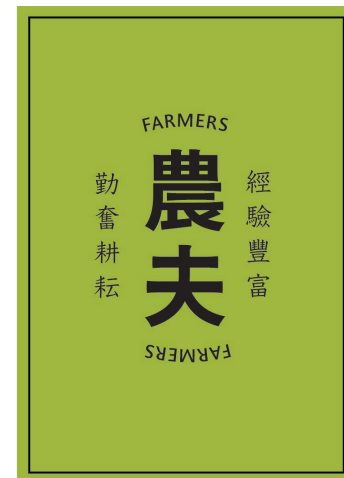
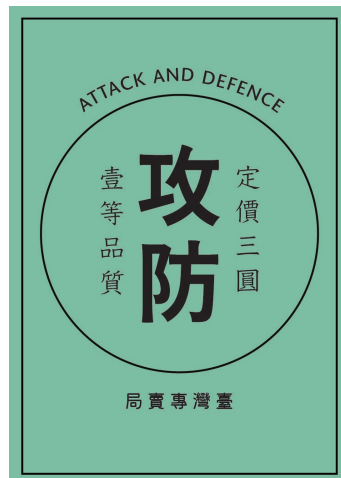


Moodboard for Visuals of Cards

Packaging and advertisements from the Japanese era.



Cards (Version 1)



Testing the Game & Adjustments

I printed the cards at home and tested out the game to see if any adjustments can be made to improve the game. Some major things that I realised I had to change include:

- There was little motivation to buy and use the strategy cards, as they cost too much, and don't do much to winning the game.
- There needs to be some strategy cards that give players the chance to get more cards or force the other player to lose cards.
- It was too difficult for the game to proceed if the players didn't have the money cards that they need.
- The amount of sugar cane that each farmer produces and the number of money cards required to buy them needs to be reconsidered to make the game shorter and engaging.

I also did more research into the rice-sugar rivalry and expanded the range of cards based on how different parties dealt with the problem. The unit of measurement was also changed from kilograms to a thousand catties (a catty is 0.6 kg, so a thousand catties equals 600 kg), since this is what was used most often during the time.

How to Play (Version 2)

Each player is a sugar factory. You need to try to buy the most sugar cane possible from farmers. Gain farmer cards by spending money cards that correspond to what is on the farmer cards. The first player to collect 10 thousand catties of sugar cane wins.

Farmer Cards

There are different types of farmers that produce different quantities of sugar cane and cost different money cards to attract.

Money Cards

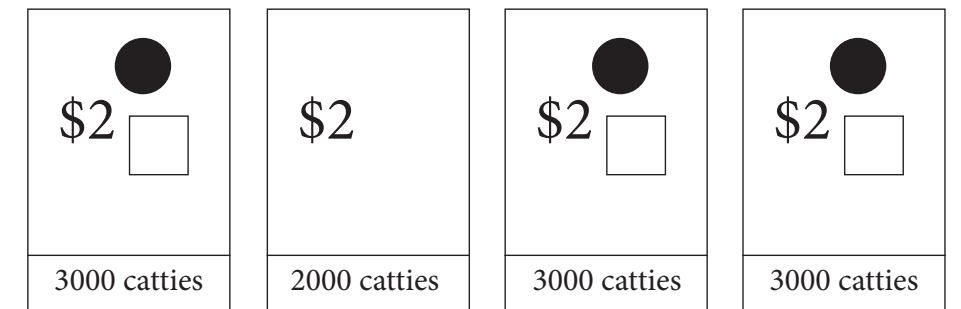
There is a base sugar cane price for every farmer card, and additional money cards, such as general subsidy and fertiliser subsidy that could be used to buy sugar cane from farmers.

Strategy Cards

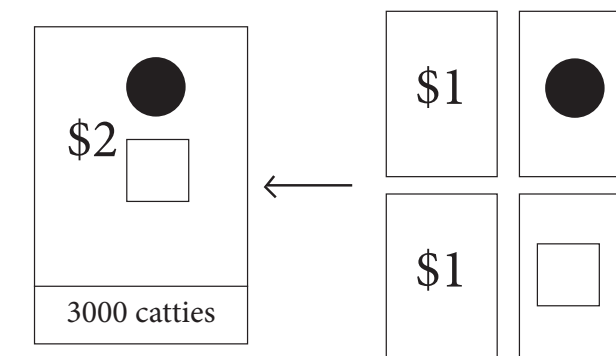
These cards can affect sugar cane price, productivity of farmers, and the number of money cards you or your competitors hold. Use them to attack and defend. You can buy 1 strategy card with 2 money cards.

Setup

Each player gets 4 money cards and 1 strategy cards to begin with. Open 4 farmer cards, then keep the rest facing down. Keep the pile of money cards and strategy cards down as well. On your turn, take a money card, and decide your action.



Farmer Cards flipped open



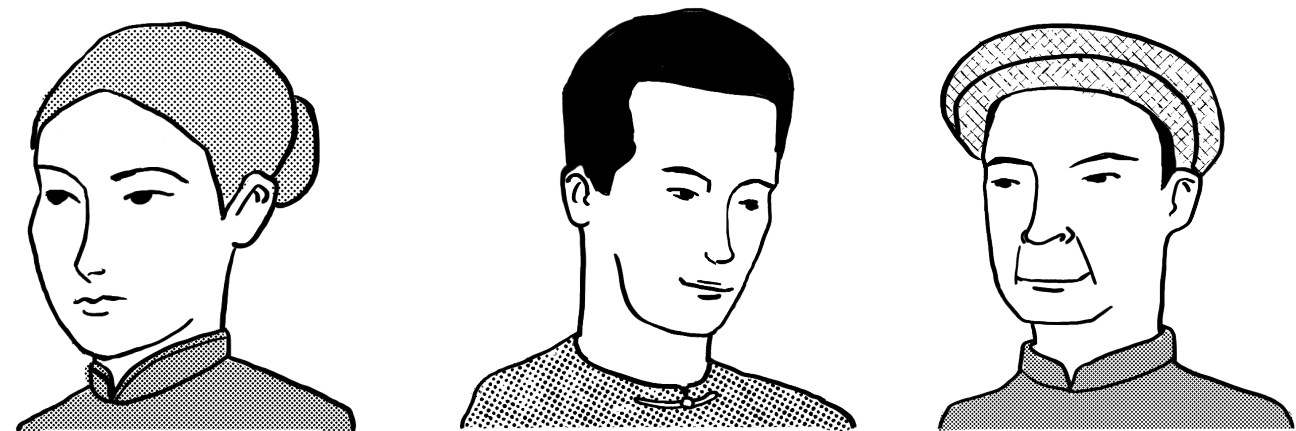
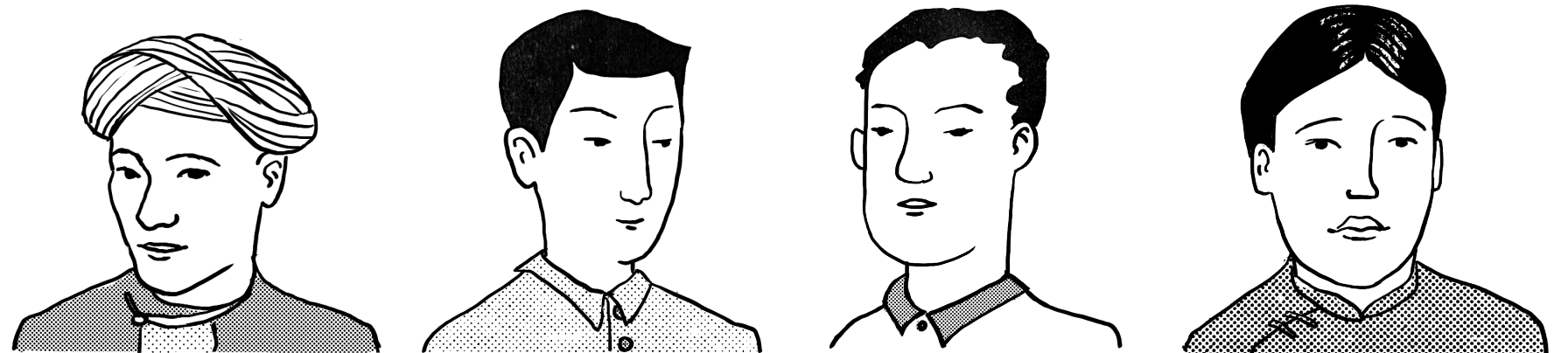
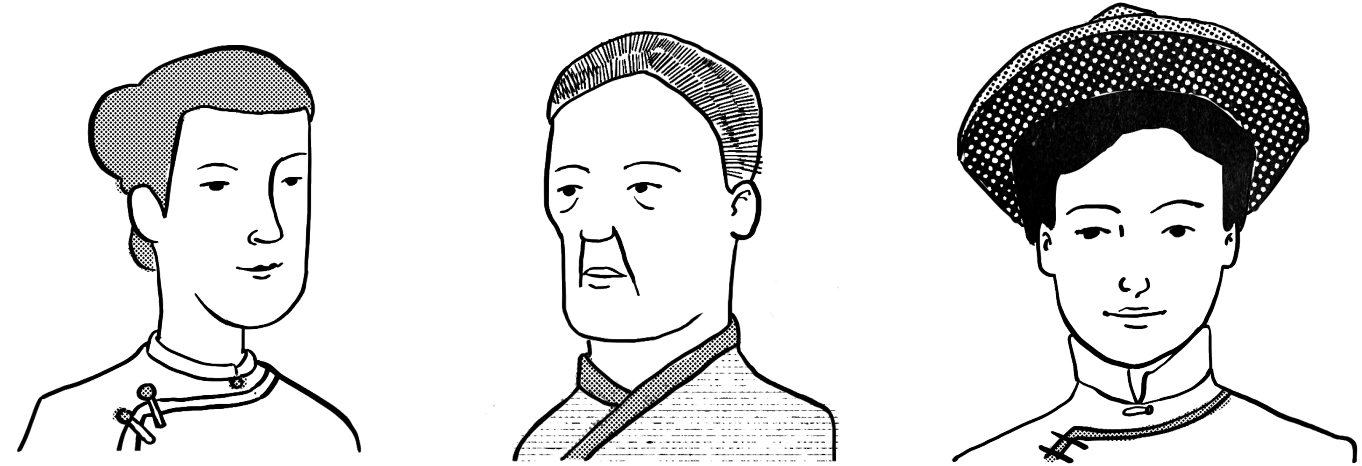
Farmer Card

Money Card

Illustrations for Farmer Cards

I drew inspiration from the illustrations of people in old Japanese advertisements. I tried to mimic the visual look with the linework and the use of halftone textures.

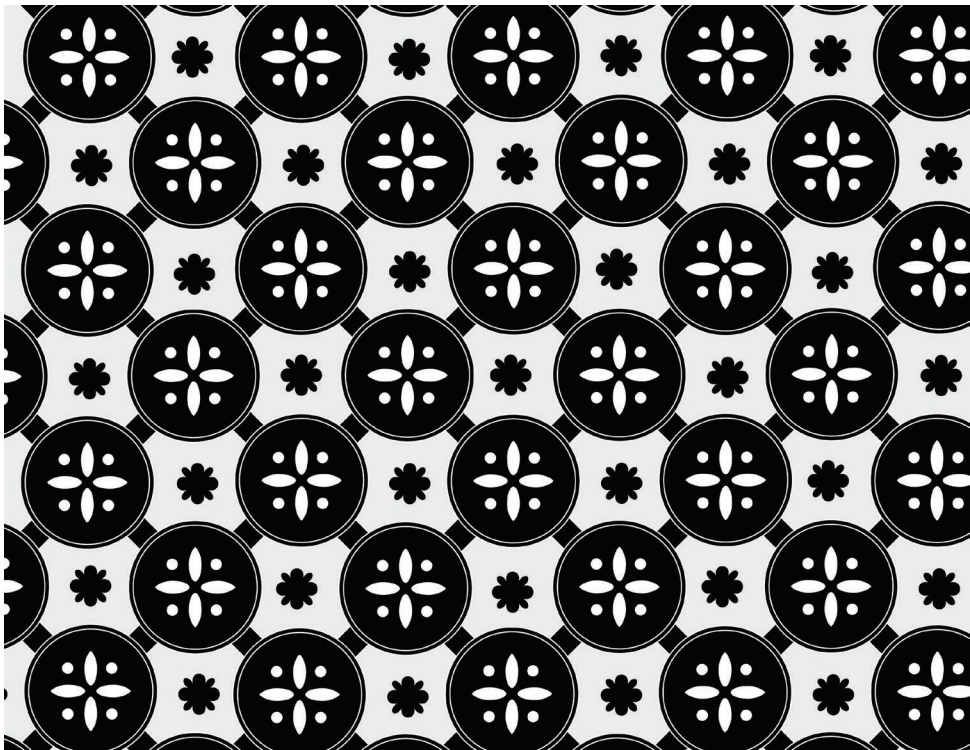
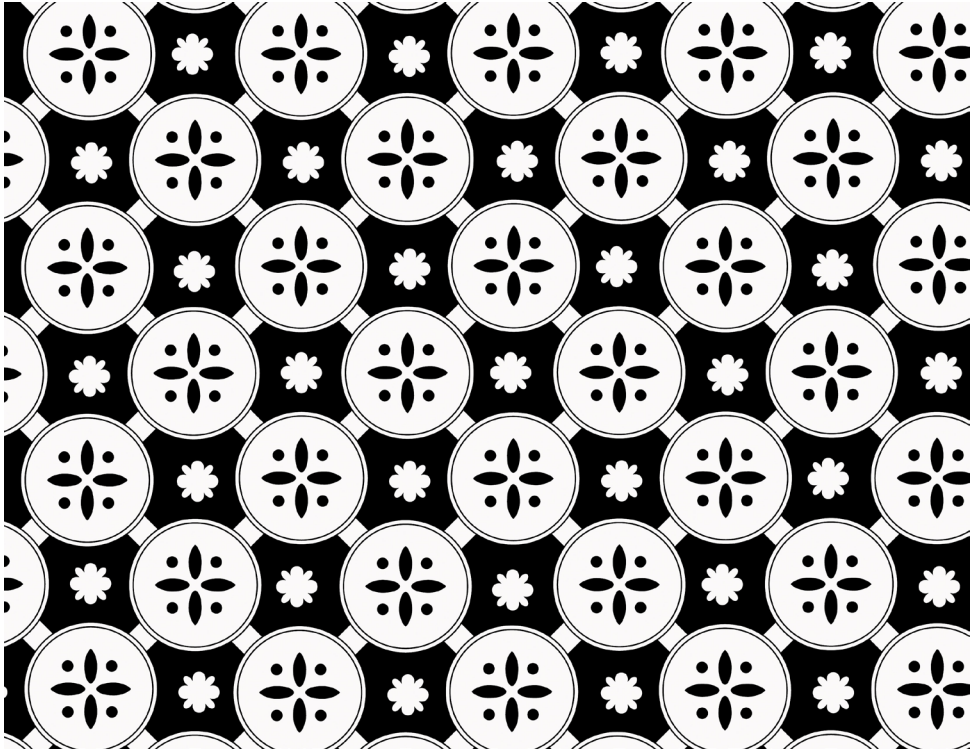
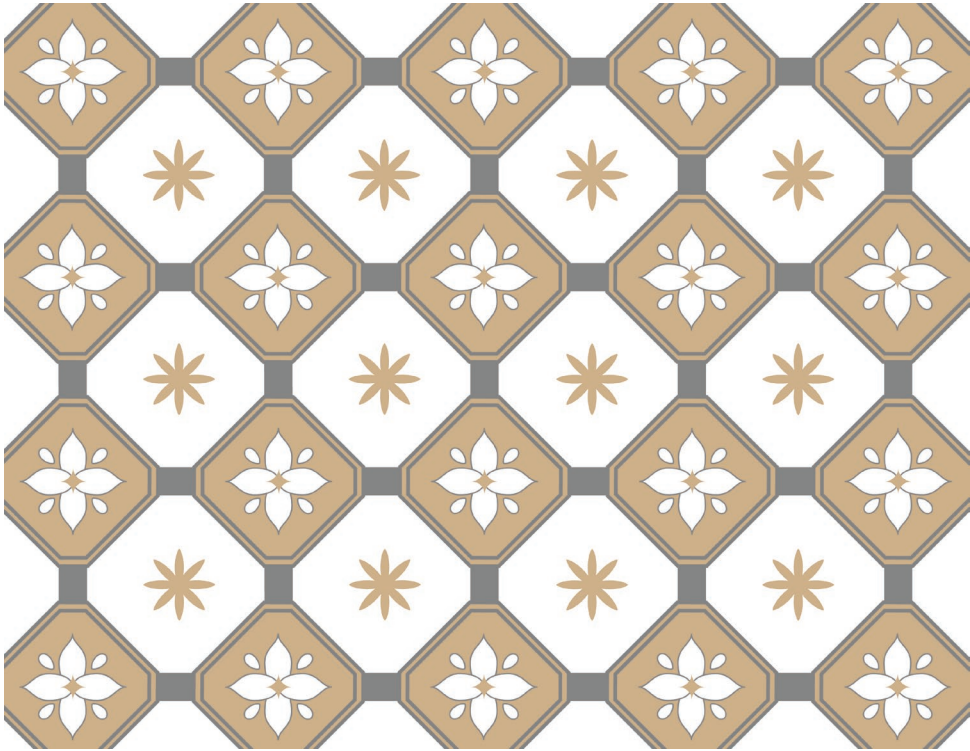
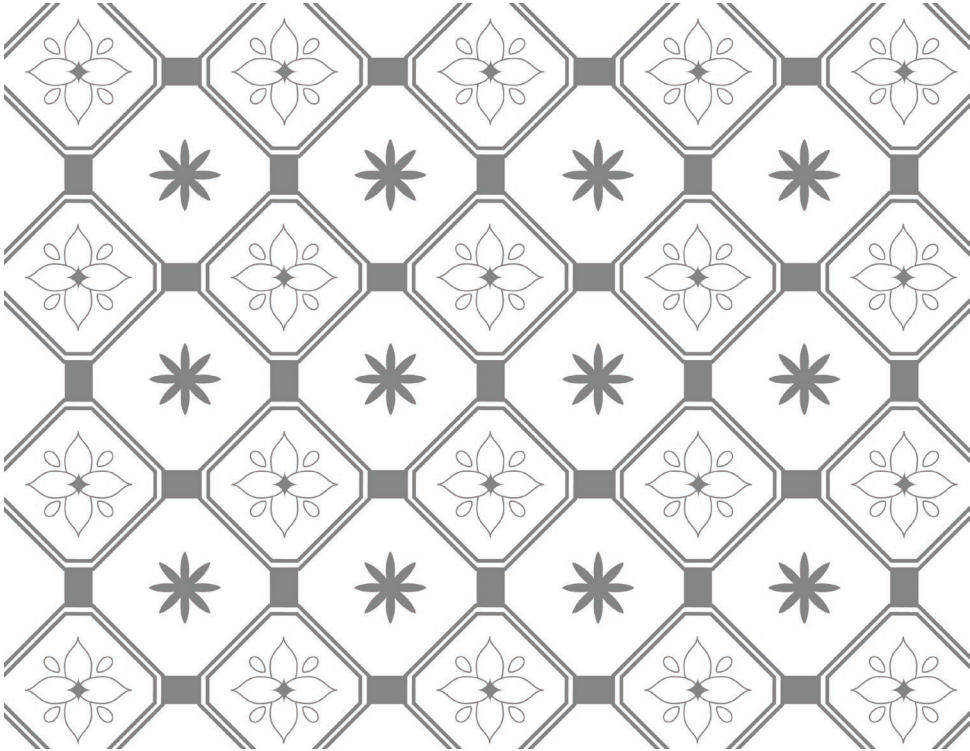
For the outfits and hairstyles, I referenced photos of the time and a few essays about what people wore. It was difficult though, because photography was not yet accessible to all, and fashion of the rich is much more well documented, even in terms of written record. Since a lot of people still wore traditional Han Chinese clothes continuing from the Qing Dynasty, I did some research into what people wore before 1895. Other than the clothes of the Han Chinese, I also tried to include the western fashion that was becoming popular and the clothes of indigenous peoples. The farmers also have their names next to their portraits.

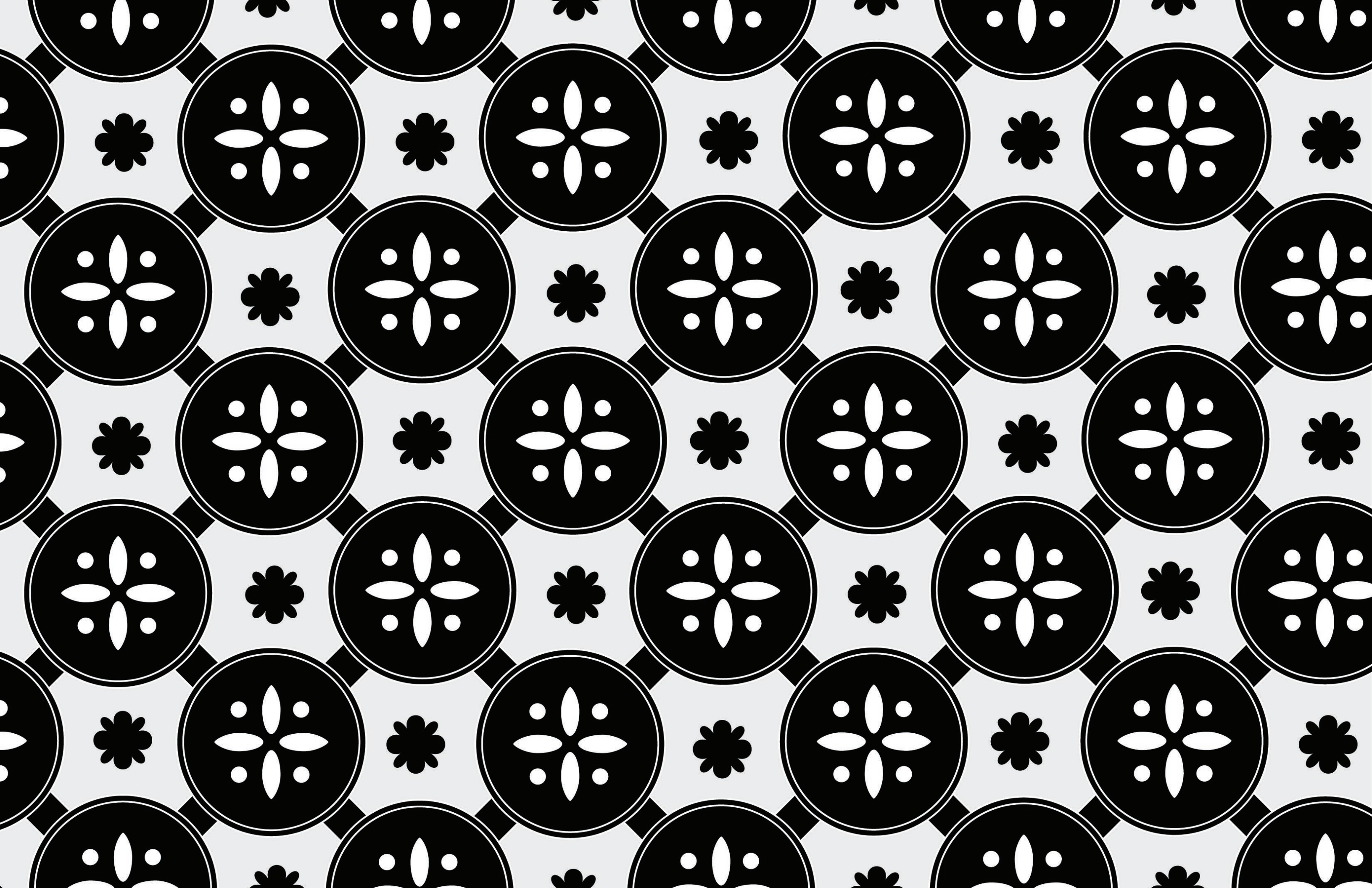


Photos of people from the Japanese era (1895-1945)

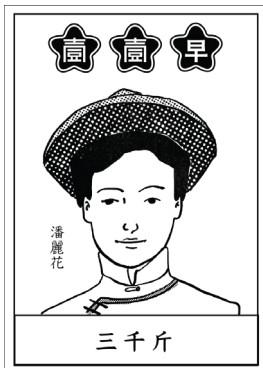
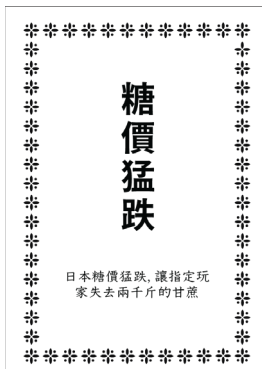
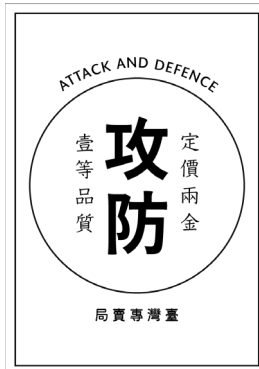
Pattern for Borders on Cards

Inspired by the traditional tiles of Taiwan, I experimented with patterns based on the Chinese character of rice, “米”. It is then used for the border on the money cards.

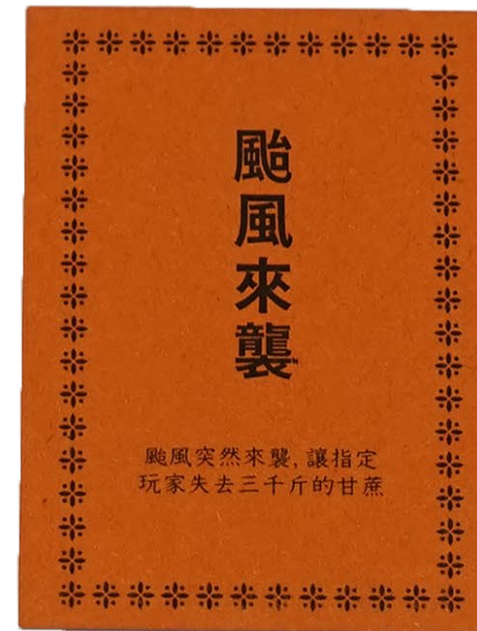




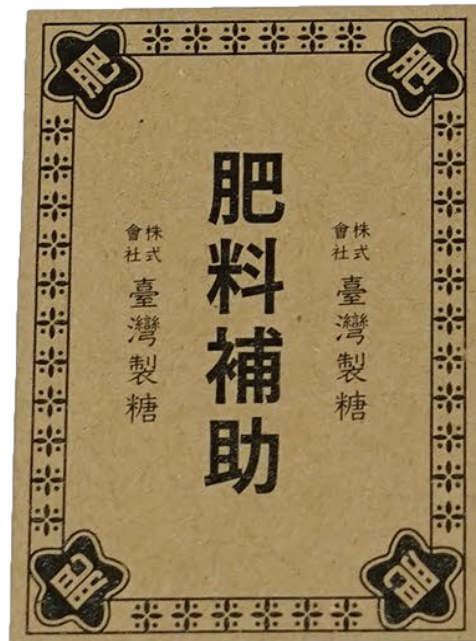
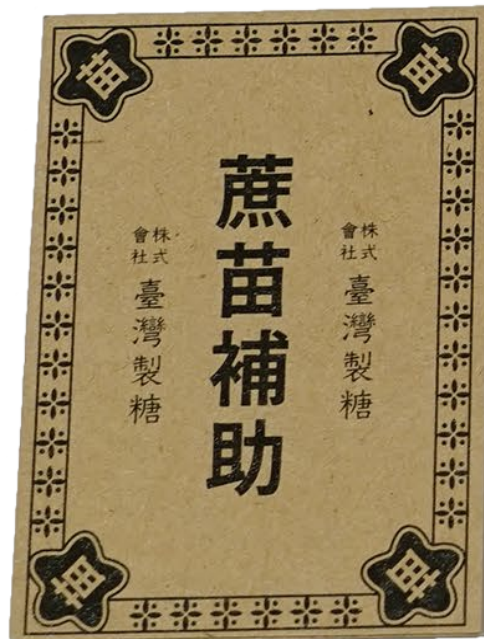
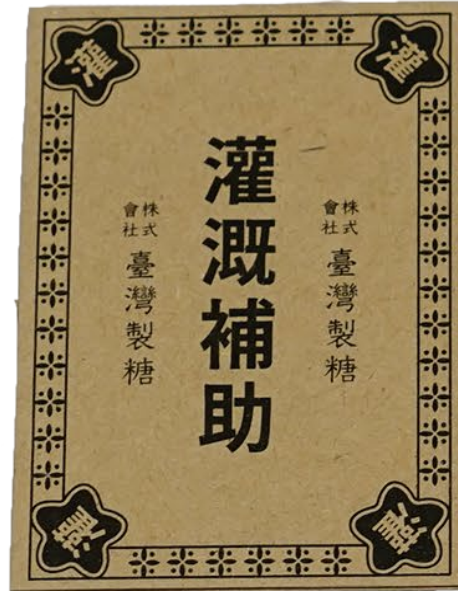
Cards (Version 2)



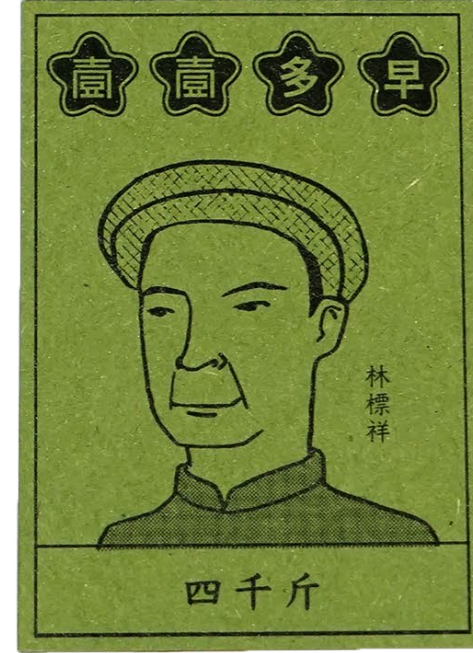
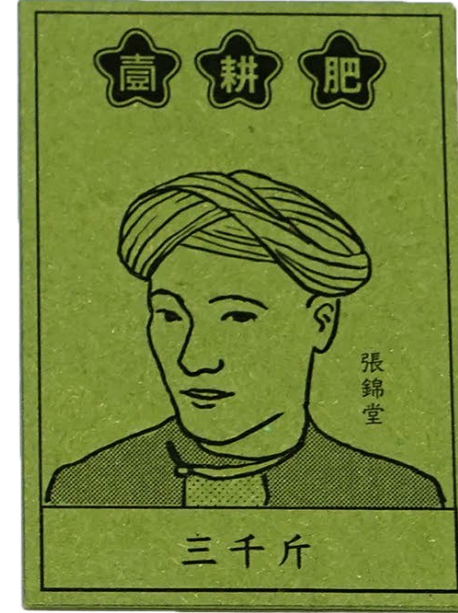
Printed Strategy Cards



Printed Money Cards



Printed Farmer Cards



FARMERS 農夫 經驗豐富 勤奮耕耘

四千斤

價猛跌
日本糖價猛跌，讓指定玩
家失去兩千斤的甘蔗

臺灣銀行 壹圓
相此券引換仁金壹圓
相渡可身患也
TAIWAN BK LTD

黃玉蘭
三千斤

ATTACK AND DEFENCE
定價兩金
壹等品質
攻防
局買專灣臺

金

FARMERS 農夫 經驗豐富 勤奮耕耘

ATTACK AND DEFENCE
定價兩金
壹等品質
攻防
局買專灣臺

老天爺

集團蔗園獎勵
會社式 臺灣製糖
會社式 臺灣製糖

水 壹 壹
黃清治
三千斤

營運不佳
糖廠營運不佳，讓指定
玩家失去兩塊糖

水

FARMERS 農夫 經驗豐富

ATTACK AND DEFENCE

The Whole Package

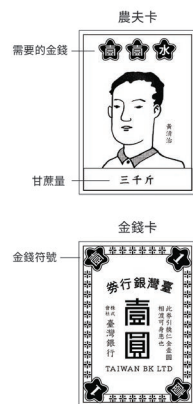
I created a completely no-glue box for the boardgame that opens up flat. The box is tucked into a piece made out of paper with rice straws in it. The total package contains the cards and a book explaining the instructions and historical background behind the board game.



Boardgame Book

The book explains how to play the game and the historical background behind it.

玩法說明



每位玩家都是一座糖廠，你的目標是從農夫們手裏購買足夠的蔗糖原料！

1. 發牌每人4張金錢卡和1張攻防卡。
2. 翻開4張農夫卡。
3. 到自己的回合時再抽2張金錢卡到手上後，可以選擇不做任何事直接換下一位玩家，或執行下列任何操作。
 - a. 按照農夫卡上所需的金錢卡出牌，並賺取該農夫上標註的甘蔗量。賺取農夫卡要補回，確保場上一直有4張農夫卡。
 - b. 出攻防卡。可花2張金錢卡購買1張攻防卡，或者跟其他玩家交易。
 - c. 出牌時記得注意其他玩家已有多少甘蔗。
 - d. 在自己的回合內不限出牌次數。
4. 最先取得十千斤甘蔗的玩家獲勝！

米糖相剋

遊戲規則

玩法示範



玩家一還出了一張攻防卡，讓玩家二失去三千斤甘蔗。

玩家一用兩張壹圓和一張水田獎勵收購到黃清治的三千斤甘蔗。

米糖相剋

遊戲規則

遊戲的創作背景

這個遊戲是以日治時期為時代背景，圍繞當時的「米糖相剋」之問題創造出來的。所謂的米糖相剋指的是台灣稻米與甘蔗的種植互相競爭農作地的現象。對於農夫們，土地是基本的生產要素，而產業的發展會影響到土地資源的配置。日治時期，總督府大力發展稻米和蔗糖產業，使兩者成為台灣最重要的農作物，農民當然紛紛大量種植，卻也加劇了稻米和蔗糖之間互相爭地的問題。許多糖廠為了取得足夠的原料便採用「米價比準法」按照米價去調整收購甘蔗的價格，形成了甘蔗價錢不看甘蔗而看米價的神奇情況。本遊戲便是希望透過糖廠的角度讓大家能以更有趣更具娛樂性的方式去學習並了解當時的歷史和百姓需要面對的一些情況。一般講到米糖相剋，大家可能都略略懂或者隱隱知道這好像是個什麼歷史現象，但其實還有很多不是很清楚的地方，下面就來解答一些疑問。

米糖相剋

歷史

為什麼農夫們會在米和甘蔗之間這麼糾結？

之所以會出現爭地的問題，首先就是因為農夫可以選擇在田裡種什麼，而他們當然會想種能夠獲利更高的作物。那既然主要就是選哪個能賺比較多錢的問題而已，農民為什麼還會在米和甘蔗之間這麼糾結呢？簡單來說就是因為要考慮的因素太多了，這裡講講幾個最重要的。

種植週期

米從播種到收成一般只需要4個月，一年能收成兩到三次，種蔗卻需要12到14個月，如果採用早播法更可能延長到18個月。「早播法」顧名思義就是把播種期比正常時間往前推一到三個月，但收穫時間不變。這樣能夠幫助提升收成量，卻也代表農民這段時間都沒辦法種其他作物，而且當自然災害發生時，農民所承受的損失也更大。

家庭小農的需求

當時台灣的農民大部分都是所謂的家庭小農，以1921年而言，有88%的農戶的經營面積在三甲以下，所以選擇種什麼其實不單單只是看哪個能賺更多錢，還得考慮種什麼可以供自己夠吃夠生活。在這點上，種稻就比較有優勢，第二期作收穫後還可以在冬季種些其他東西，自己可以吃的米和蔬菜都保證了。

甘蔗是期貨交易

按照「製糖廠取締規則」糖廠必須在蔗農播種前告知甘蔗的收購條件，所以甘蔗是期貨交易，而另一方面，稻米卻是現貨交易。這代表農民必須自己去評估和預計未來稻米的現貨價格。

生產力的差異

不同的農夫因為水利條件、人力、天候等等，能夠生產的稻與蔗的收穫量不盡相同。值得注意的是，其實不是全台都有米糖相剋的問題，由於水稻需要足夠的水，如果是旱田的話，根本沒什麼好選擇的，因此一般來說水田地區才是米蔗競爭的場所。

需要的勞力

蔗作相較於稻作需要的勞力較少，蔗農可以趁機做做其他副業增加收入。

蓬萊米的到來

1922前，農民一般只是在糾結種甘蔗還是在來米而已，但在1922後，蓬萊米也變成了一個選擇。

米糖相剋

歷史

糖廠如何應對這個讓人頭痛的問題？

在總督府的獎勵政策與糖廠的快速發展下，台灣的蔗作面積急遽飆升。糖業的興盛提高了甘蔗的價值，因此許多本來種稻的人都轉去種甘蔗。這個替代性對農民是有利的，但對糖廠來說卻代表他們收購甘蔗時必須考慮到農民決定不種稻所失去的機會成本。糖廠如何確保他們買得到足夠的原料呢？甘蔗的收購價格主要分成「原料費」、「補貼款」、「獎勵金」三部分。原料費就是最基礎也最重要的價格，農夫一定會拿到的部分；補貼款是用於彈性調整蔗價，確保農民的種蔗意願；獎勵金則是用來鼓勵農民依照糖廠指定的方式種植，比如採用早播法。這個遊戲的金錢卡便是採用歷史上糖廠常用的以下補助和獎勵來設計的。下面會一一解釋遊戲裡出現的每個款項。

蔗苗補助

蔗苗費原為耕作者的負擔，但會社也給予相當的補助，若是遇到凶年，並給予無息或低利貸款。

多收獎勵

按照會社指導的方法耕種，單位面積產量達到某基準後即給予獎勵金，產量越多獎勵金也越高。

水田獎勵

按照會社認可的水田栽種甘蔗，則給予獎勵金。

米糖相剋

早植獎勵

製糖會社為鼓勵早植，也由於早植佔用田地較久，所以按栽種月份給予不同的獎勵金

看天田補助

看天田指的是沒有水利設施，只能看天靠雨水的田。在會社認可的看天田按照規定栽種甘蔗，則給予補助金。

集團蔗園獎勵

通常限於水田面積在三甲以上的集團蔗園，按原料斤量給予獎勵金。

肥料補助

在製糖會社認可的肥料使用條件下(如按時定量，不移作別的作物之用)，按收穫斤量給予肥料補助金。

灌溉補助

在會社認可的田地，按照規定時間實施灌溉或抽溝排水，則根據面積給予補助金。

耕作資金前貸

由於甘蔗的栽種期間長達一年至一年半，這期間農民耕作需要支出現金，因此這個項目對農民的植蔗意願影響頗大，幾乎每家製糖會社都有貸款的服務，規程中通常以栽種的面積或收穫斤量作為貸出金額的標準，並載明利息以及歸還方式。

歷史



玩法說明

每位玩家都是一位糖廠，你的目標是從農夫們手裏購買足夠的蔗糖原料！

1. 發牌每人4張金錢卡和1張攻防卡。
2. 翻開4張農夫卡。
3. 到自己的回合時再抽2張金錢卡到手上後，可以選擇不做任何事直接換下一位玩家，或執行下列任何操作。
 - a. 按照農夫卡上所需的金錢卡出牌，並賺取該農夫卡上標註的甘蔗量。賺取農夫卡要補回，確保場上一共有4張農夫卡。
 - b. 出攻防卡。可花2張金錢卡購買1張攻防卡，或者跟其他玩家交易。
 - c. 出牌時記得注意其他玩家已有多少甘蔗。
 - d. 在自己的回合內不限出牌次數。
4. 最先取得十千斤甘蔗的玩家獲勝！

玩法示範

農夫一選出了一張攻防卡，讓玩家二失去三千斤甘蔗。

玩家二用兩張畫圈和一張水田獎勵收購到黃清治的三千斤甘蔗。

遊戲的創作背景

這個遊戲是以日治時期為時代背景，圍繞當時的「米糖相剋」之問題創造出來的。所謂的米糖相剋指的是台灣稻米與甘蔗的種植互相競爭農作地的現象。對於農夫們，土地最基本的生產要素，而產業的發展會影響到土地資源的分配。日治時期，總督府大力發展稻米和蔗糖產業。使稻米成為台灣最重要的農作物，農民當然紛紛大量種植，卻也加劇了稻米和蔗糖之間互相爭地的問題。許多糖廠為了取得足夠的原料便採用「米價止平法」按照米價去調整收購甘蔗的價格，形成了甘蔗價錢不看甘蔗而看米價的怪奇情況。本遊戲便是希望透過糖廠的角度讓大家可以更有興趣且娛樂性的方式去學習並了解當時的歷史和百姓需要面對的一些情況。一般講到米糖相剋，大家可能都略略懂或者隱隱知道這好像是個什麼歷史現象，但其實還有很多不是很清楚的地方，下面就來解答一些疑問。

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水田獎勵
在會社認可的水田栽種甘蔗，則給予獎勵金。

早植獎勵
製糖會社為鼓勵早植，也由於早植佔用田地較久，所以按栽種月份給予不同的獎勵金。

看天田補助
看天田指的是沒有水利設施，只能看天靠雨水的田。在會社認可的看天田按照規定栽種甘蔗，則給予補助金。

集團蔗園獎勵
通常限於水田面積在三甲以上的集團蔗園，按原料斤量給予獎勵金。

肥料補助
在製糖會社認可的肥料使用條件下(如按時定量，不移作別的作物之用)，按收穫斤量給予肥料補助金。

灌溉補助
在會社認可的田地，按照規定時間實施灌溉或掘溝排水，則根據面積給予補助金。

耕作資金前貸
由於甘蔗的栽種期間長達一年至一年半，這期間農民耕作需要支出現金，因此這個項目對農民的植蔗意願影響頗大，幾乎每家製糖會社都有貸款的服務，規程中通常以栽種的面積或收穫斤量作為貸出金額的標準，並載明利息以及歸還方式。

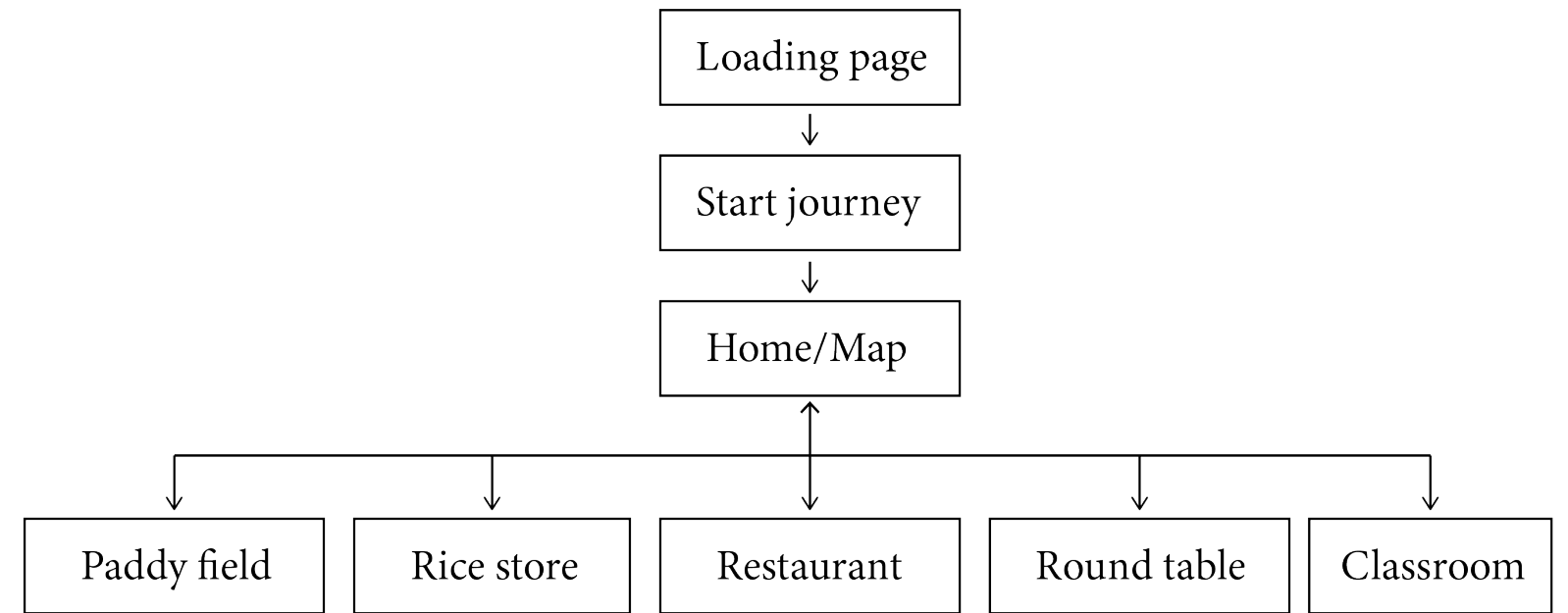
02 Website

A platform that prompts conversations about rice, and make history more digestible and relevant.

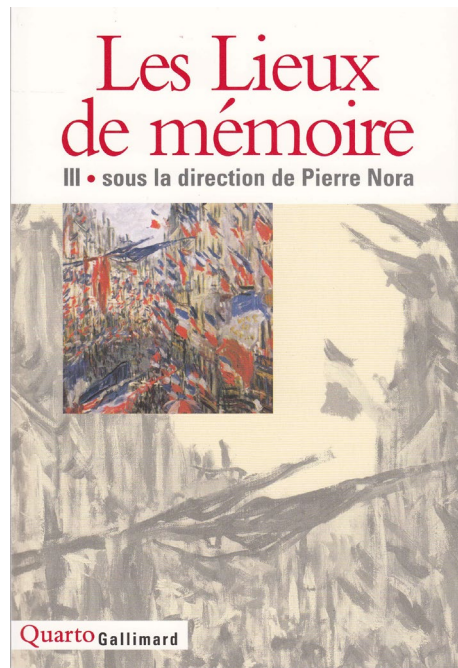
Sitemap

I was inspired by French historian Pierre Nora's work "Les Lieux de Memoire", which translates to "sites of memories". This refers to places, objects or anything tangible that one can attach their memories to, which becomes a part of the memory heritage of a community. I chose four locations that each gives the user a different experience. On the right are the first and final version of my website sitemap.

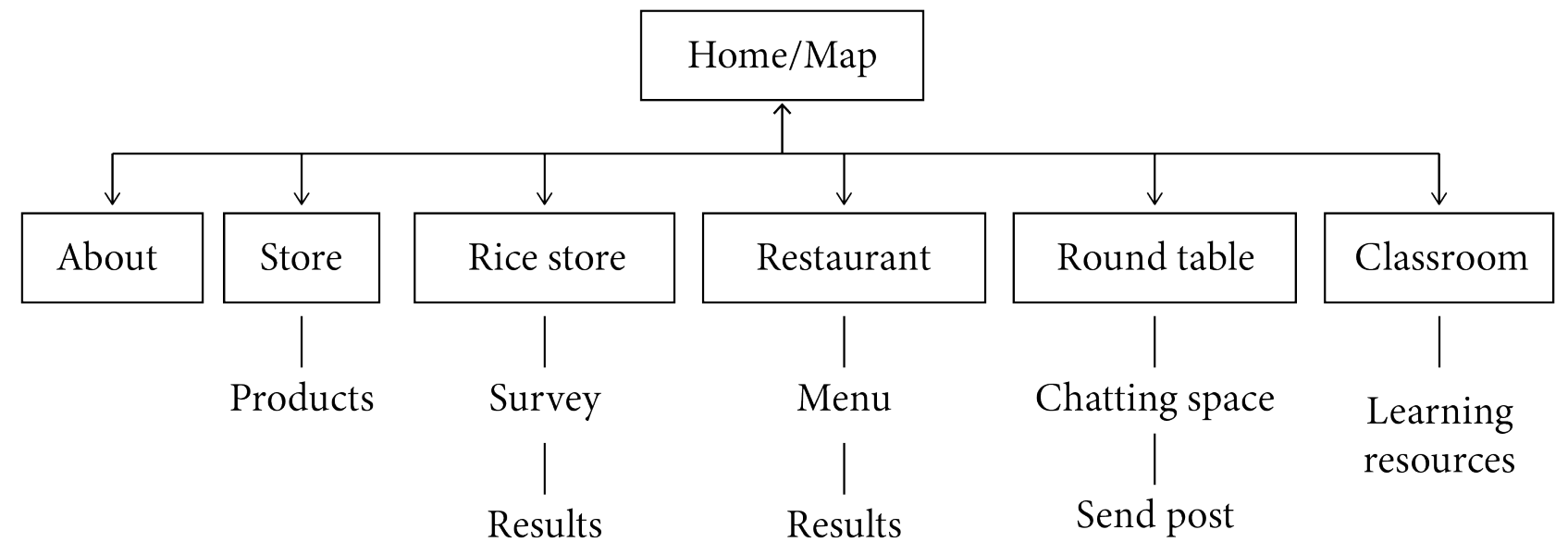
1. Rice Store: Gives you your favourite rice cultivar based on a short survey and educates on why we eat the rice cultivars we eat today.
2. Restaurant/ Snack vendor: Rice dishes, preferences, and receipt that analyses your data and given you fun facts about the history and culture of the dishes you chose.
3. Round table: Where people metaphorically sit together and talk about their memories and experiences with rice.
4. Academy: More educational resources related to rice, serves as a bibliography to my thesis



First version of the website sitemap



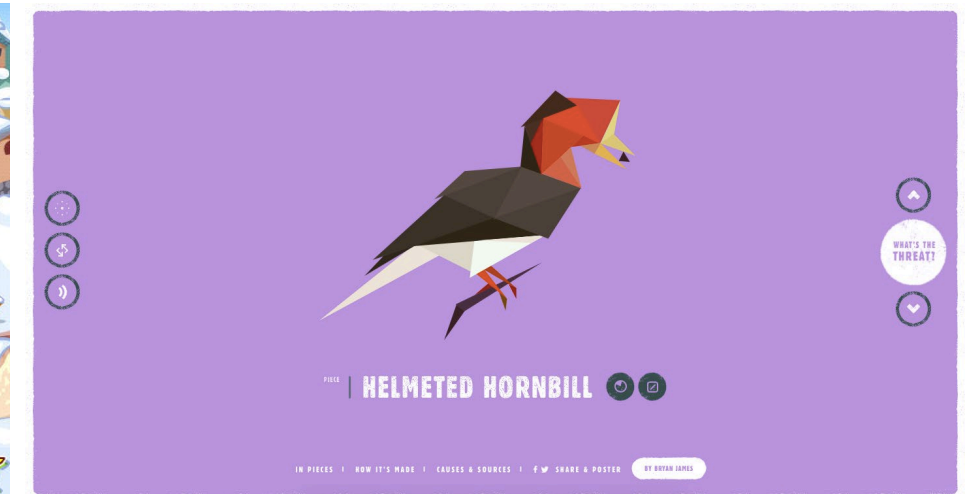
Cover of Pierre Nora's "Les Lieux de memoire"



Final version of the website sitemap

Inspiration

1. **Beer 34:** a promotional site for a Georgian craft beer brand
2. **Antyfest:** website that supports the donation to music festivals all over the world
3. **Mole's world:** map from a children-friendly video game
4. **The world of nuclear applications:** an interactive website that educates on the application of nuclear technology
5. **Mario's map:** map in video game that allows player to navigate through stages
6. **Species in pieces:** a CSS-based interactive exhibition turned study into 30 of the world's most interesting but unfortunately endangered species



References

- <http://www.beer34.ge/en>
- <https://antifest.ru/en>
- <http://www.51mole.com.tw>
- <https://www.iaea.org/interactive/world-of-na/#/>
- <https://www.nintendoenthusiast.com/super-mario-maker-2-update-adds-map-creator-super-worlds-and-koopalings/>
- <http://species-in-pieces.com/#>

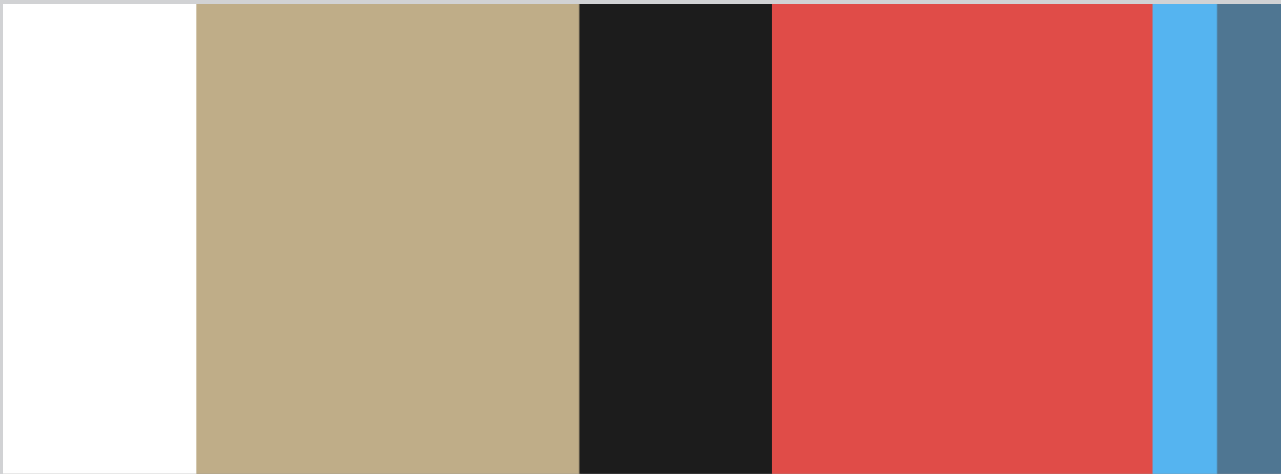
Homepage (Version 1)



Changing Colour Palette

I realised that if were to follow the original vblack, white, and red palette with a linework-heavy illustration style, the food illustrations in the snack vendor page would be very out of place, so I decided to change the colour palette, with the neutral colours (white, beige, and black) as primary colours, the red as secondary colour, and finally the blues as tertiary colours.

I also did a tiny experiment with quick layouts using the colours to make sure that they play well with each other and legibility will be fine on the website.



Homepage (Final Version)



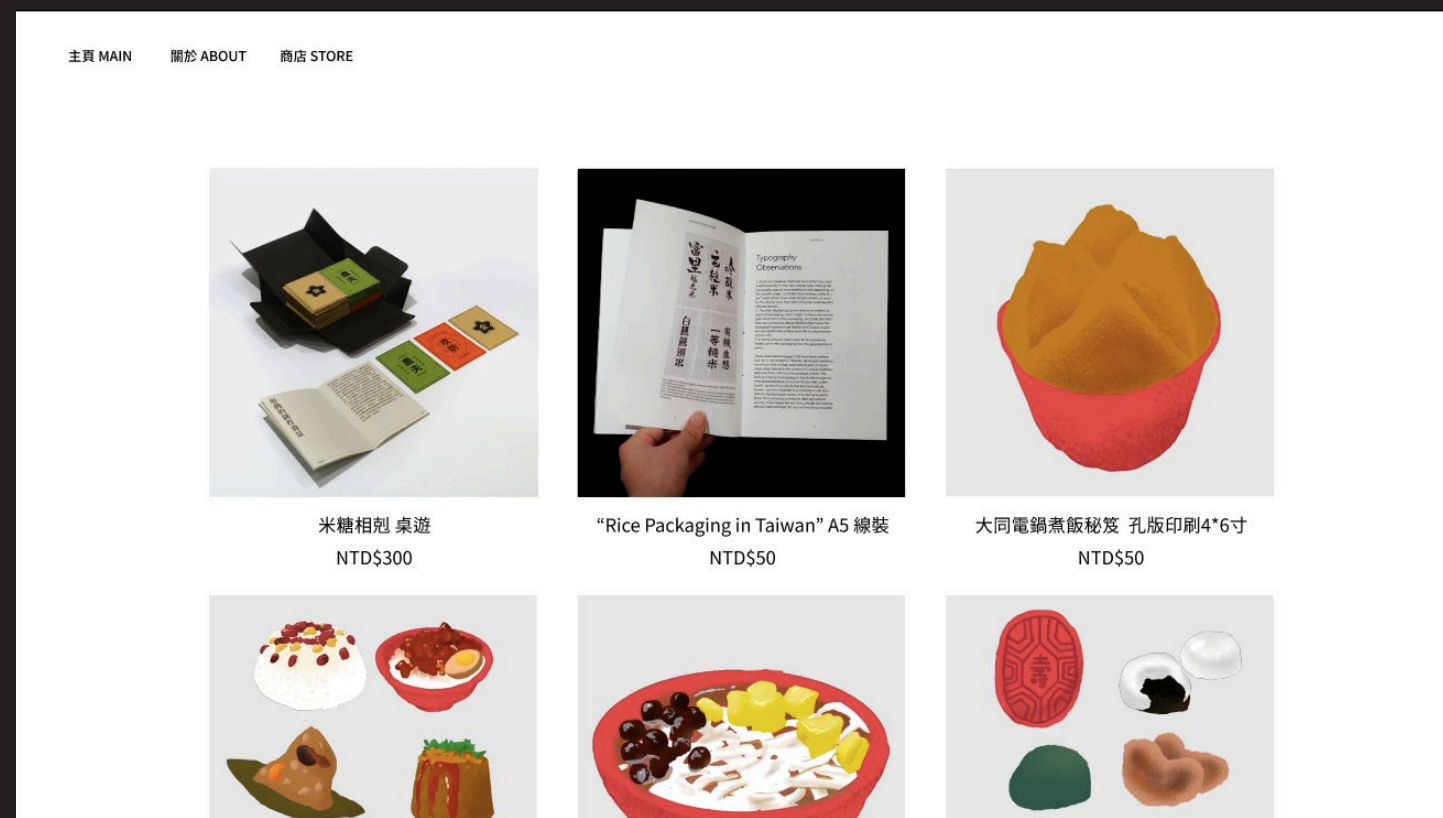
選擇你想去的地方，
開始米的旅程！





About and Store Page

1. About page explains what this project is, why I did this project, and why I made the design decisions I made.
2. The Store page basically “sells” everything else that I have made for my thesis.. The most important product being the boardgame. Other products include my thesis paper on the packaging of rice and merch such as postcards and stickers.



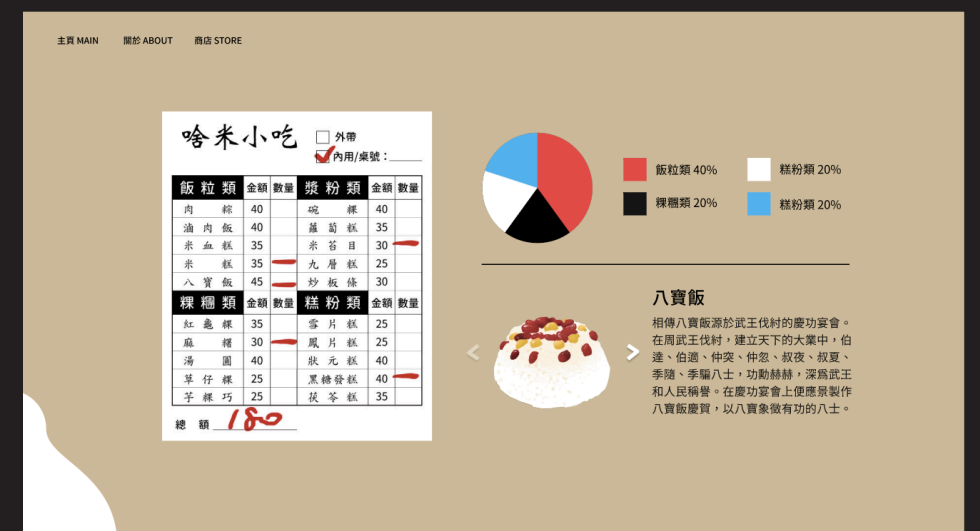
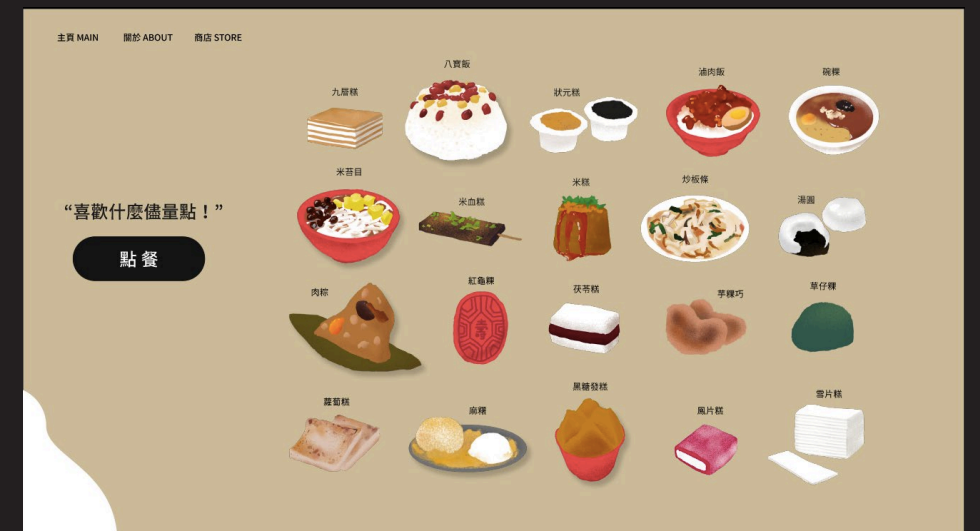
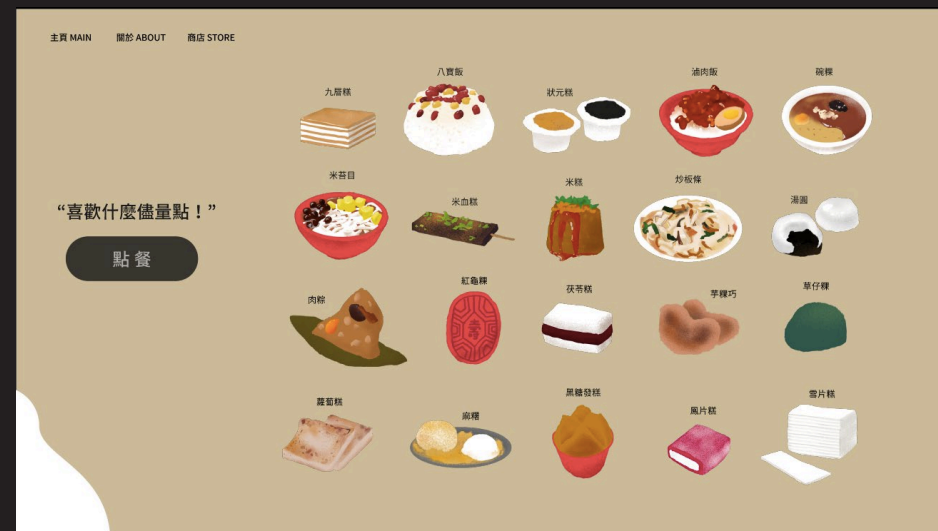
Academy Page

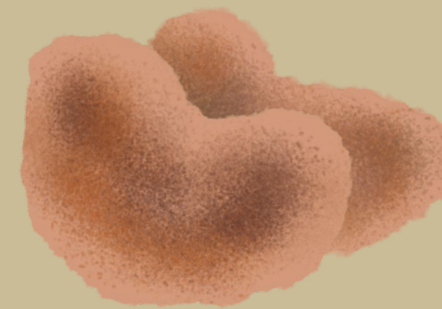
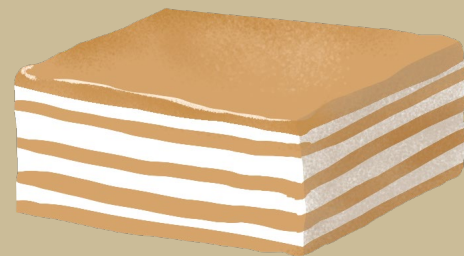
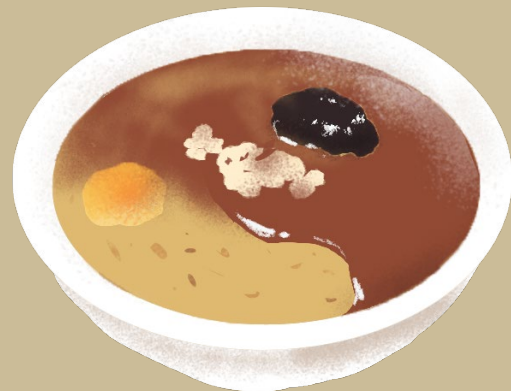
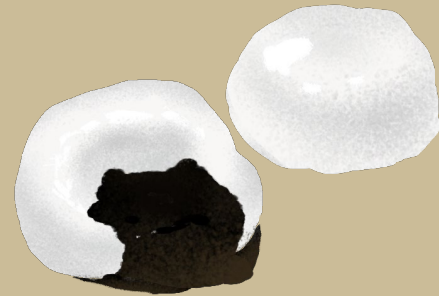
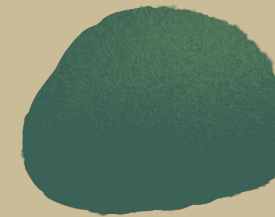
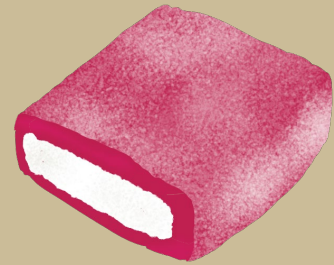
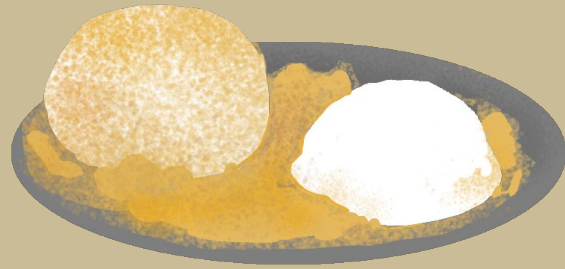
1. Press on academy illustration
2. Loading page
3. The page organises resources like websites, books, and academic essays that people can read for further understanding of the culture and history of rice
4. You can click directly on the links
5. As you hover over each section, relevant photos will appear



Street Vendor Page

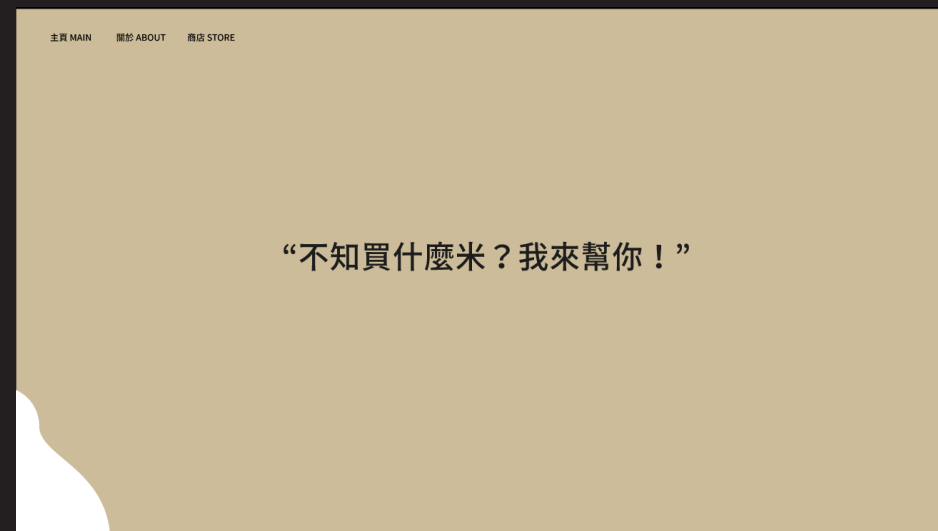
1. Press on street vendor illustration
2. Loading page
3. Variety of rice dishes
4. Choose the rice dish you like, and press "Order"
5. An animation appears and marks the rice dishes you choose on a menu categorised under the types of rice dishes
6. The final result page gives you a data visualisation of the dishes you choose and little snippet about the history and or culture about the dishes.





Rice Store Page

1. Press on rice store illustration
2. Loading page
3. “Don’t know which rice cultivar to buy? Let me help you!”
4. Go through a short, 5-part questionnaire
5. Result page shows you rice cultivars that fits your preferences and a blurb explaining the history of the three main varieties of rice that are most common in Taiwan today
6. You can click on the individual rice cultivars to find out more about them



Round Table Page

1. Press on round table illustration
2. Loading page
3. This is a conversation platform for people to talk about their memories, experience, or anything else that they want to say about rice. Each grain of rice represents one story.
4. Press on the "Join conversation" button to add a grain.
5. Type your story, and press "Send".
6. Press "Give me another bowl of rice" to see new stories.



**Reflection and
final thoughts.**

Panel Presentation Feedback

The main feedback I got from the panel was on the variety of my thesis work, both in terms of content and visuals. While a few appreciated the range of work, most agreed that it would benefit from some simplification and more consistency.

Someone mentioned that perhaps if I reimagine it as a physical exhibition, then the difference in visual styles could work better and categorise the work quite easily into different spaces. Another suggestion was to experiment and use the visuals of rice grains more consistently across the whole website.

Overall, the panel showed more interest in the boardgame than the actual website, which I kind of understand. Although I spent more time on the website, it was more generic conceptually, and the boardgame repackages history in a more unique and interesting way.

I somewhat expected this kind of feedback, because I did indeed treat the website and boardgame as two separate work, although the overarching purpose behind them were the same. I thought that since the boardgame would essentially be a merch to the platform, it wouldn't need to have the same visual style. However, I still think the panels' feedback was really valid, and the website could benefit from a more consistent visual system. I think what I was debating while making the website was whether or not it's going to be boring if all the pages on the website used the exact same colours for the background, type, and graphics, so I made the design decisions that I made, but it would definitely be helpful to experiment more with the combination of colours.

Reflection, Critique, Thoughts

I didn't get to do a physical exhibition as what I envisioned at the very beginning, but I think doing a website and boardgame was a good undertaking. I barely made websites before this, so although I feel like it is rather amateurish, I learned a lot in the process, and now feel much more comfortable about designing websites and creating prototypes.

I agree with one of the panels who said I could've done more with the shapes of rice grains. The visual metaphor of rice grains and bowls of rice is something that could be used more extensively.

The process of researching was probably the most fascinating and enjoyable part. If I'm completely honest, I think what I designed and made didn't really live up to the research I did, both in terms of quantity and how interesting they were. The website feels more like a starting point than a resolved solution.

In terms of the main goals that I set out to meet, the boardgame does a pretty good job of making the education of history more engaging and digestible, and the website made it a more interactive experience than usual history lectures, but a lot more work could've been done for prompting conversations. The connection between memory and history was not particularly explored in my design either despite the amount of reading I did for it.

Time management wise, I should've started making much earlier. That would probably lead to a much more resolved product than the one I have now, in regards of how well it achieves the goals that I set in the beginning.

In terms of design choices, I'm still glad that I chose an illustration direction, because in comparison with photos, I think it allows for more space to insert your own memories or experiences into it, but also just because I enjoyed illustrating.

I think the packaging of the boardgame could be better and more considered with more time. Perhaps some text and graphics on the box as well.

Currently, the round table page of the website only allows posting, but no commenting. Prompting conversations and encouraging people to share experiences would be much more effective, if commenting and interaction between different users are possible.

If I had more time, I would like to also work more on the academy page, with organised articles about specific topics. An Instagram page and social media campaign could also make the project more complete.

 **THROUGH THE LENS OF**
RICE