

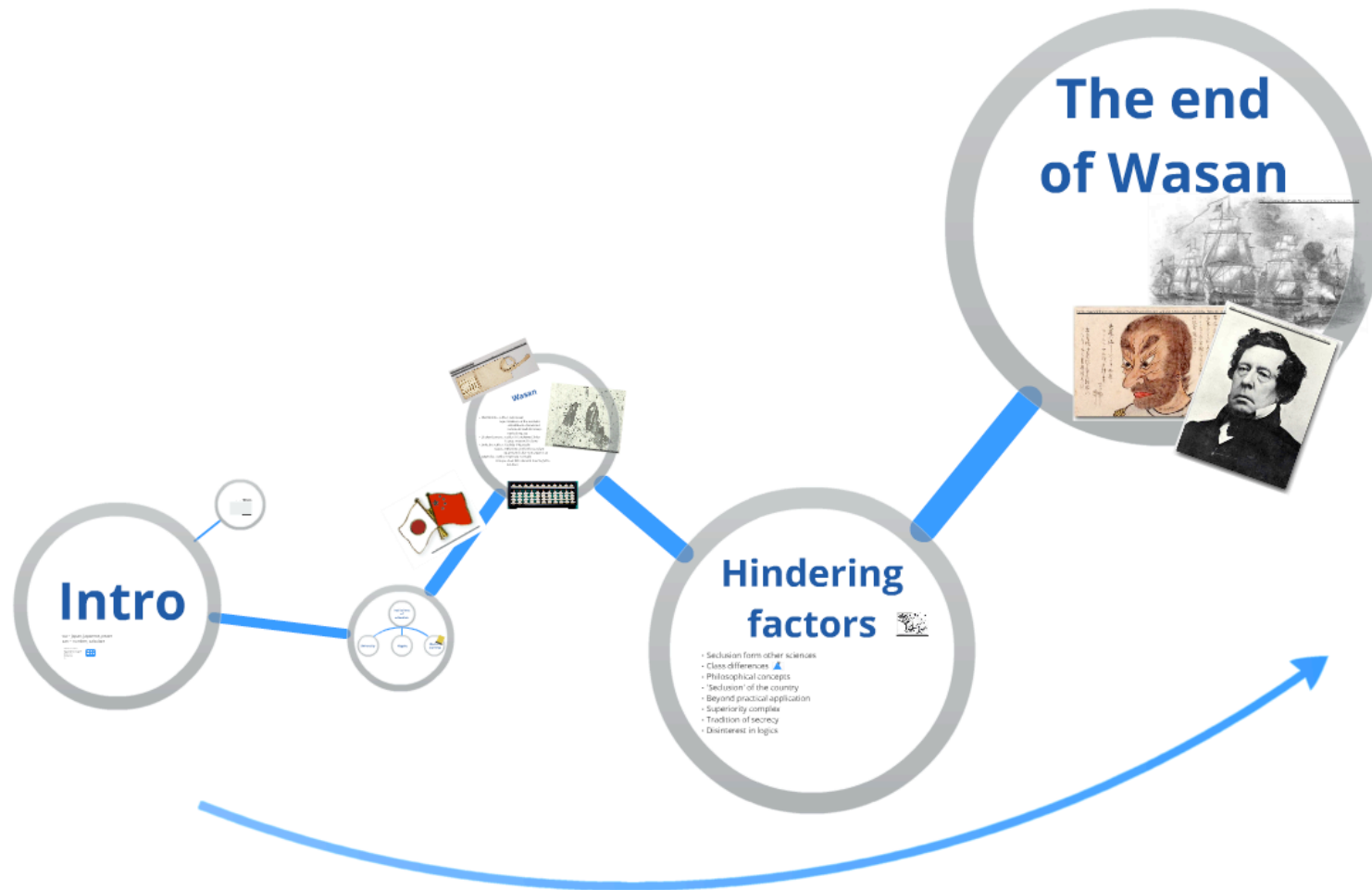
Wasan

Japanese mathematics of the Tokugawa period (1600-1868)



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Japanese mathematics of the Tokugawa period (1600-1868)



Marco Nørskov, PhD



Intro

wa = Japan, Japanese, peace
san = number, calculate

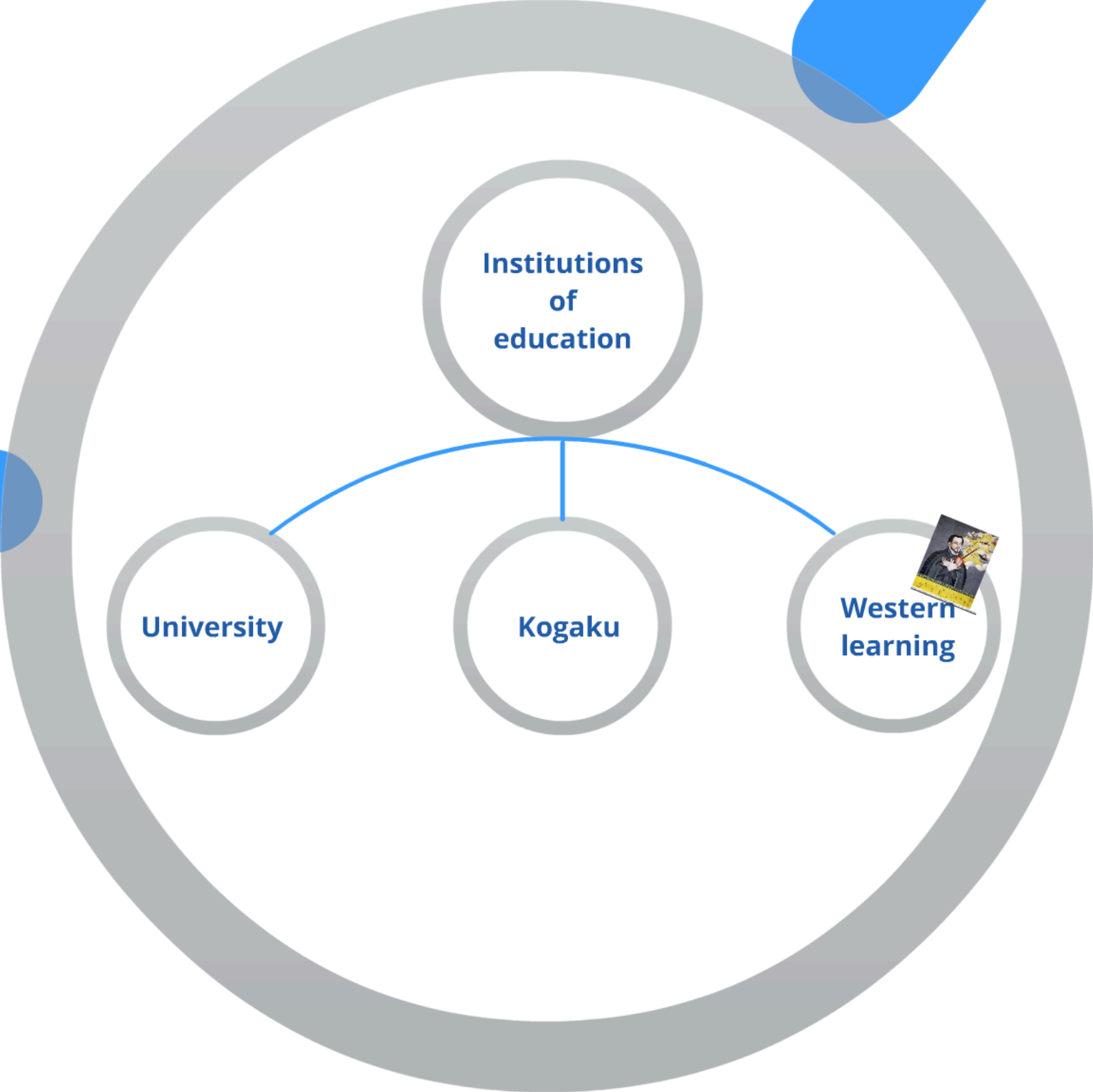
- solve linear equations
- under determined equations
- calculate the area of circles
- infinite series
- magic squares
- etc

4	9	2
3	5	7
8	1	6

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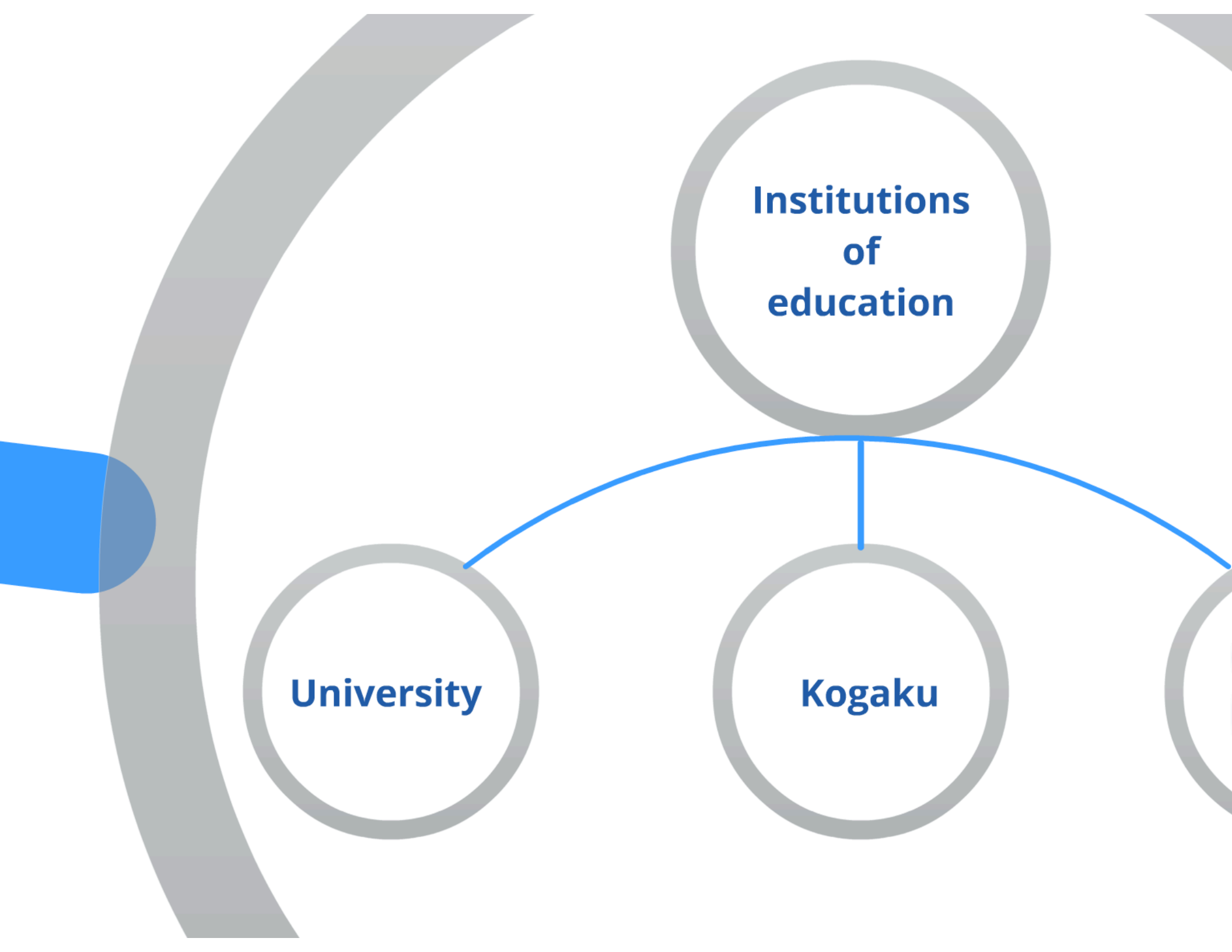
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of
education**

University

Kogaku

**Western
learning**





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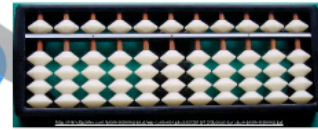
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Western learning



Wasan

- Warizansho: Author: Seki Kowa
Topic: Division on the Soroban, calculations of area and volume as well as surveying techniques
- Shokanbumono: Author: Momokawa Chihai
Topics: Area and Volume
- Jinkouki: Author: Yoshida Mitsuyoshi
Topics: Arithmetic on the the Soroban square and cube root, approx. pi
- Jugairoku: Author: Imamura Tomoaki
Unique: does list rules and how to get to solution



- Seclu
- Class
- Philo

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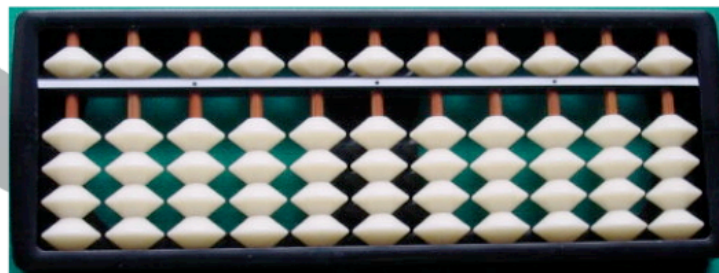


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http://upload.wikimedia.org/wikipedia/commons/b/b1/Seki_Kowa.jpg



Hindering factors



- Seclusion form other sciences
- Class differences 
- Philosophical concepts
- 'Seclusion' of the country
- Beyond practical application
- Superiority complex
- Tradition of secrecy
- Disinterest in logics




Peasants

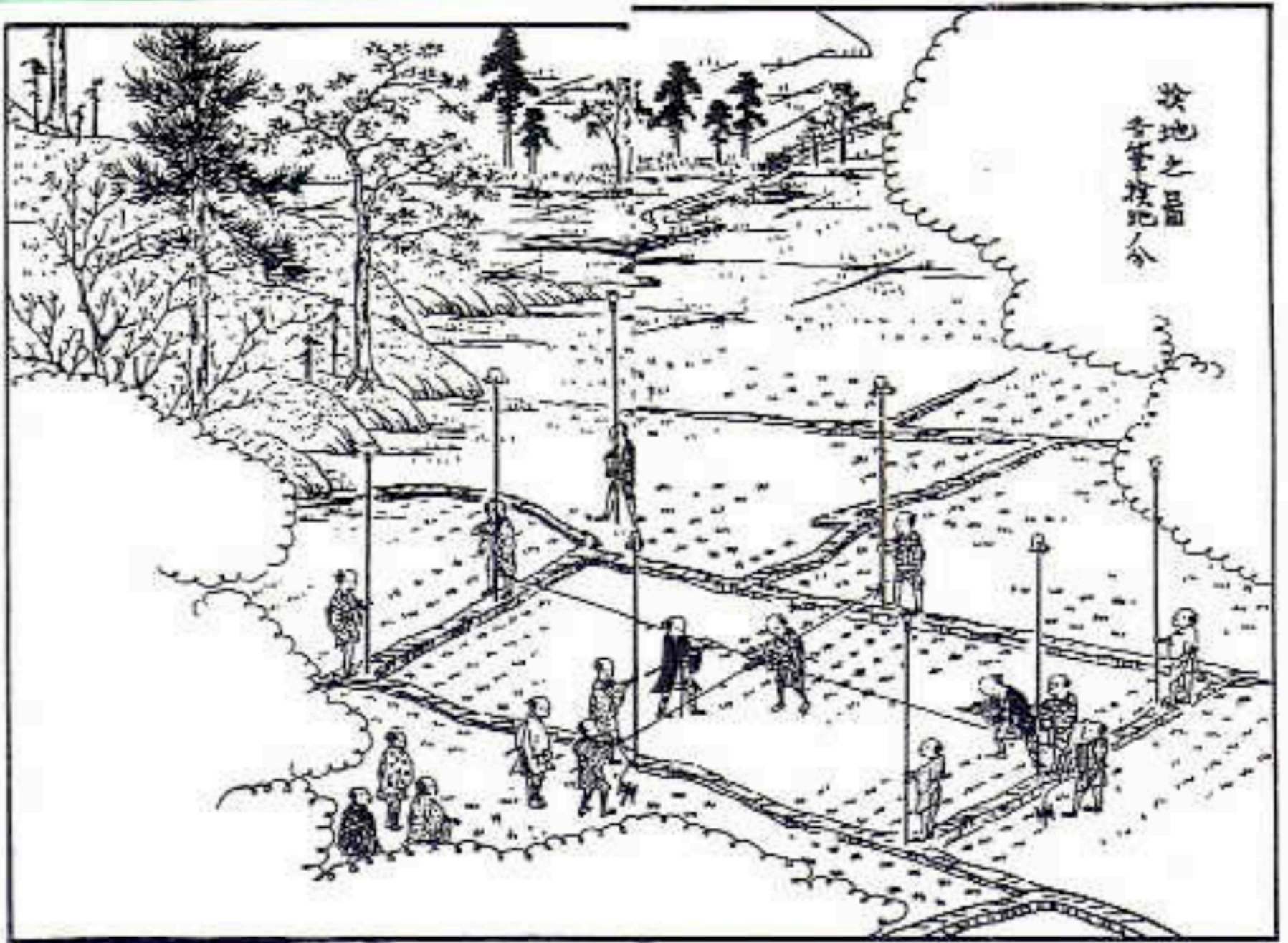
Craftsman

Merchants

Hindering factors



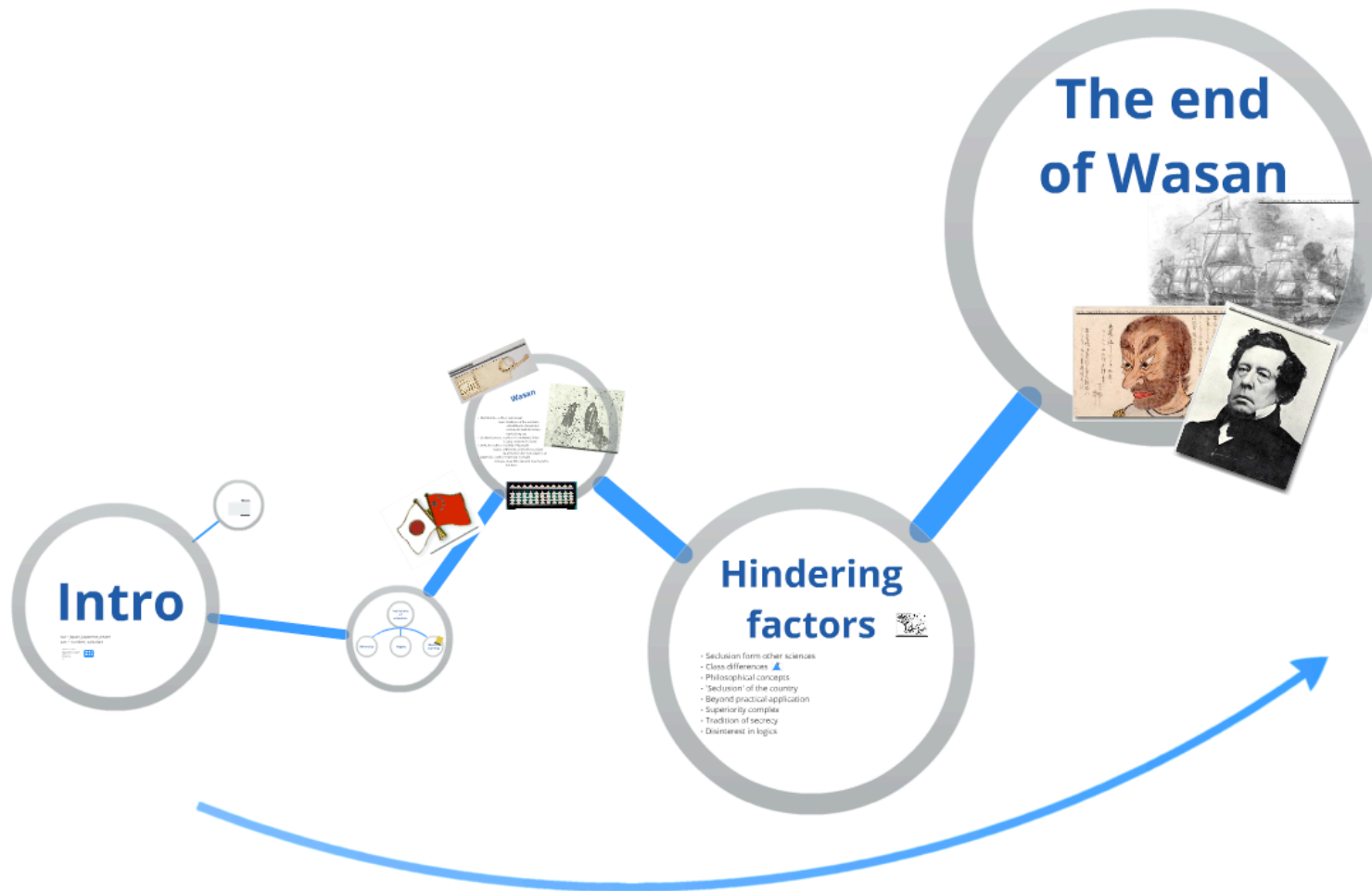
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The end of Wasan

