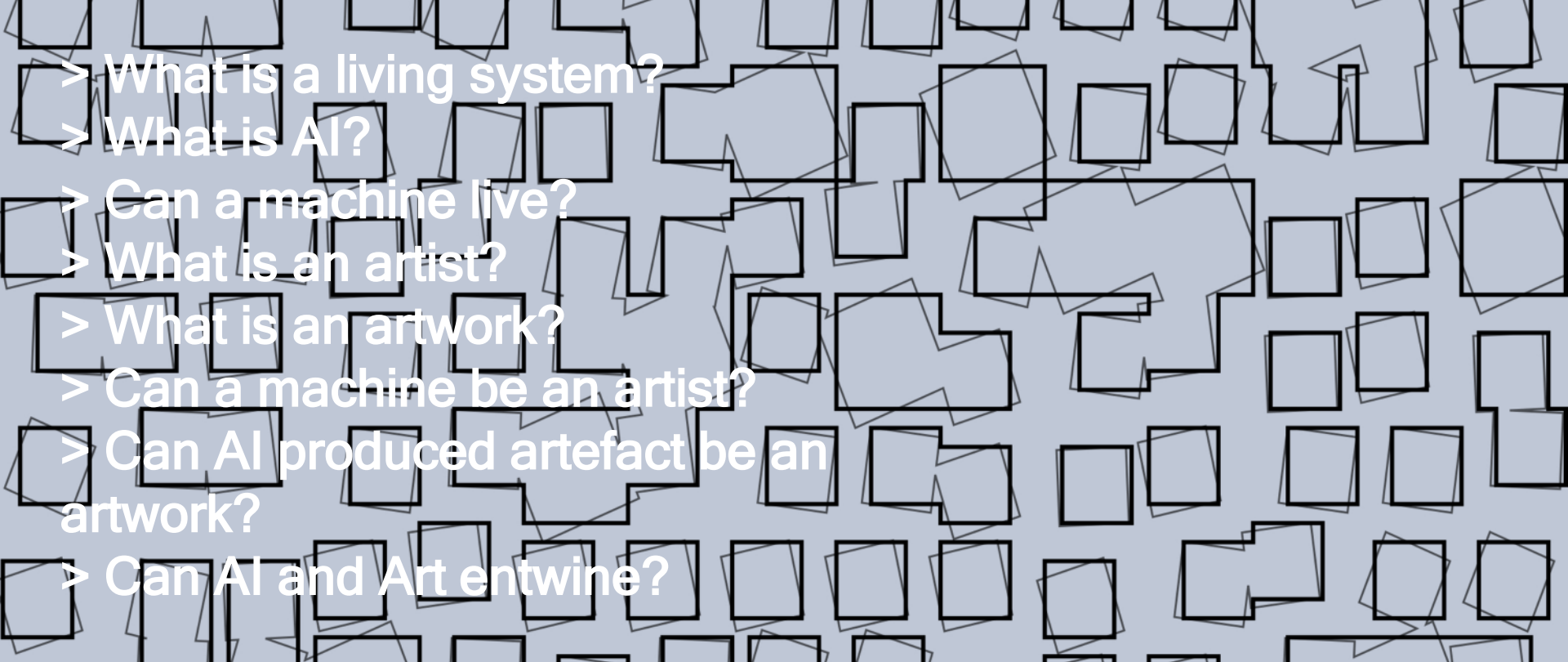


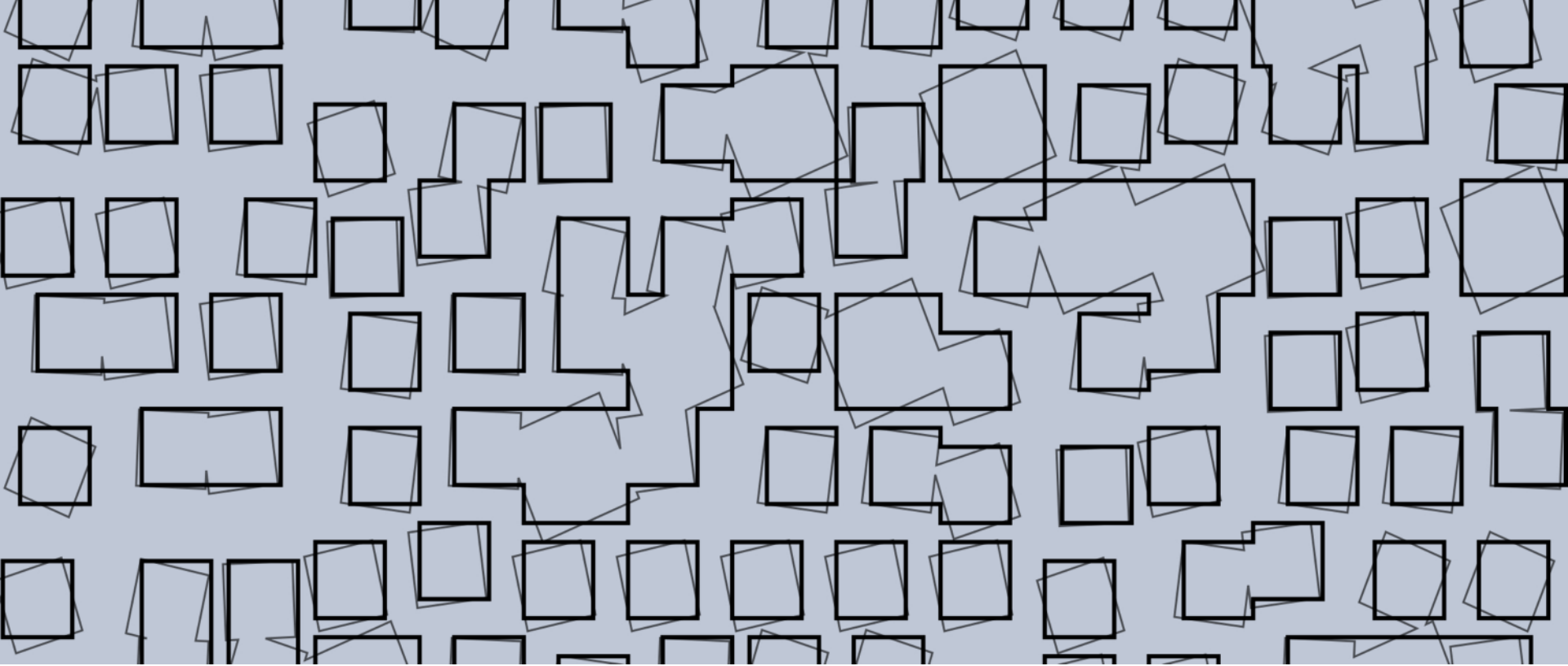
The background of the slide is a light blue-grey color. It is covered with a dense pattern of black-outlined squares and rectangles. Some of these shapes are slightly tilted or skewed. In the upper-left corner, there is a more complex, darker pattern of overlapping lines and squares, resembling a dense grid or a complex geometric structure.

Art and AI, a renewed alliance between techno-science and art

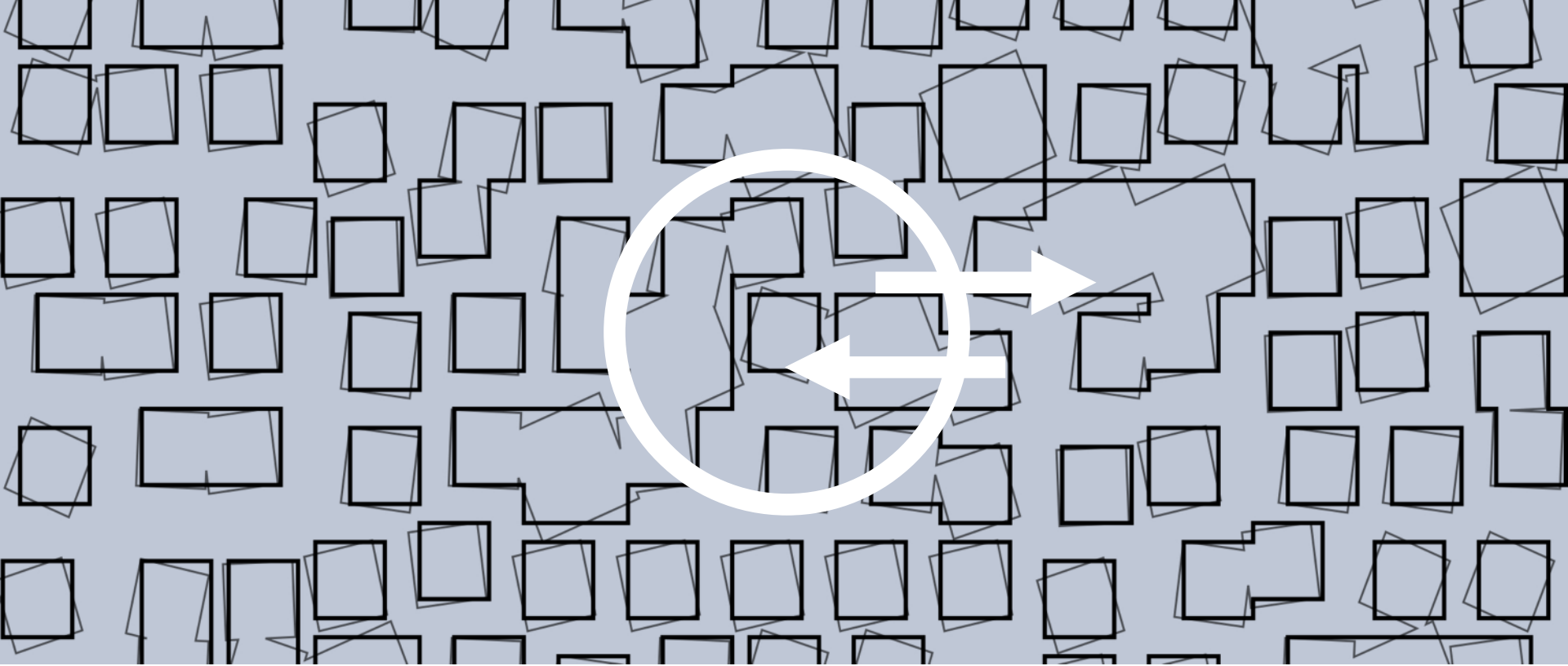
- > Thibaud Latour
- > AI&Art Pavilion - ESCH 2022 Inauguration
- > University of Luxembourg, Belval, September 25th 2020

- 
- > What is a living system?
 - > What is AI?
 - > Can a machine live?
 - > What is an artist?
 - > What is an artwork?
 - > Can a machine be an artist?
 - > Can AI produced artefact be an artwork?
 - > Can AI and Art entwine?

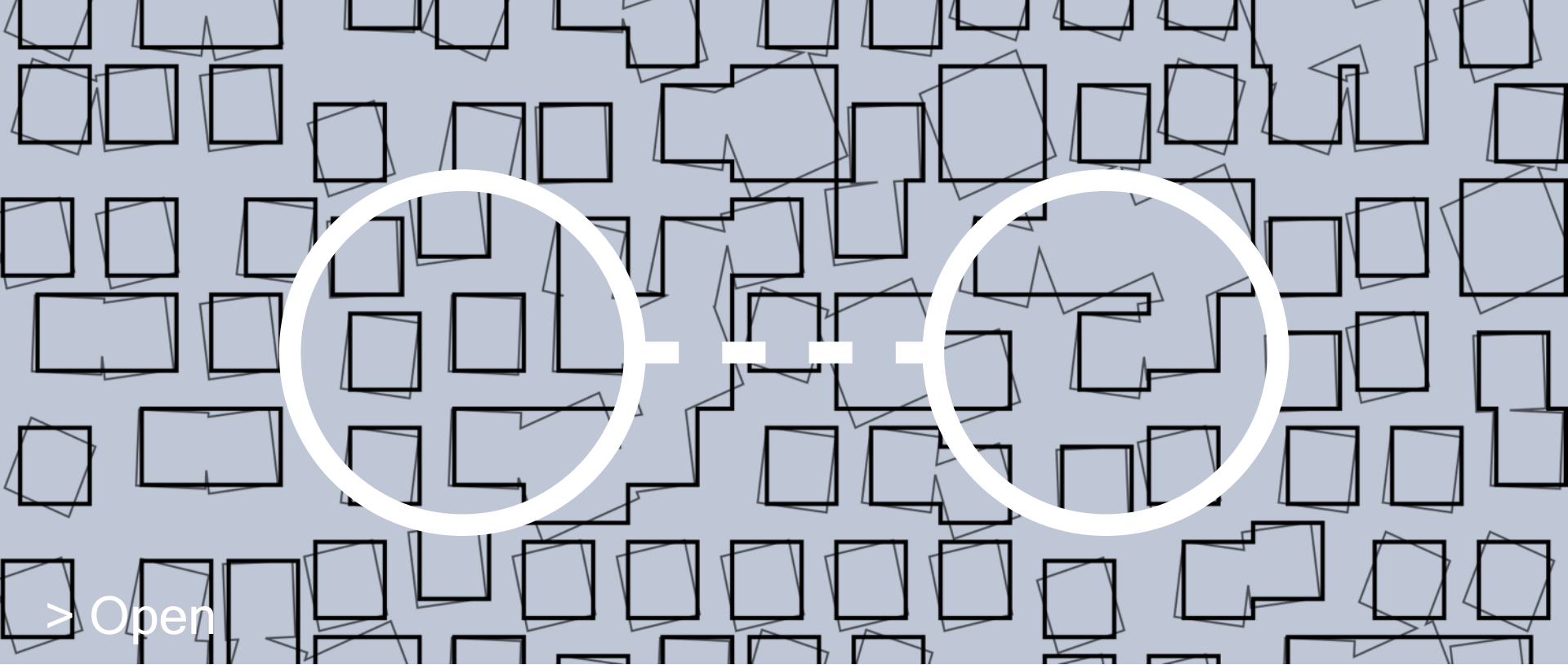
> What are the questions?



> What is a living system?

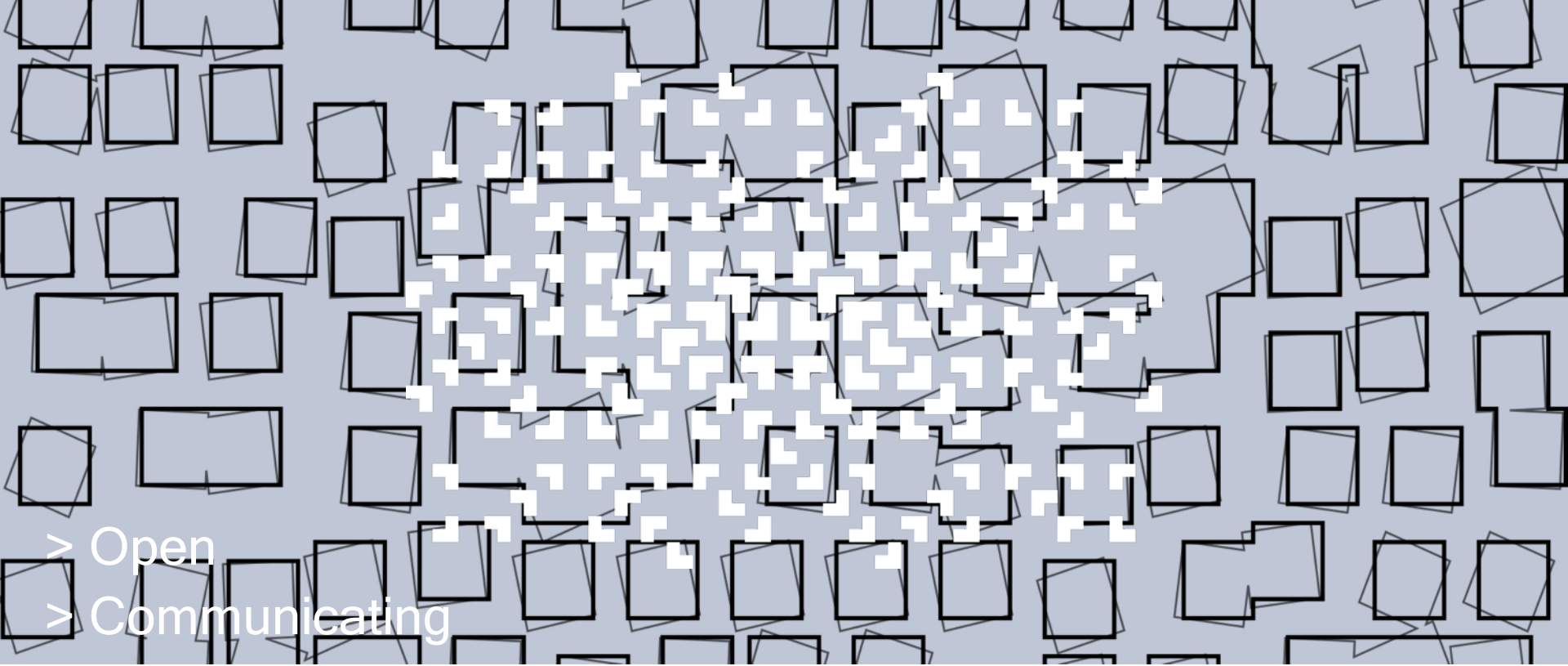


- > Open
- > What is a living system?



> Open

- > Communicating
- > What is a living system?

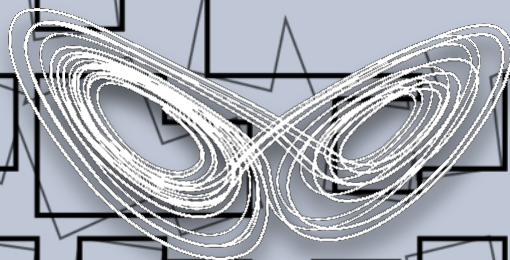
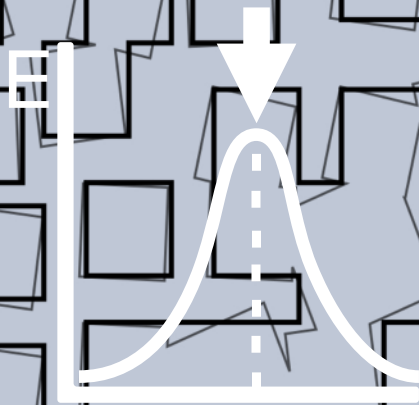


> Open

> Communicating

> **Self-organised**

> **What is a living system?**



> Open

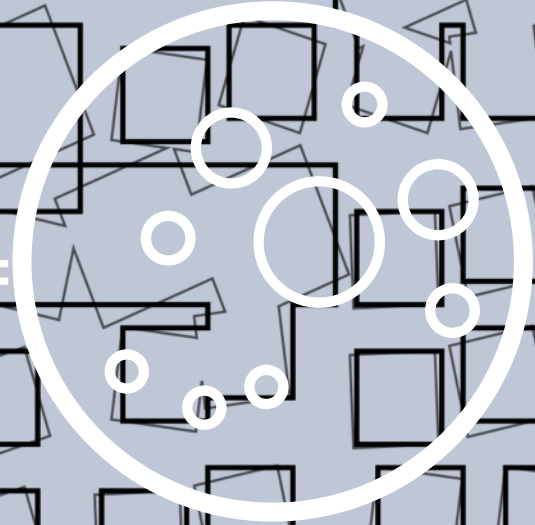
> Communicating

> Self-organised

> Far from equilibrium

> What is a living system?

[0101101000110111] =



- > Open
- > Communicating
- > Self-organised
- > Far from equilibrium

- > **Semantic closure**
- > **What is a living system?**

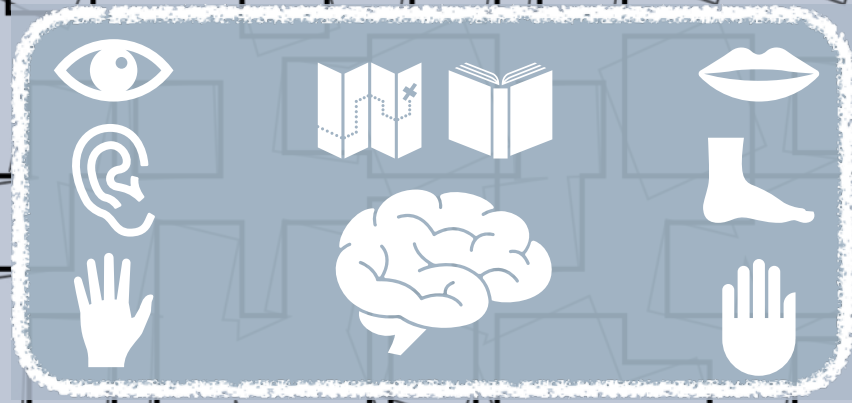


[AGATCCGGATTCT]



- > Open
- > Communicating
- > Self-organised
- > Far from equilibrium
- > Semantic closure

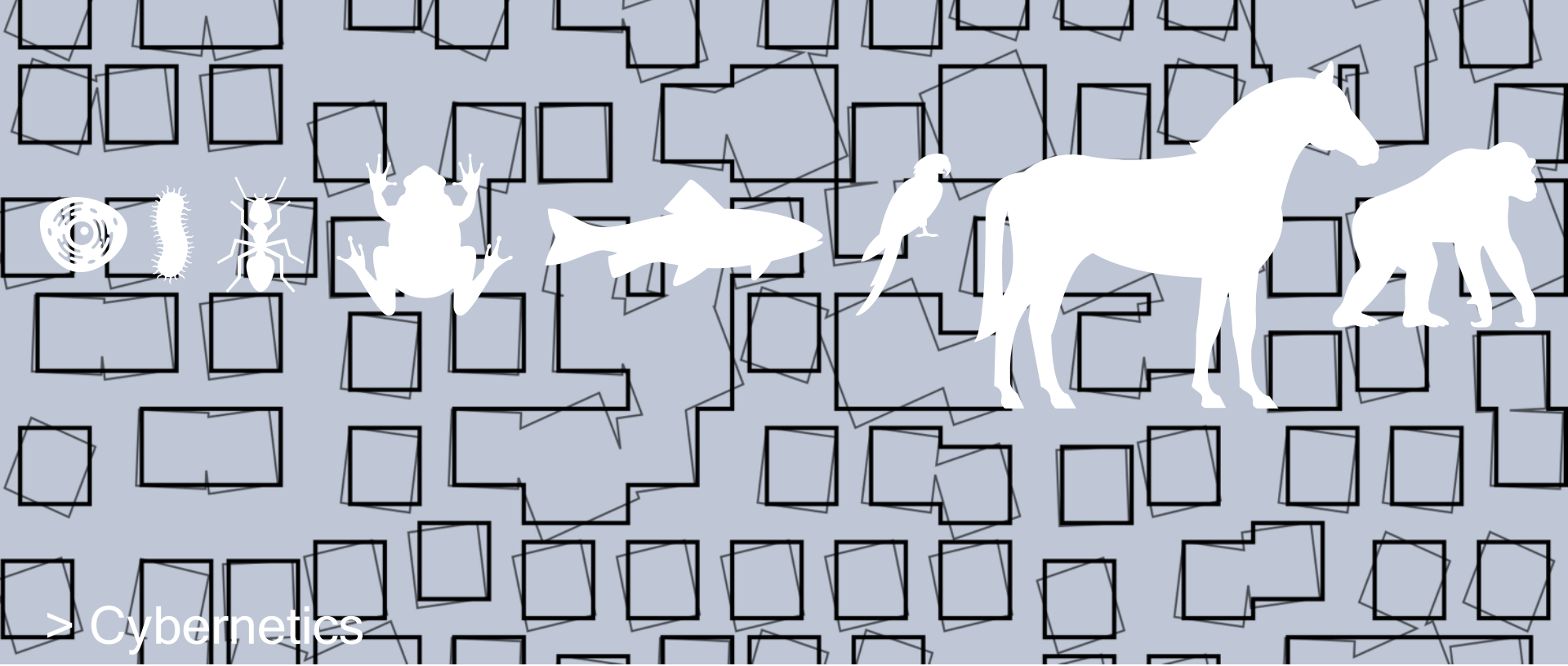
- > **Universal machine**
- > **What is a living system?**



> Universal machine

> Cybernetics

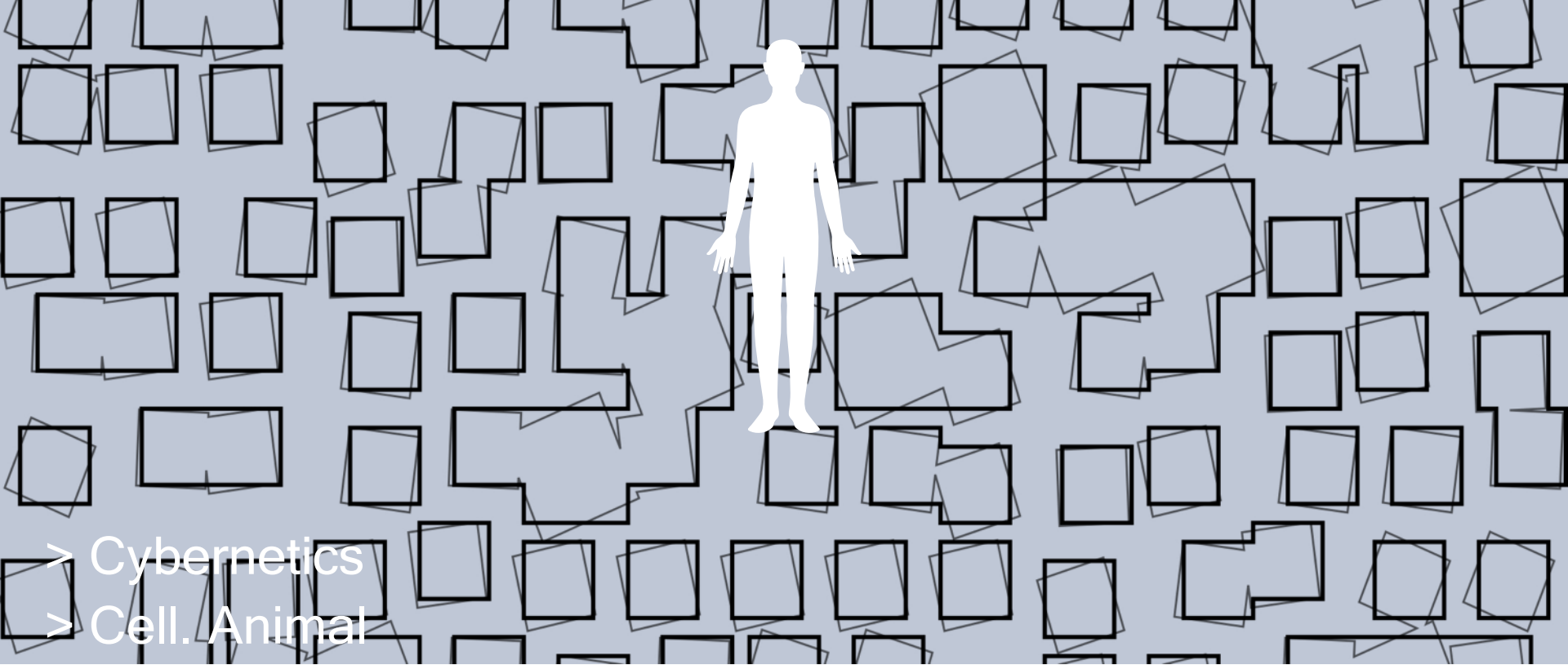
> What is a living system?



> Cybernetics

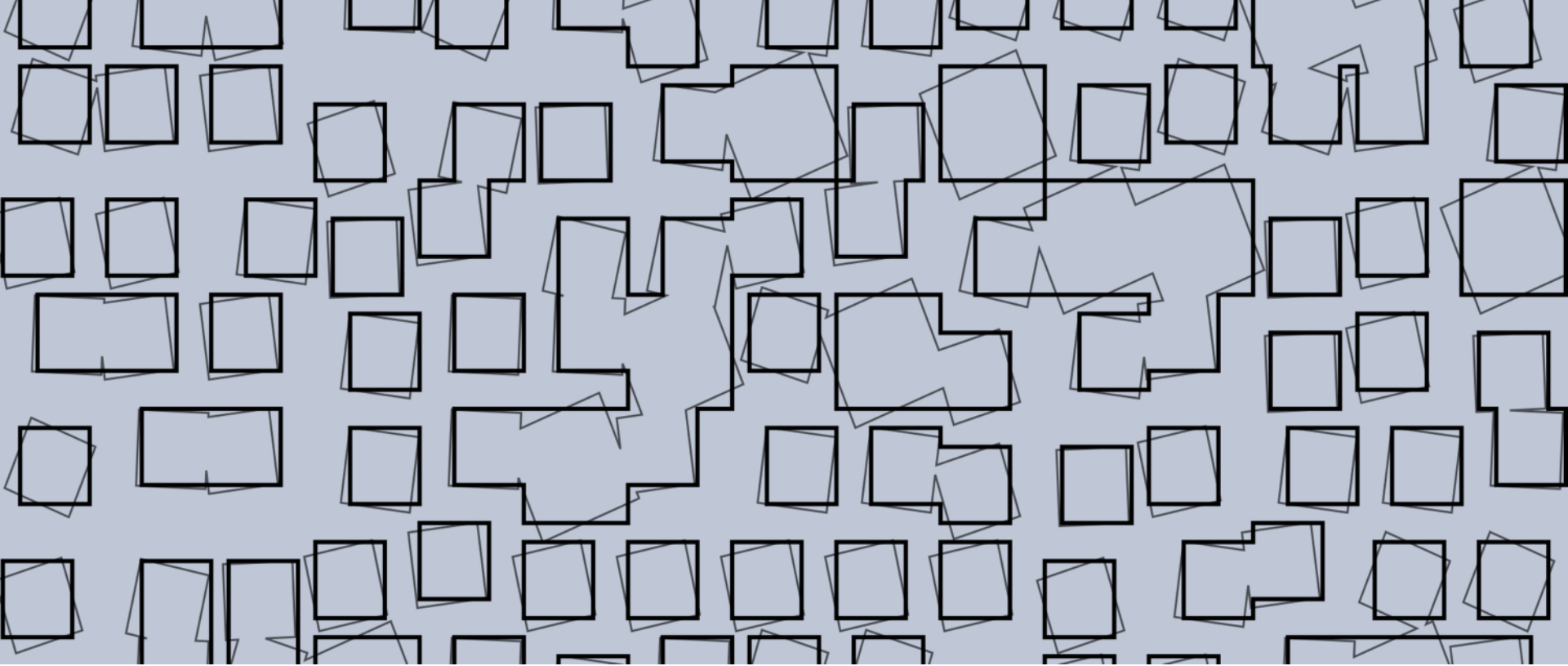
> Cell. Animal

> What is a living system?

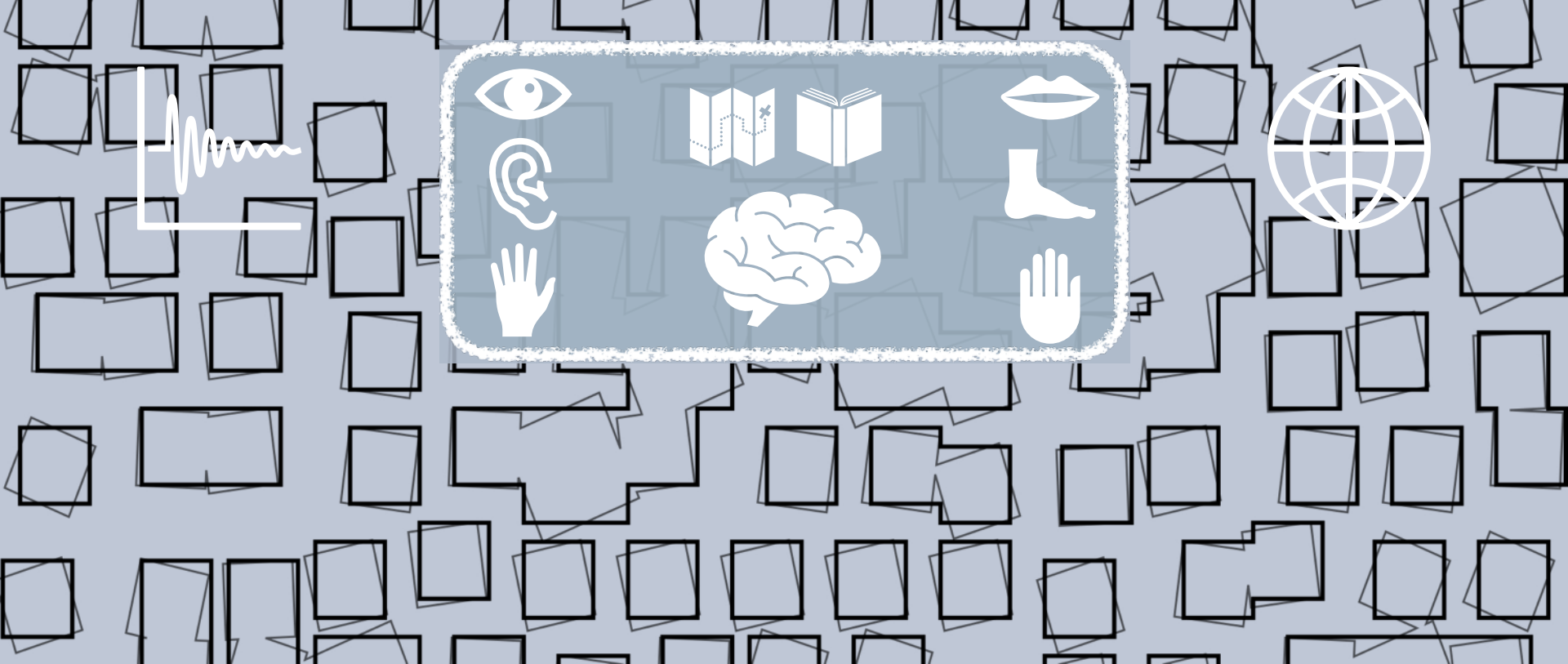


- > Cybernetics
- > Cell. Animal

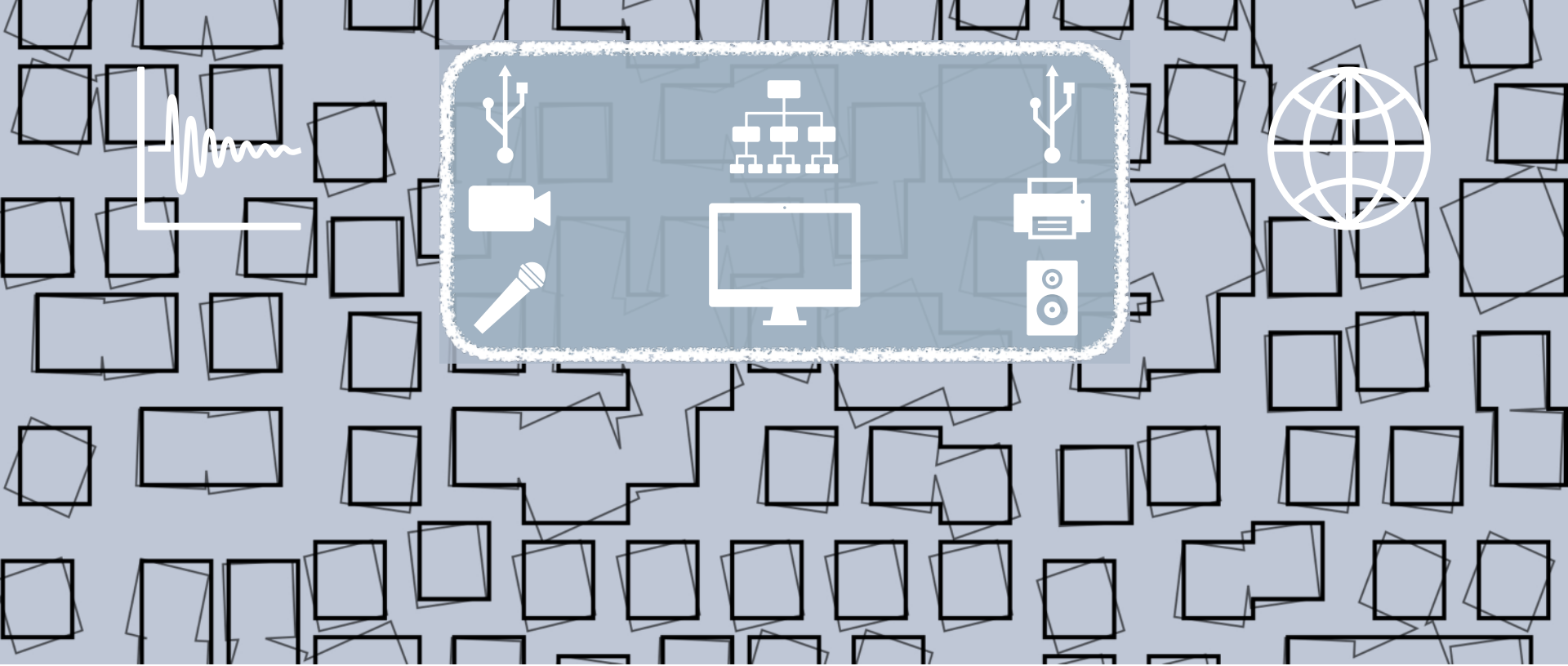
- > **Human**
- > **What is a living system?**



> What is AI?



> What is AI?



- > Cybernetics
- > What is AI?

[01011010
00110111]

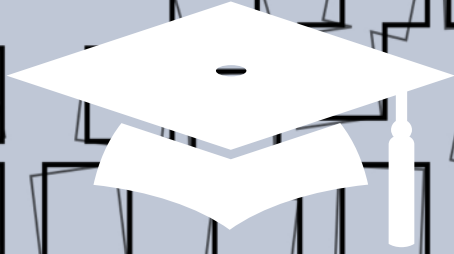


[01011010
00110111]

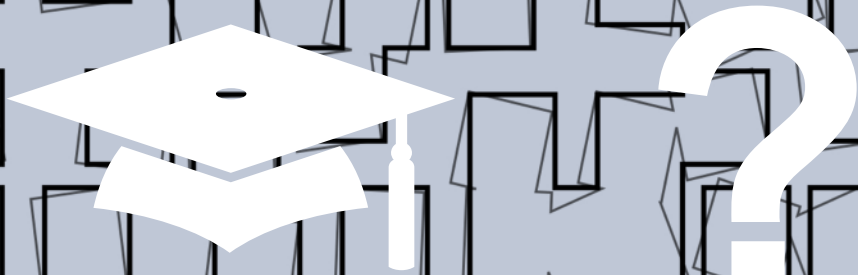


[01011010
00110111]

> What is AI?



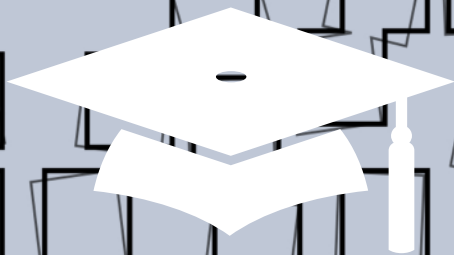
- > Supervised learning
- > What is AI?



> Supervised learning

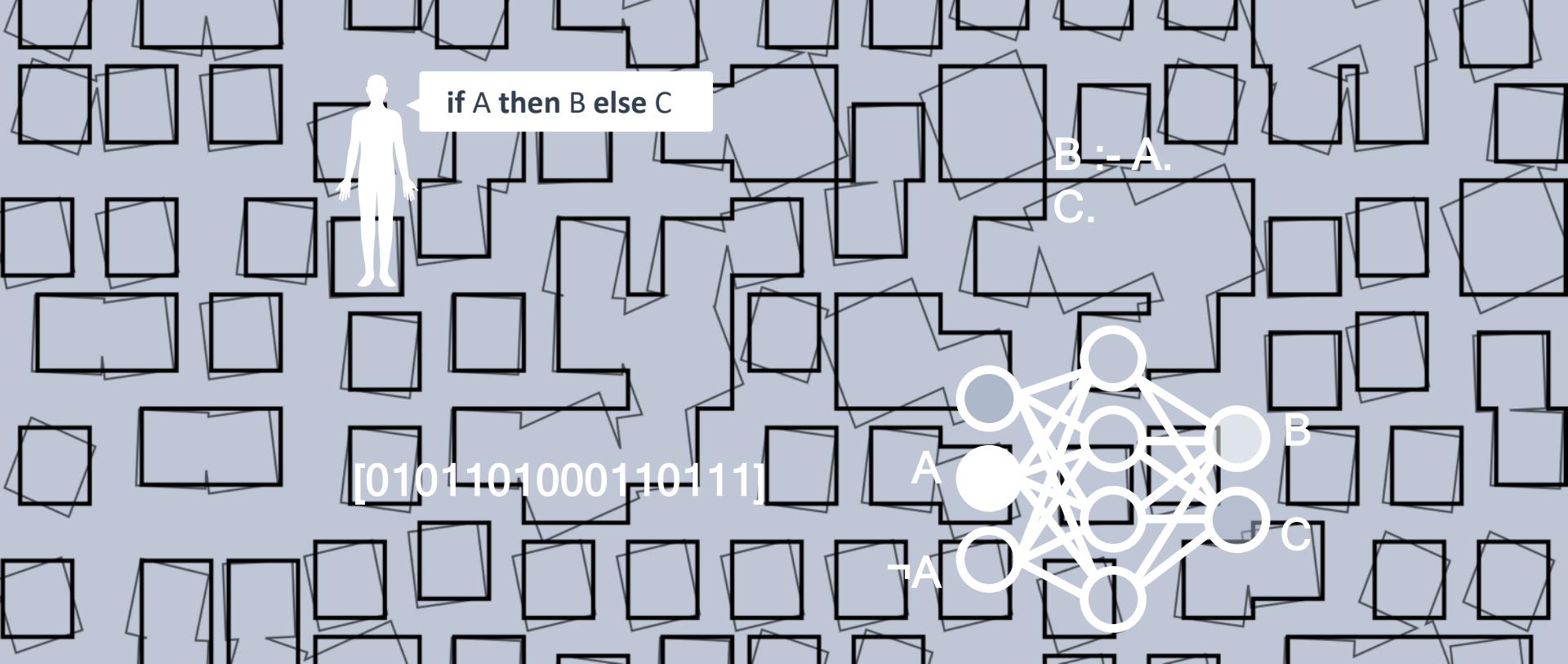
> Unsupervised learning

> What is AI?

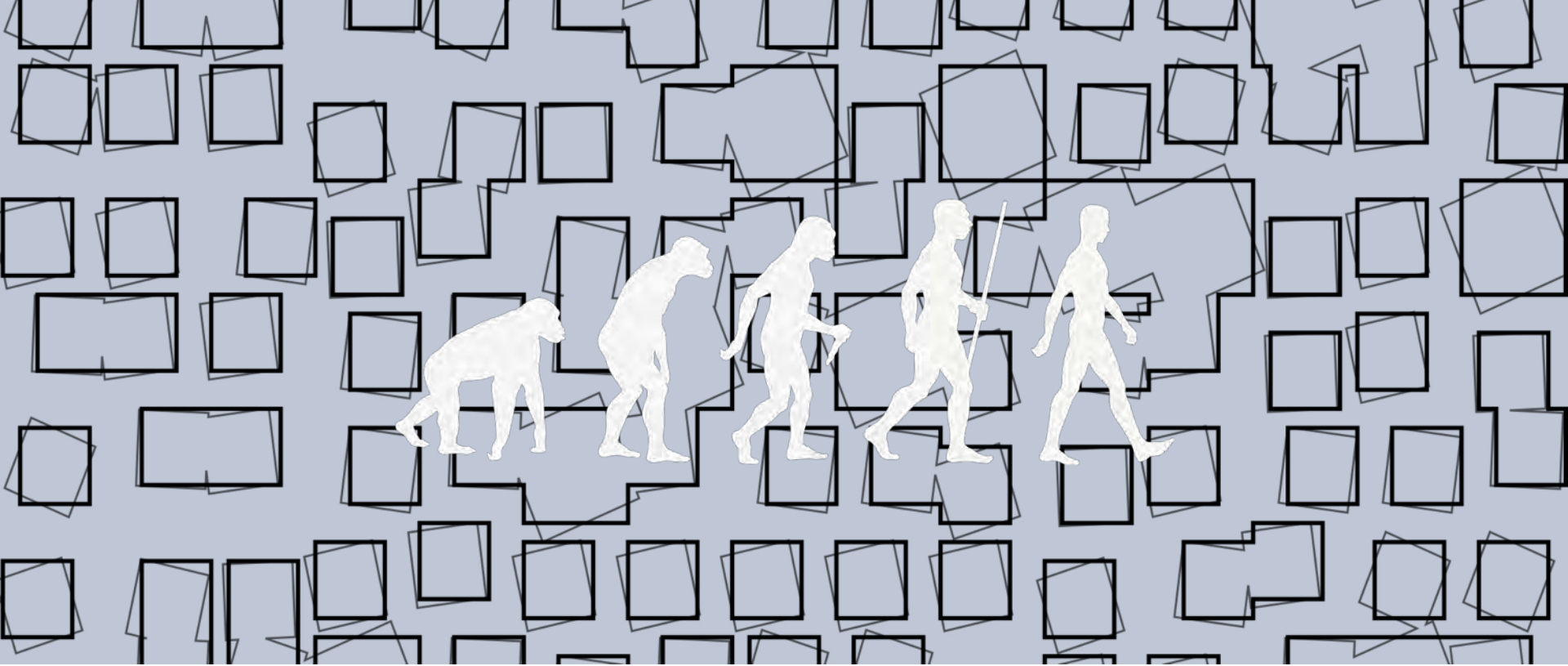


- > Supervised learning
- > Unsupervised learning

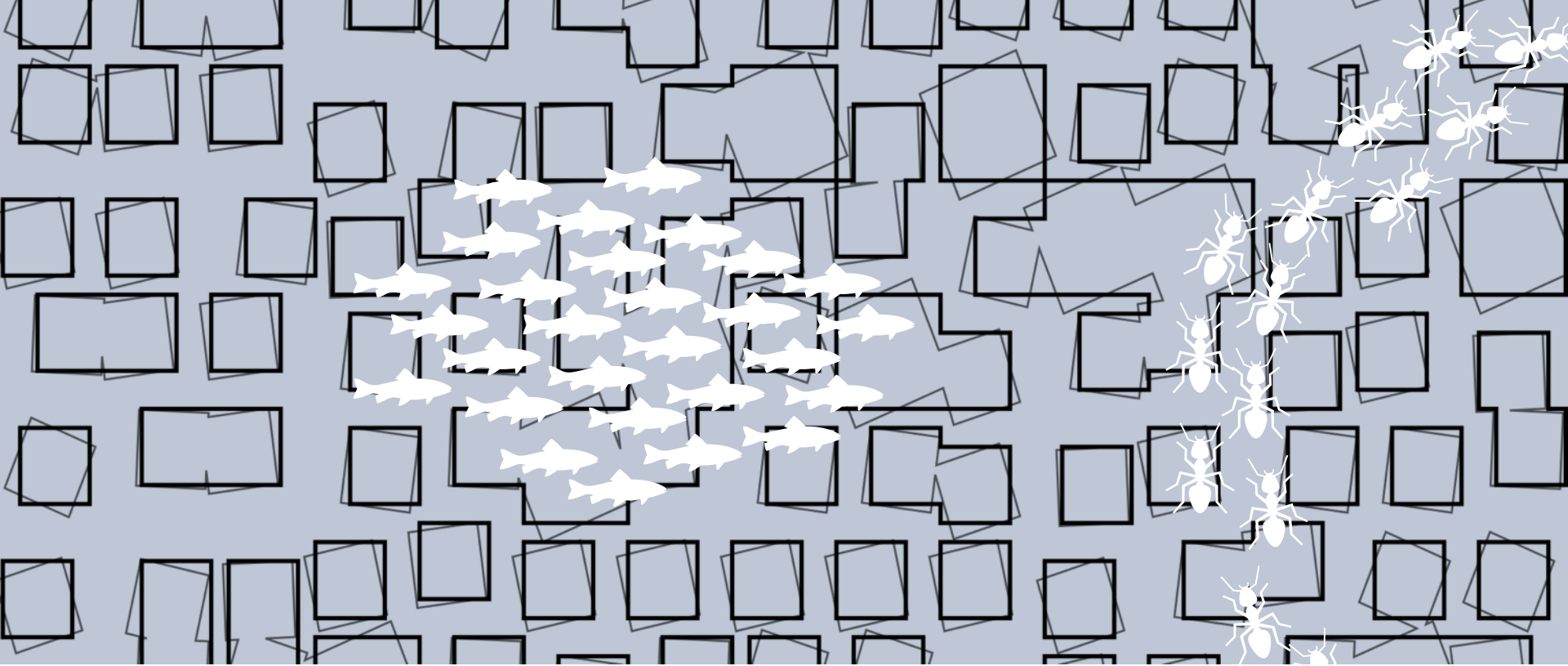
- > **Reinforcement learning**
- > **What is AI?**



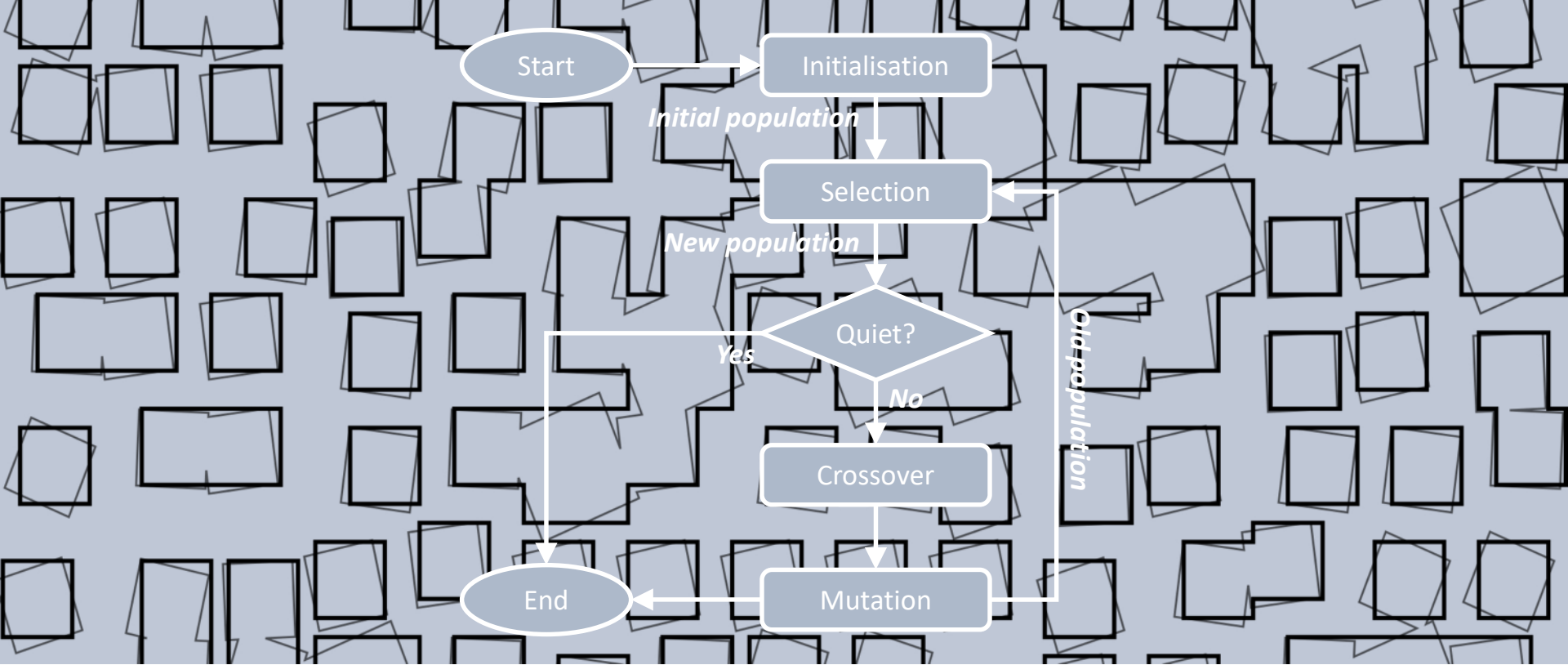
- > Models
- > What is AI?



- > Evolution
- > What is AI?



- > Evolution
- > What is AI?



- > Evolution
- > What is AI?

*Reasoning-
Based*

Behavior-Based

Human-Based

Systems that think like
humans

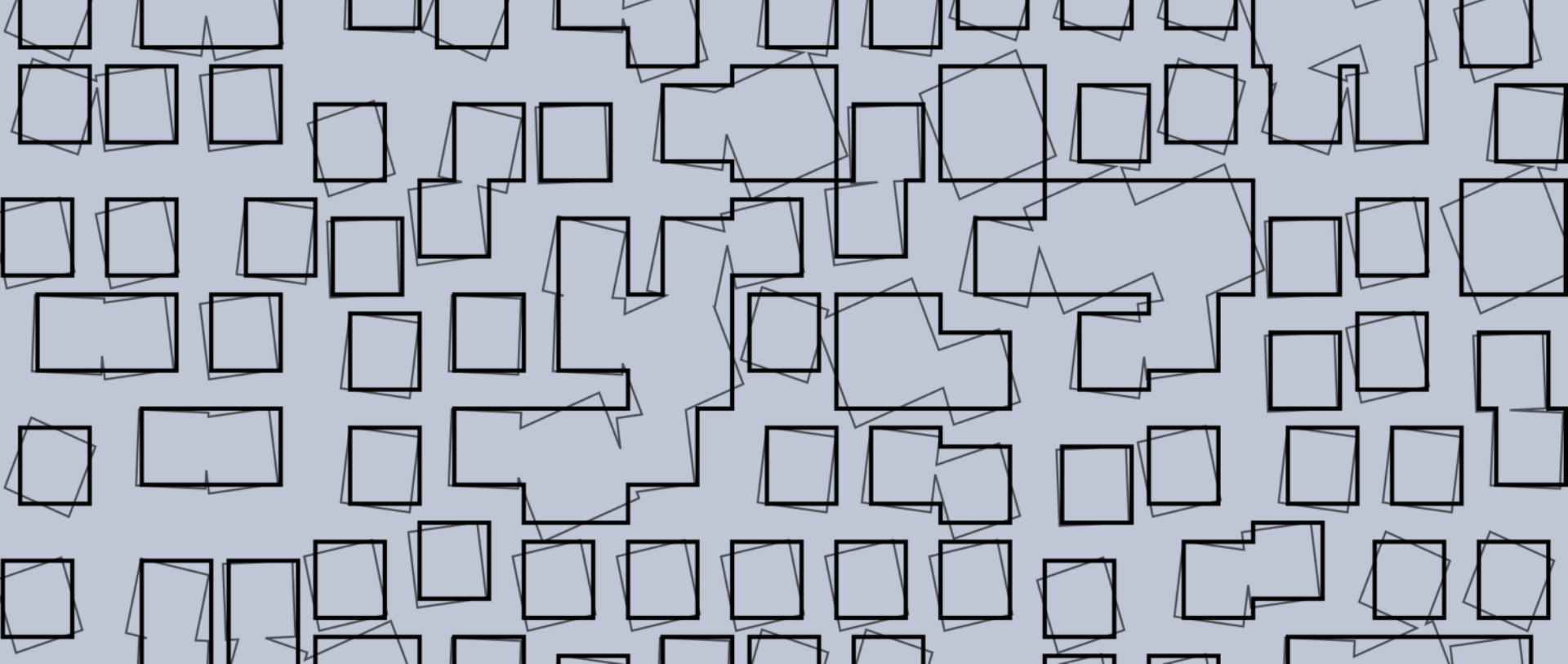
Systems that act like
humans

Ideal Rationality

Systems that think
rationally

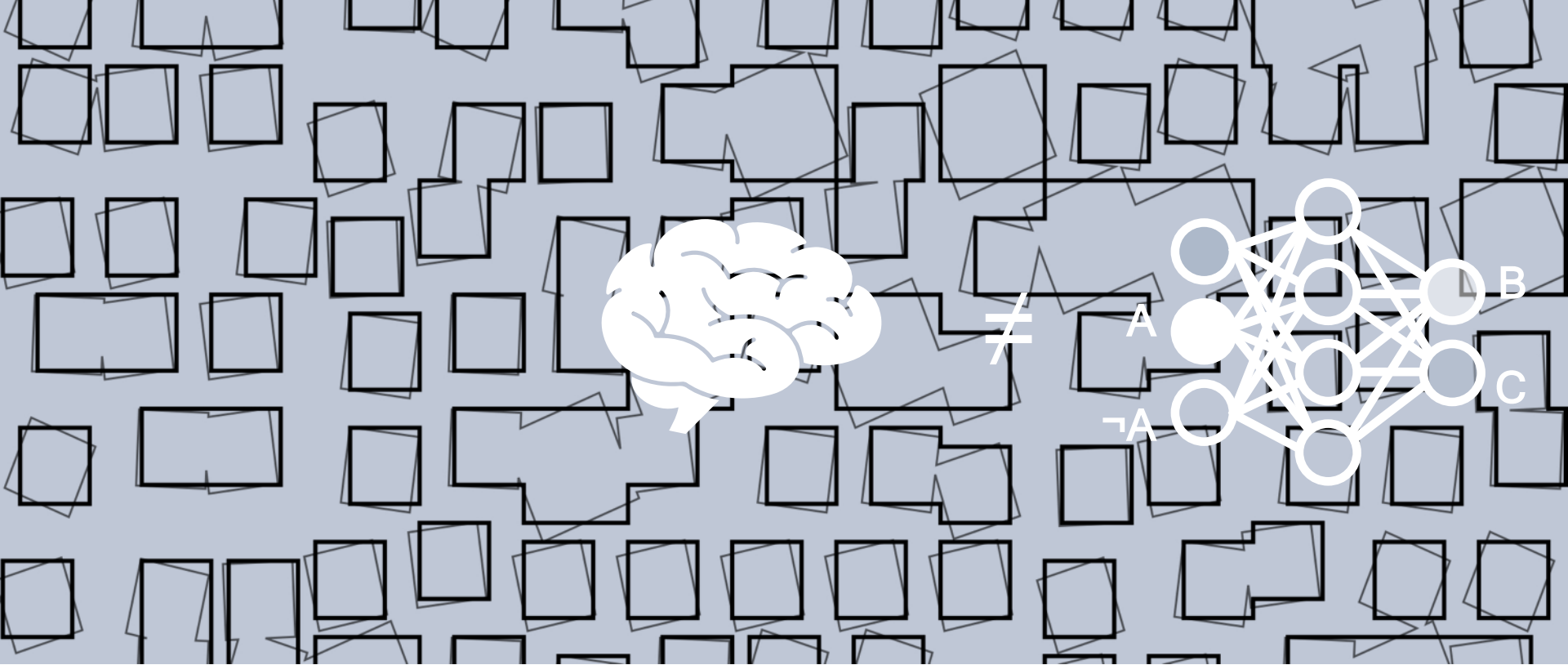
Systems that act
rationally

- > Weak and hard
- > What is AI?

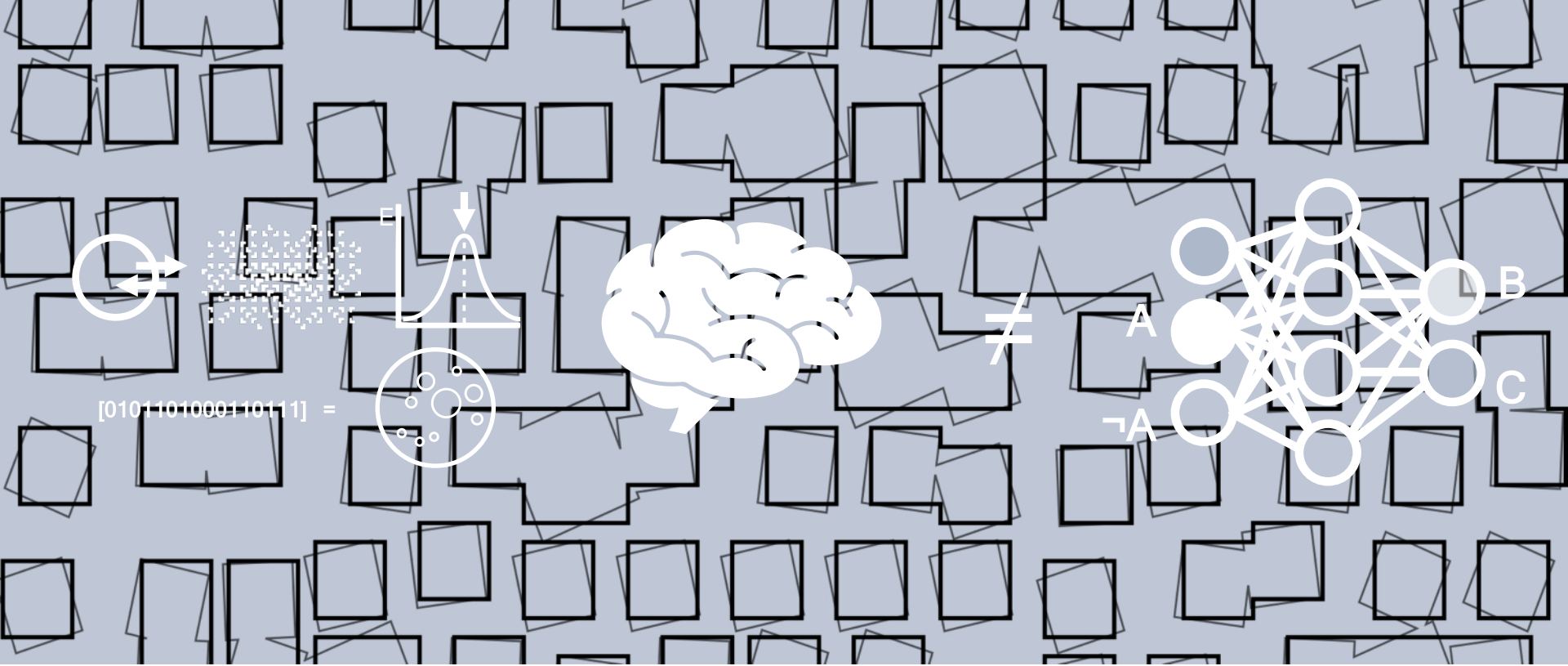


> Can a machine live?

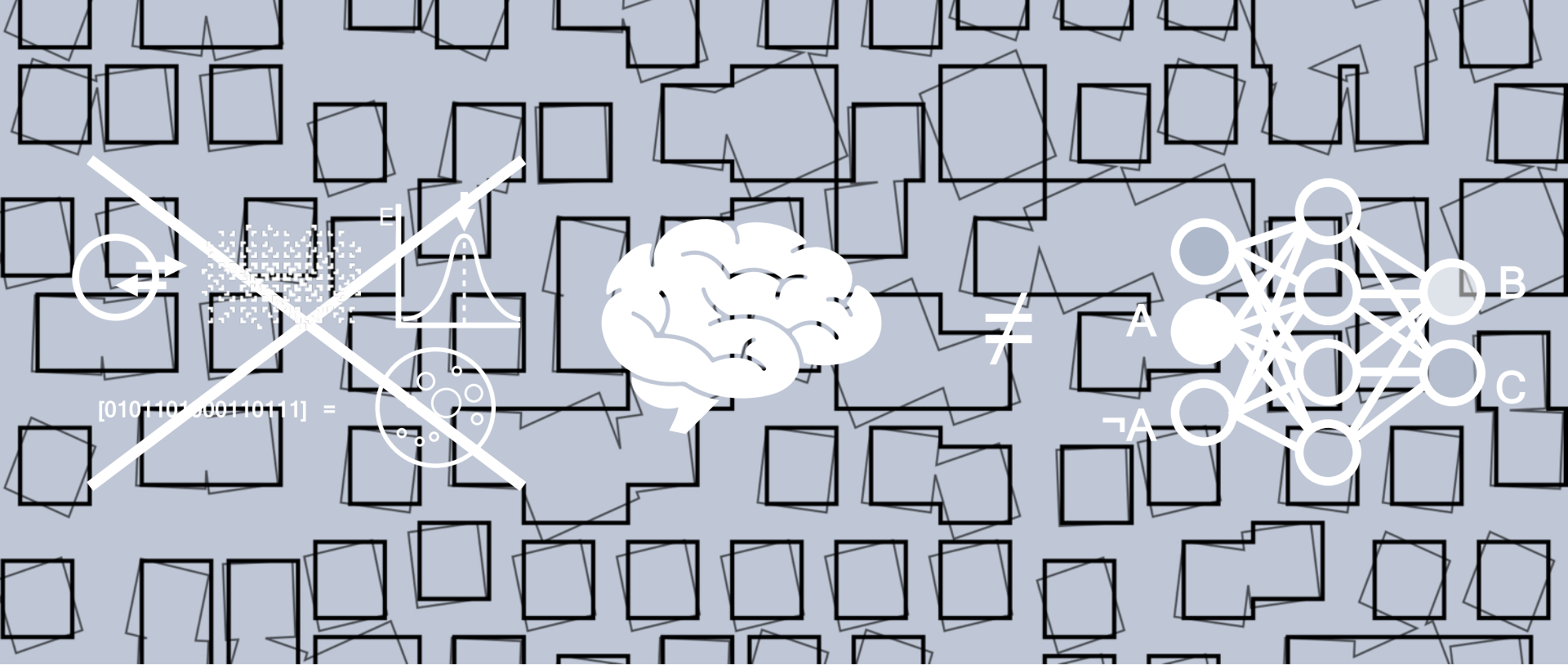




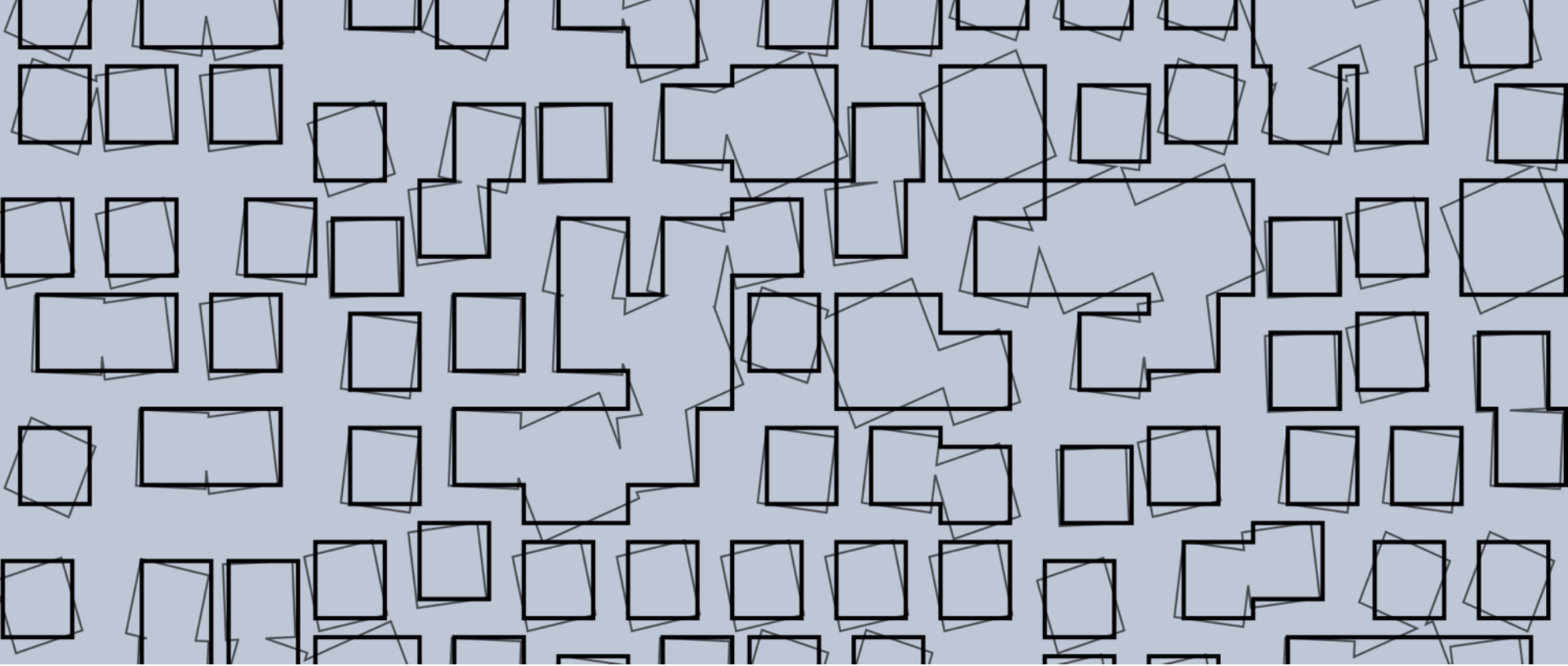
> Can a machine live?



> Can a machine live?



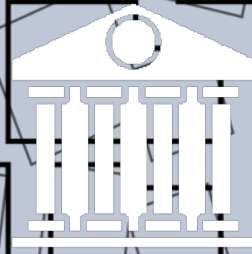
> Can a machine live?



> What is an artist?

Crafts

Academism

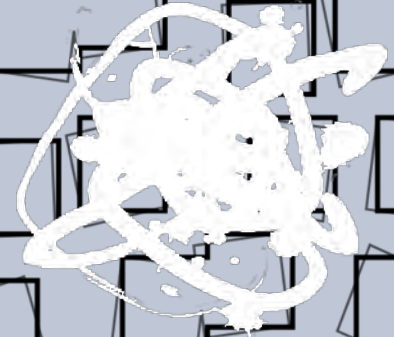


- > Historical perspective
- > What is an artist?

Autonomy

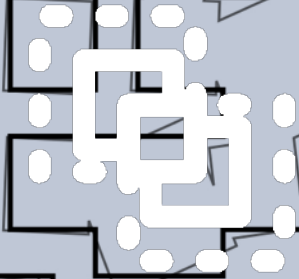
New form of aristocracy

Expression



- > Historical perspective
- > What is an artist?

Plastic language Semiotics

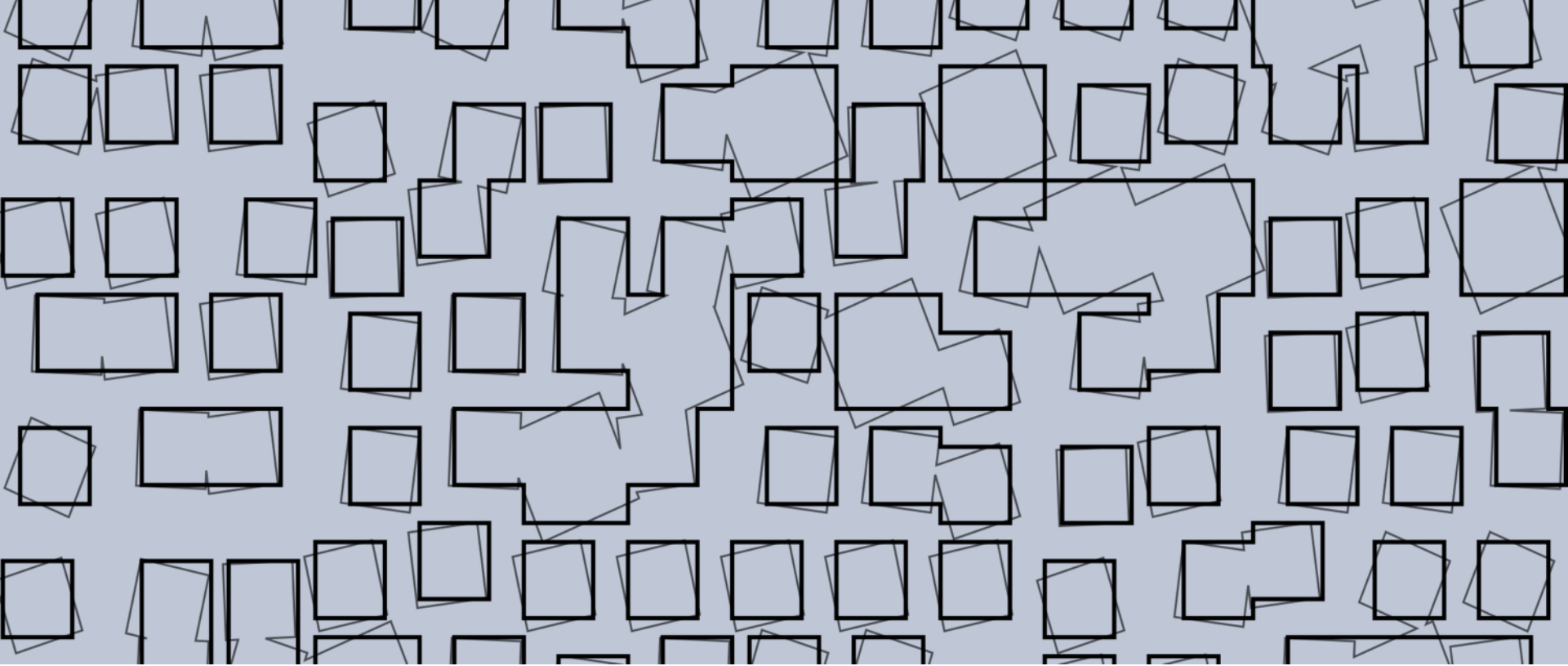


- > Historical perspective
- > What is an artist?

The background of the slide is a light blue-grey color, covered with a dense pattern of overlapping black-outlined squares and rectangles. These shapes are of various sizes and are slightly offset from each other, creating a layered, geometric effect.

An artist is a person that is recognized
as an artist by the institution

- > Institutional perspective
- > What is an artist?

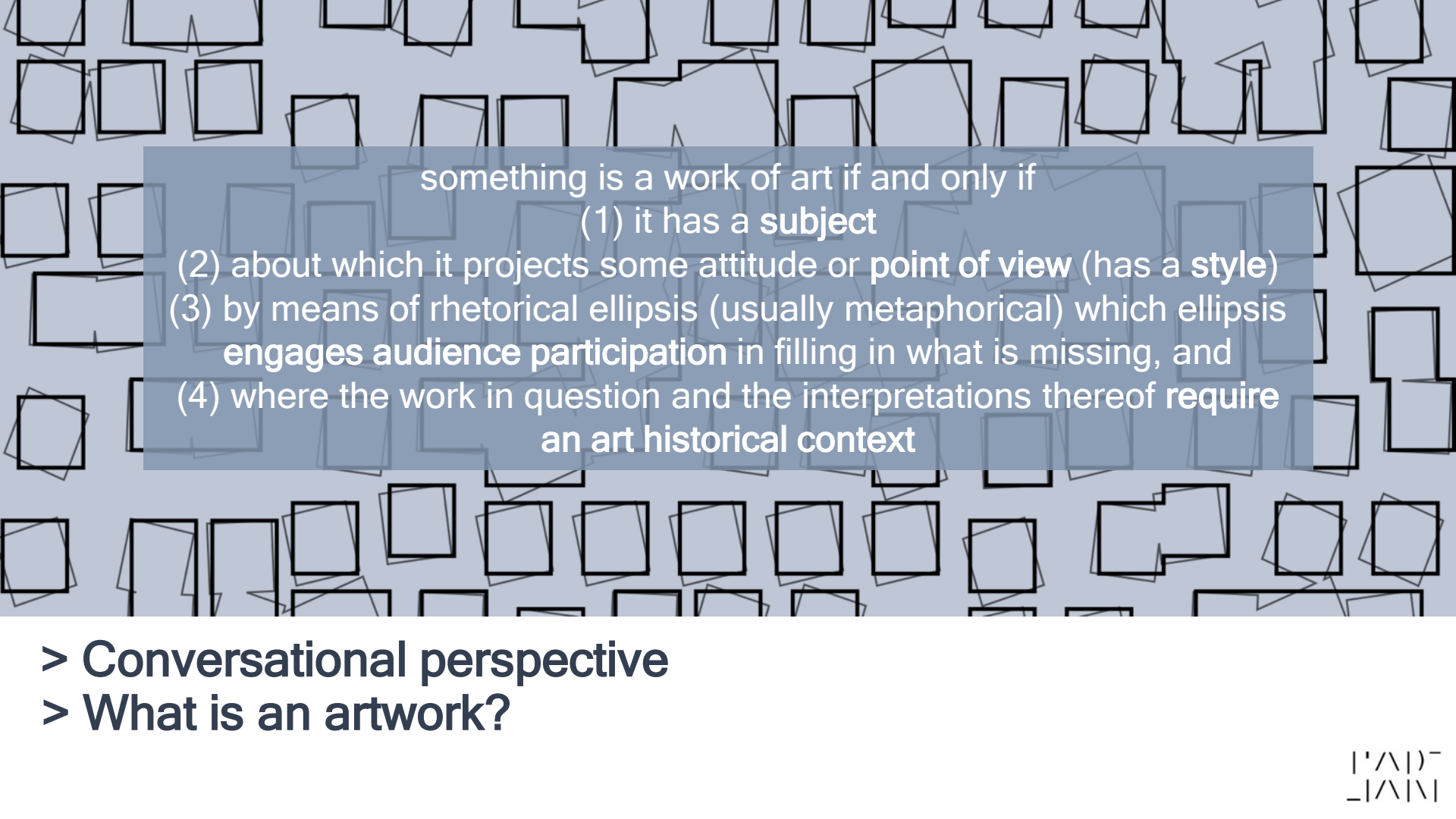


> What is an artwork?

something that:

- (1) possessing positive **aesthetic** properties;
- (2) being expressive of **emotion**;
- (3) being **intellectually challenging**;
- (4) being **formally complex and coherent**;
- (5) having the capacity to **convey complex meanings**;
- (6) exhibiting an individual **point of view**;
- (7) being **original**;
- (8) being an artifact or performance which is the product of a **high degree of skill**;
- (9) belonging to an **established artistic form**;
- (10) being the product of an **intention** to make a work of art

- > **Intrinsic perspective**
- > **What is an artwork?**

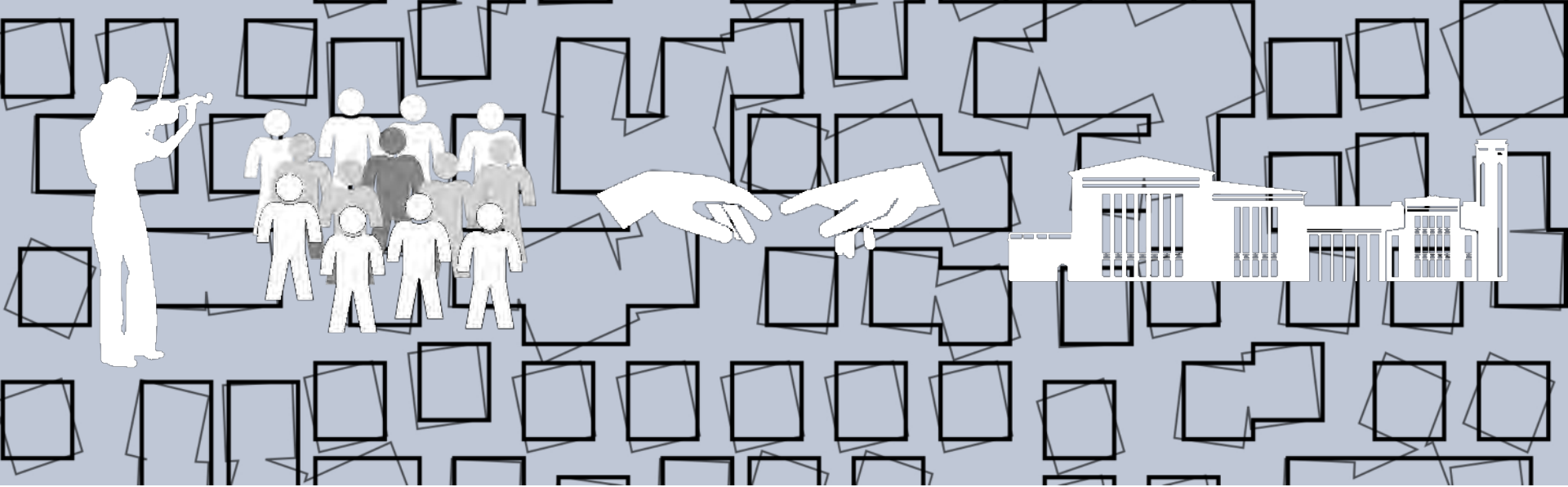


something is a work of art if and only if

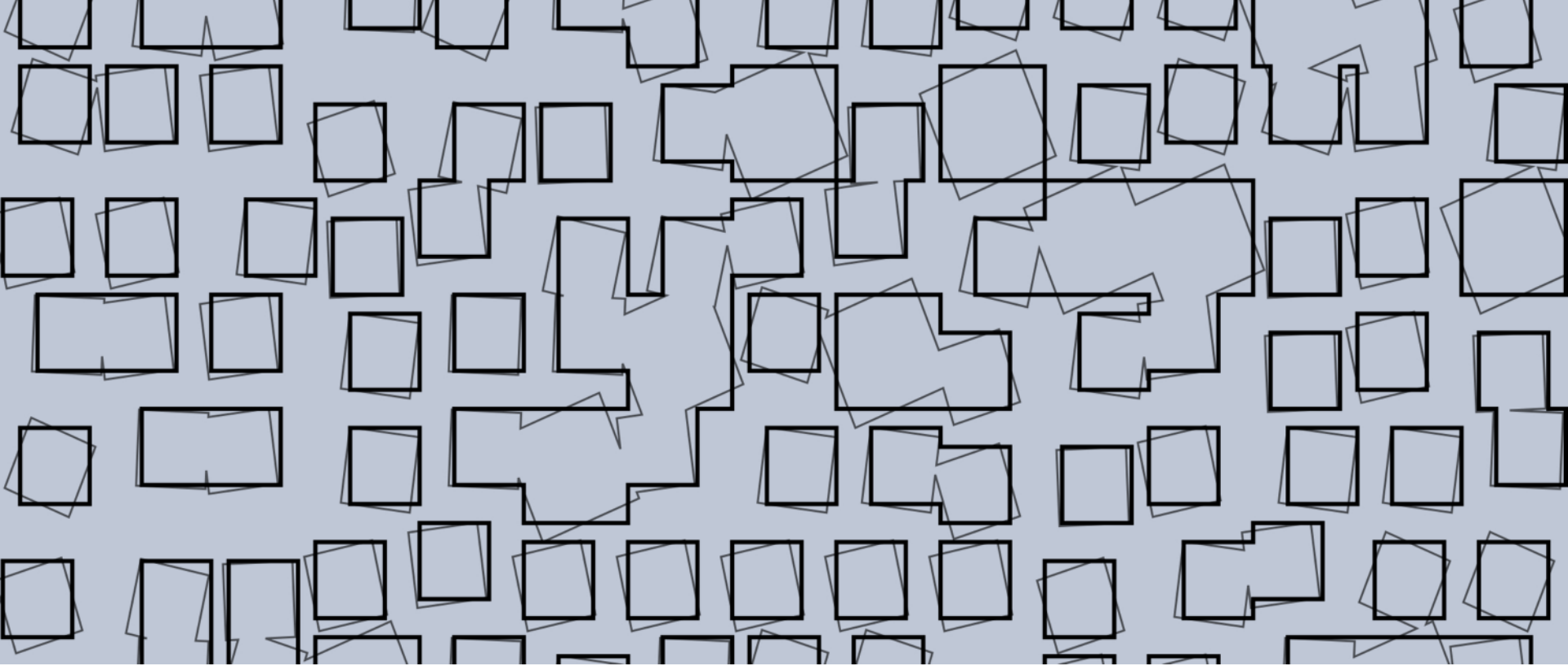
- (1) it has a **subject**
- (2) about which it projects some attitude or **point of view** (has a **style**)
- (3) by means of rhetorical ellipsis (usually metaphorical) which ellipsis **engages audience participation** in filling in what is missing, and
- (4) where the work in question and the interpretations thereof **require an art historical context**

- > **Conversational perspective**
- > **What is an artwork?**

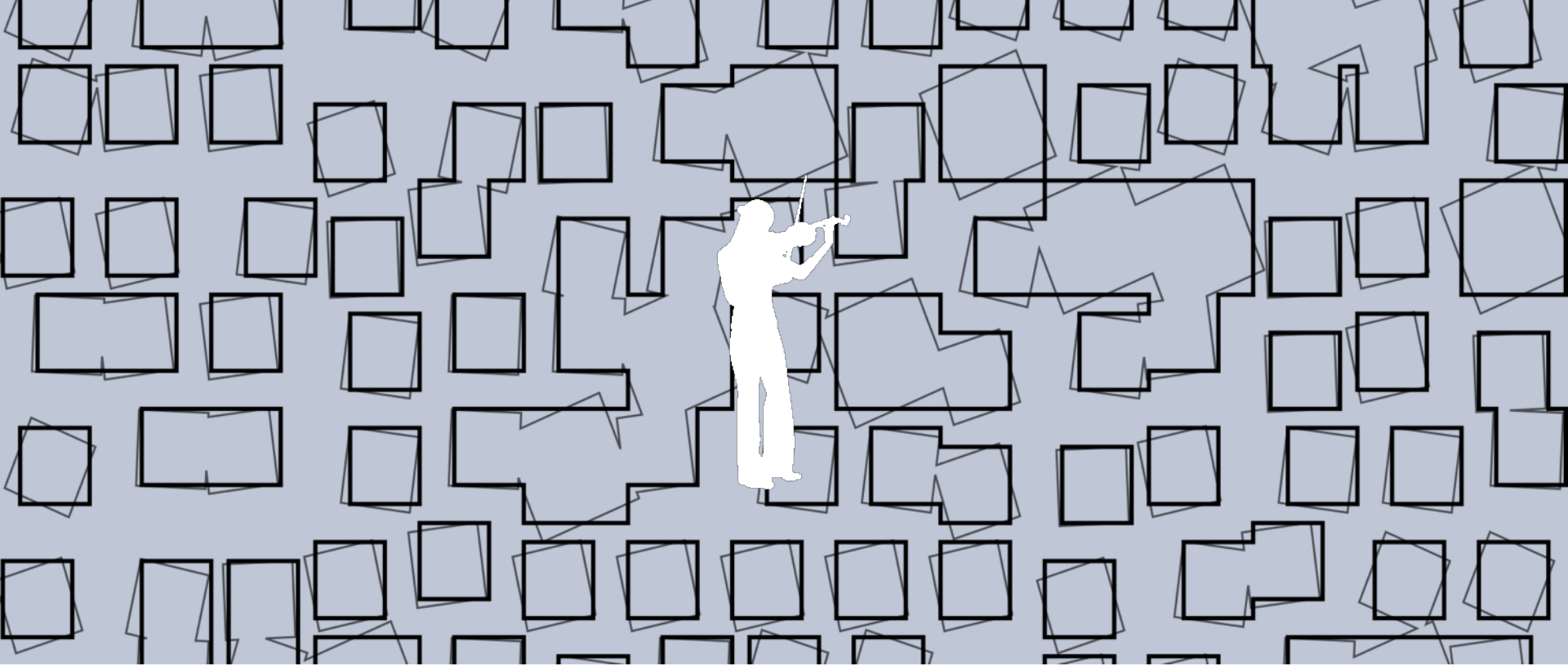
Technique and skill | Expresses personality | Original creation | Institutional recognition



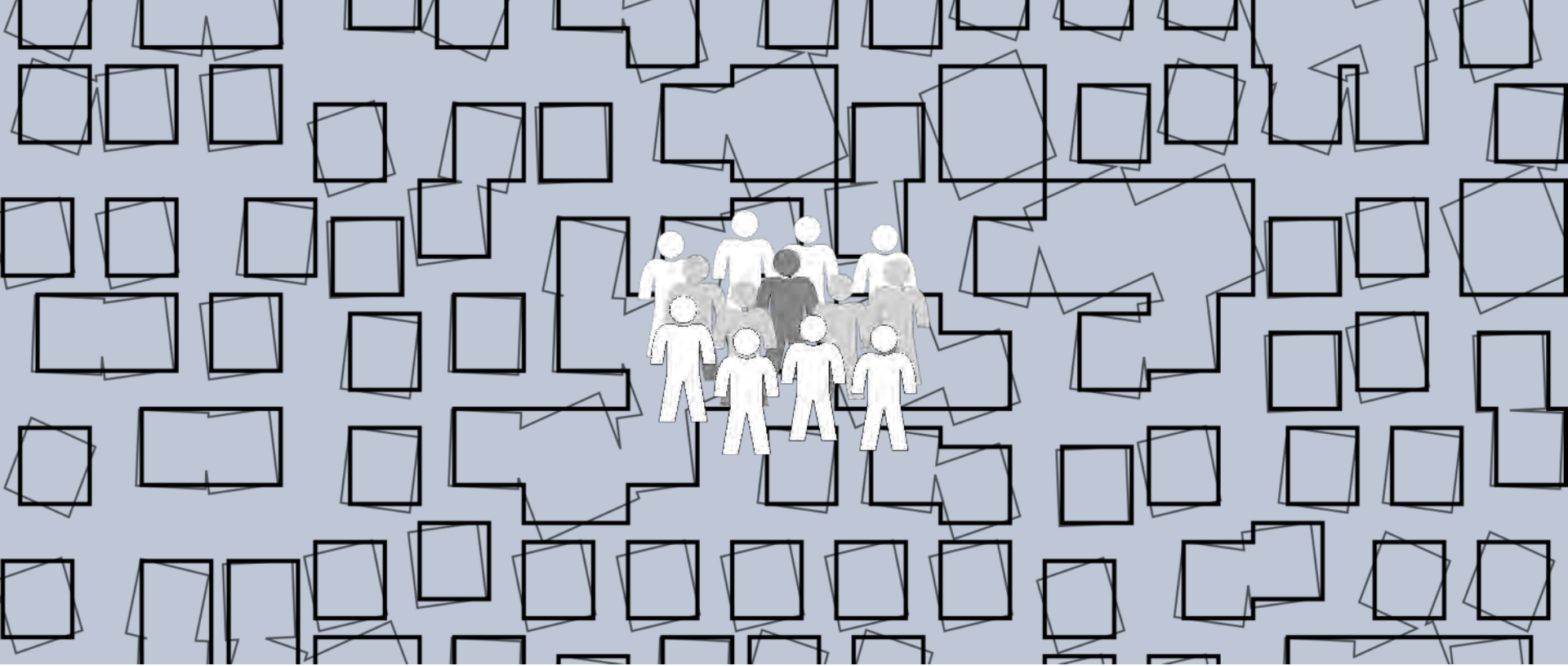
- > Concise perspective
- > What is an artwork?



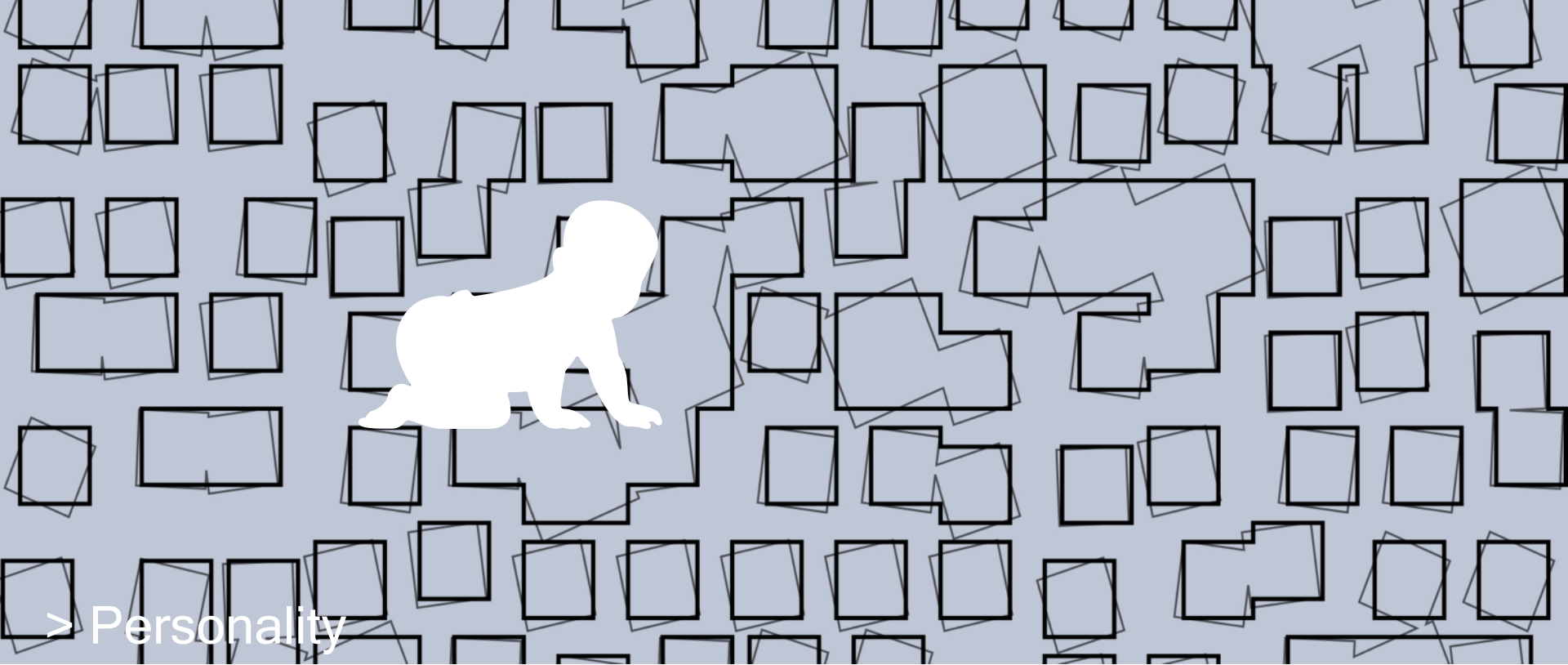
> Can a machine be an artist?



- > Skill
- > Can a machine be an artist?



- > Personality
- > Can a machine be an artist?



> Personality

> Autonomy

> Can a machine be an artist?

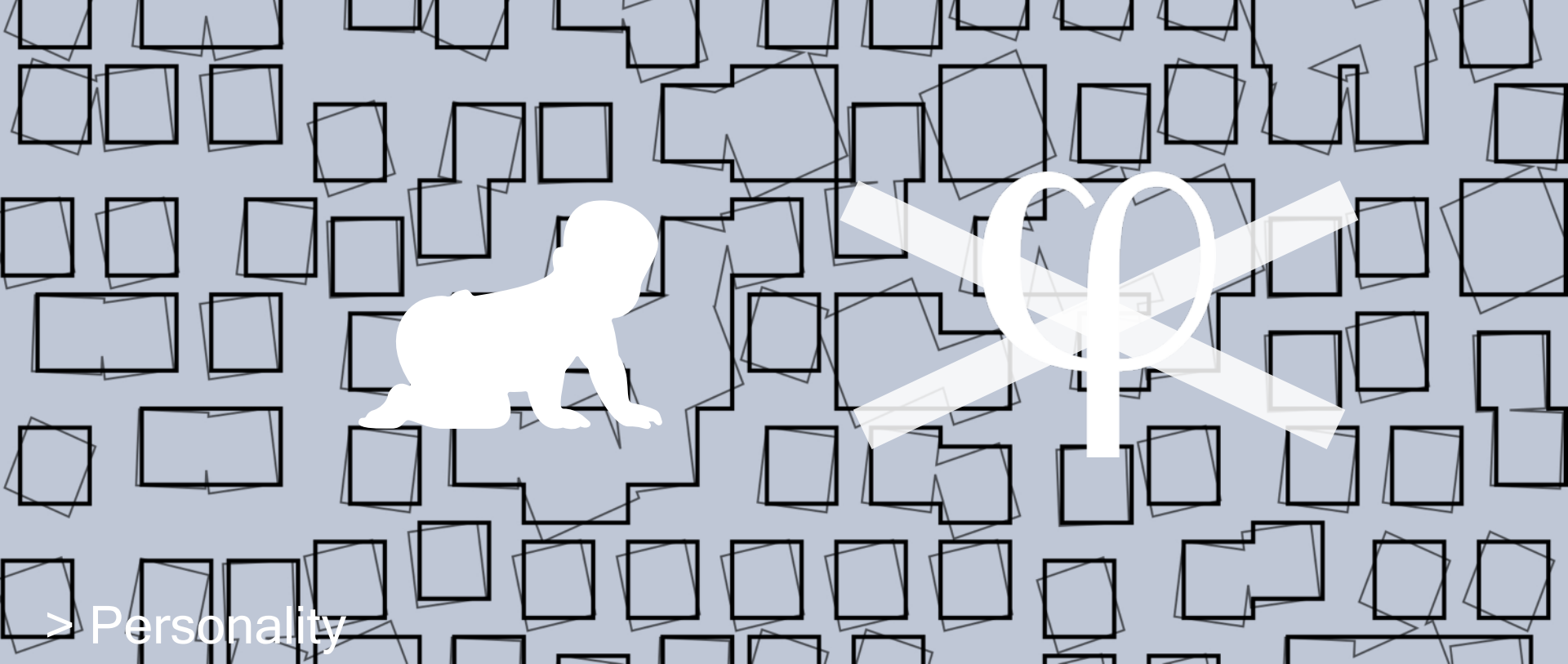


φ

> Personality

> Autonomy

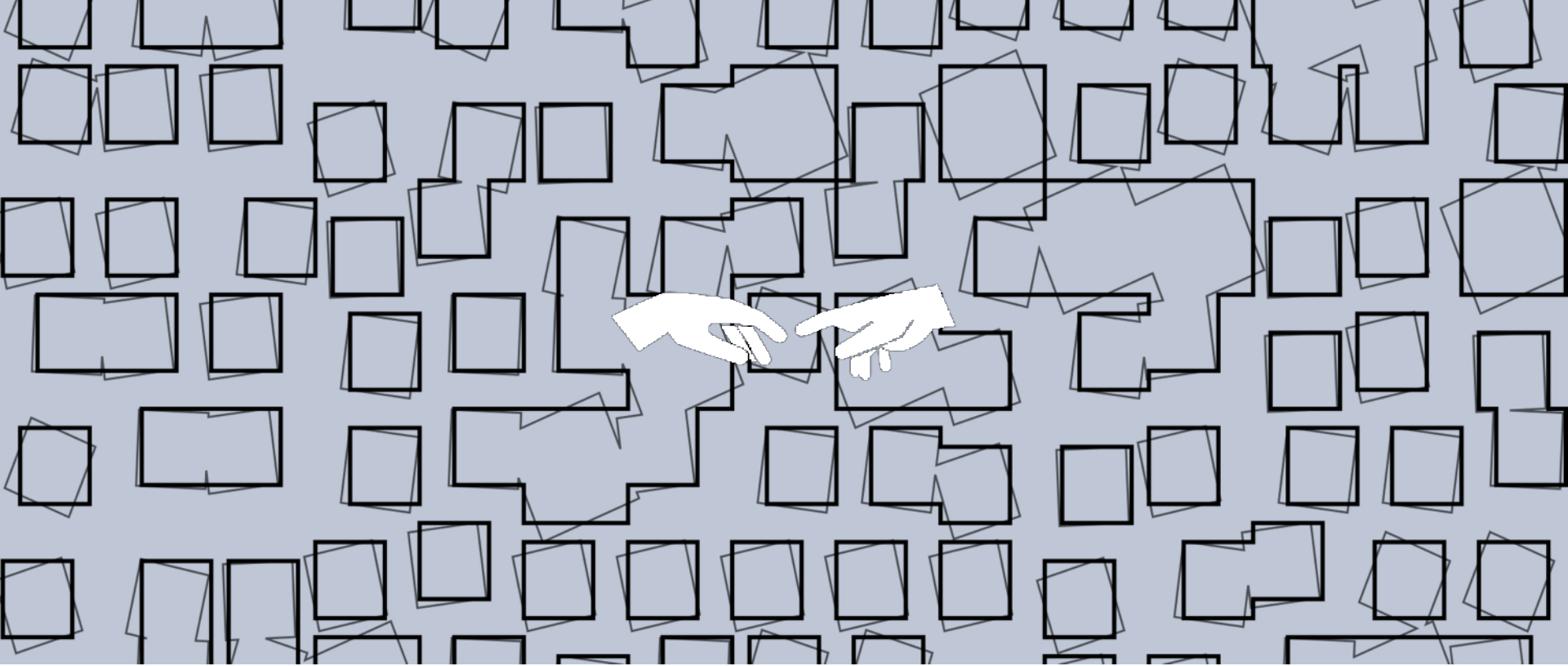
> Can a machine be an artist?



> Personality

> Autonomy

> Can a machine be an artist?

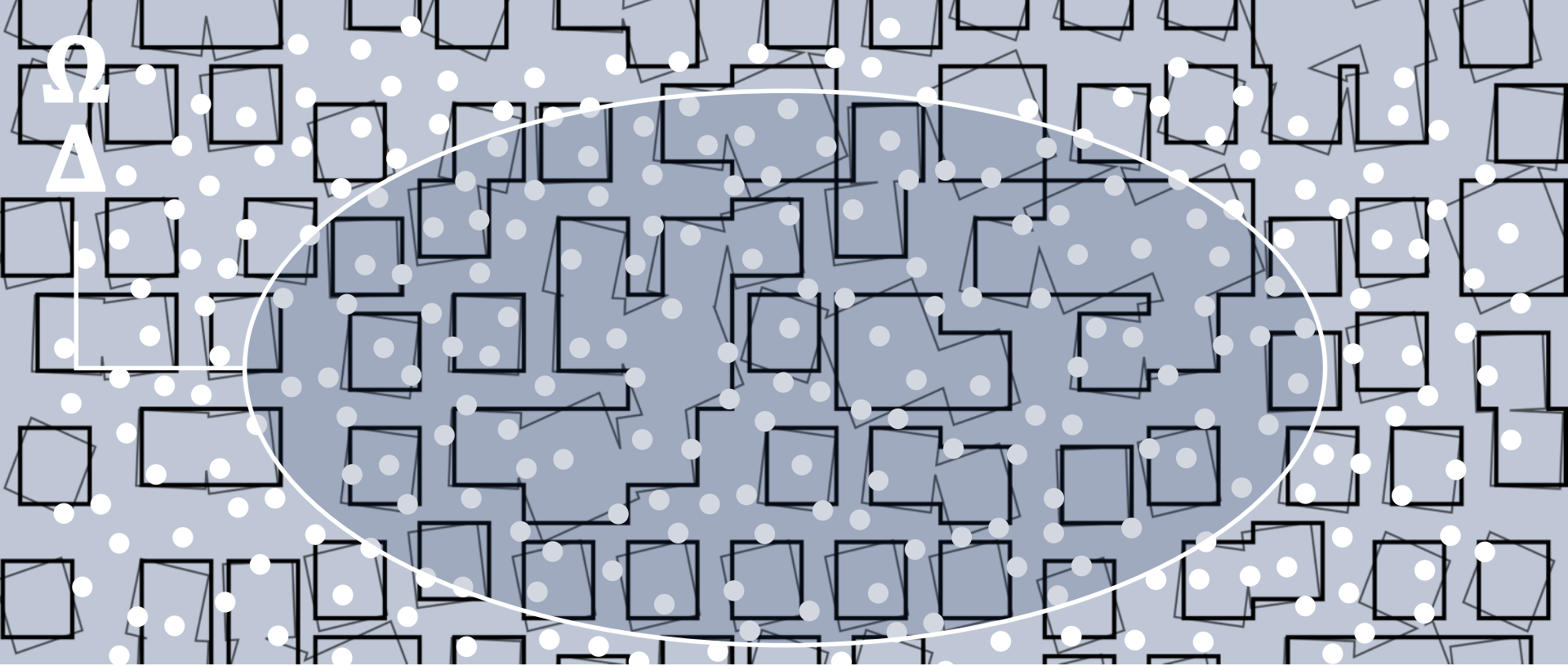


- > Creation
- > Can a machine be an artist?

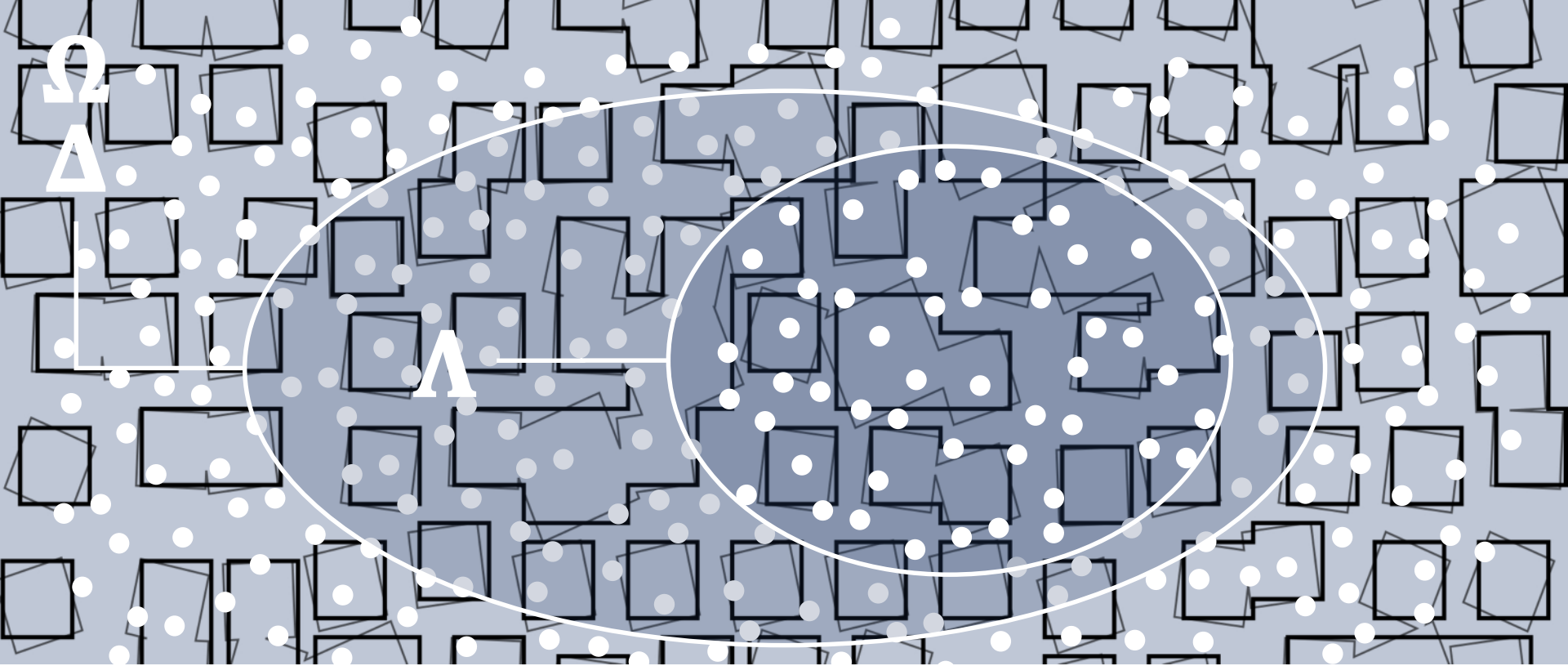
An abstract pattern on a light blue background. It consists of numerous black-outlined squares of various sizes, some of which are slightly tilted. Scattered throughout the pattern are many small white dots. In the top-left corner, there is a large white Greek letter Omega (Ω).

Ω

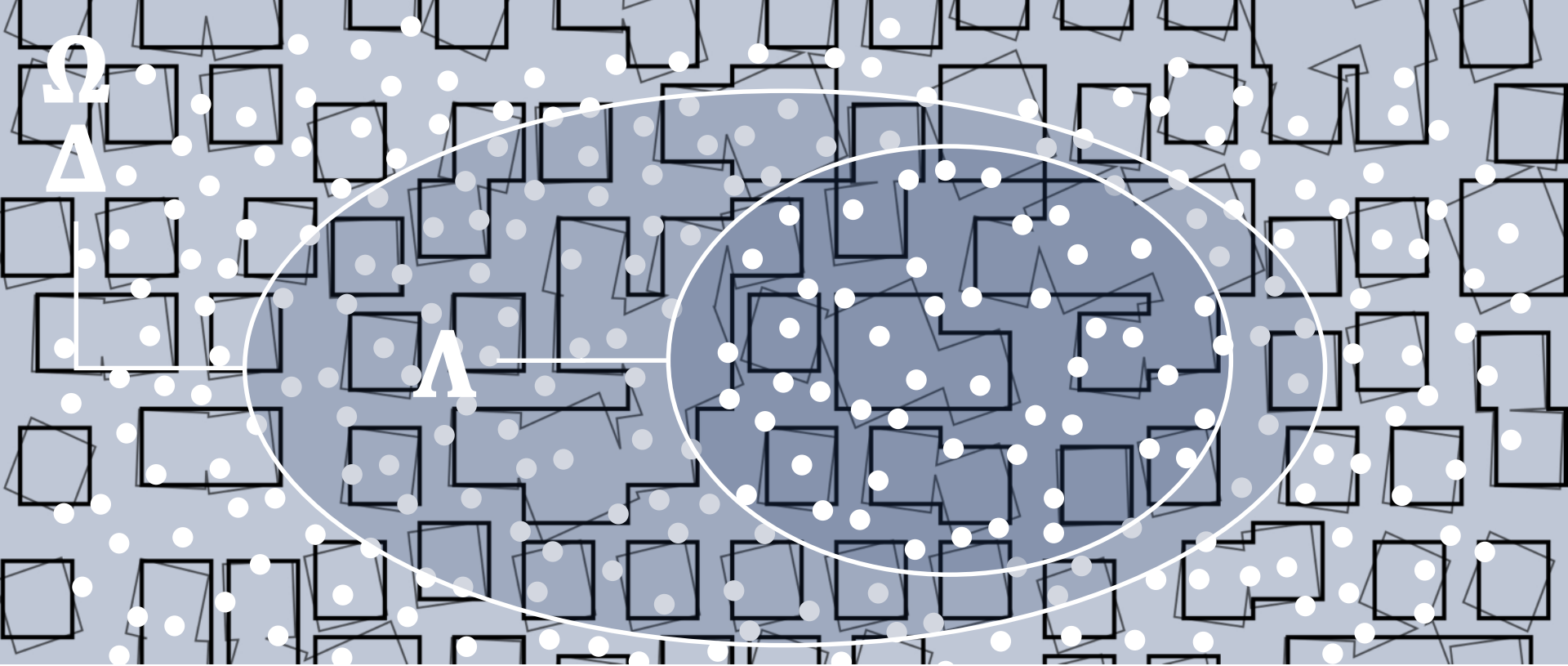
- > Creation - Things
- > Can a machine be an artist?



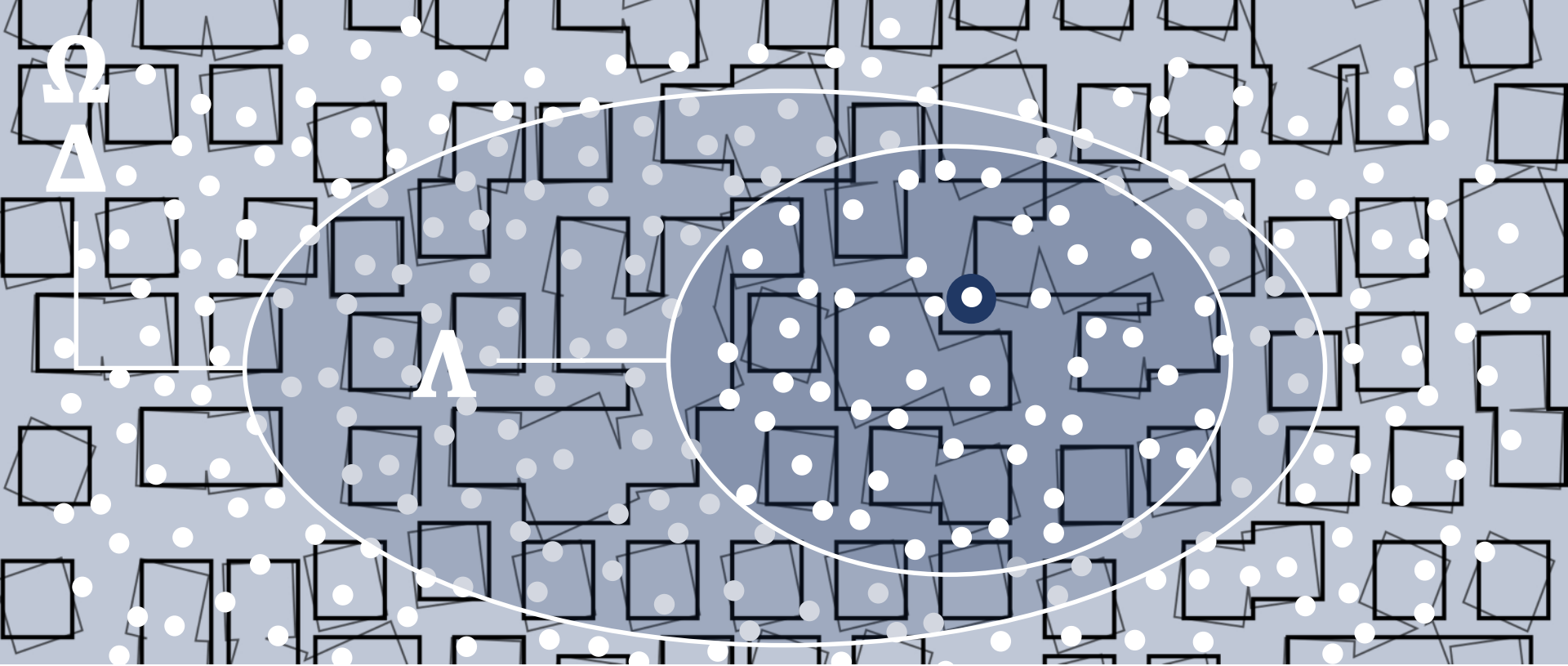
- > Creation - Universe of discourse
- > Can a machine be an artist?



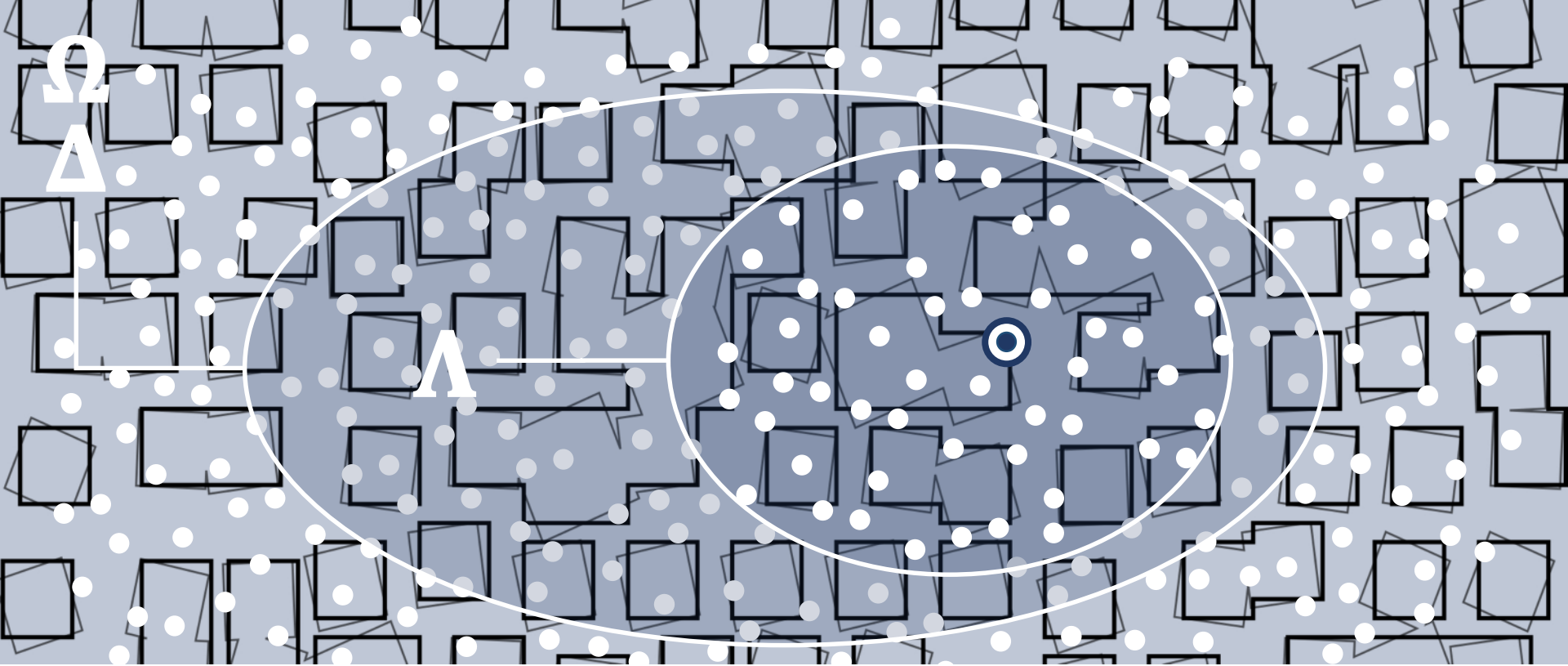
- > Creation - Universe of experience
- > Can a machine be an artist?



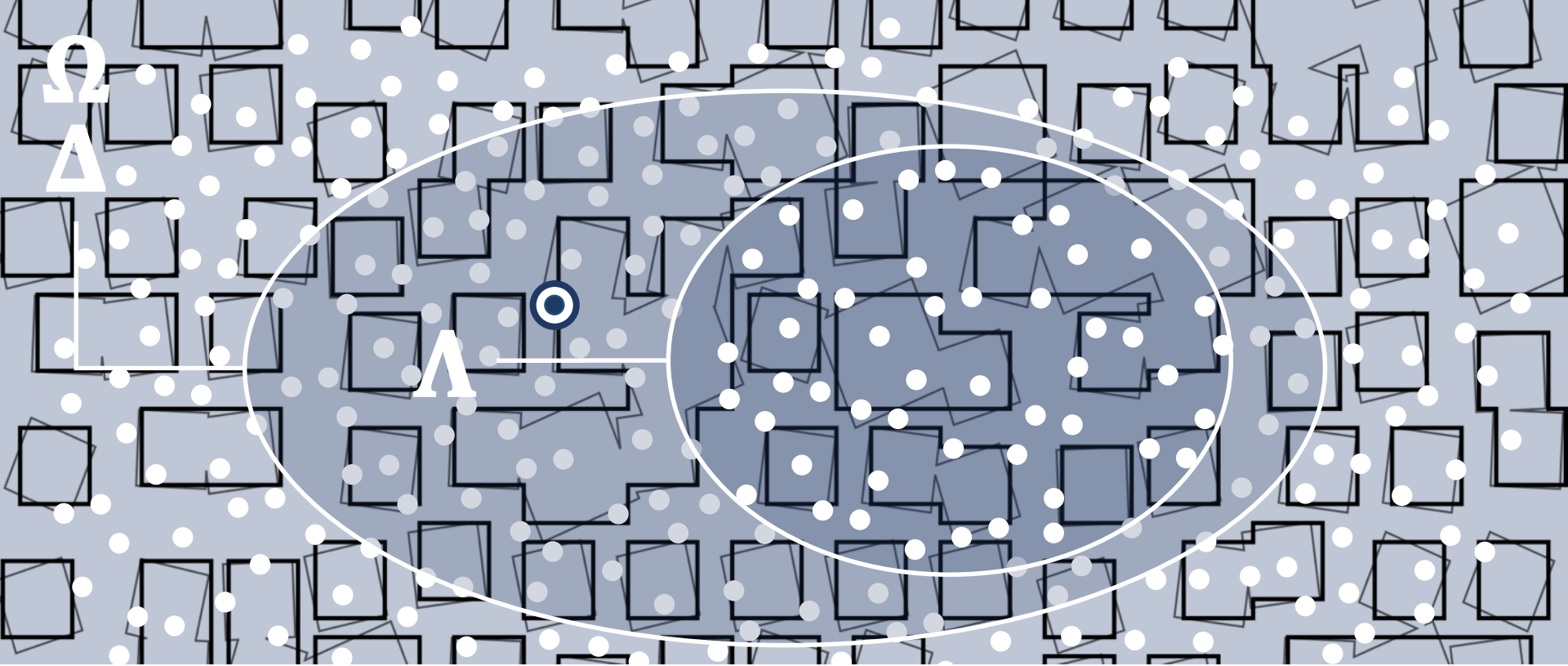
- > Creation - Universe of learning
- > Can a machine be an artist?



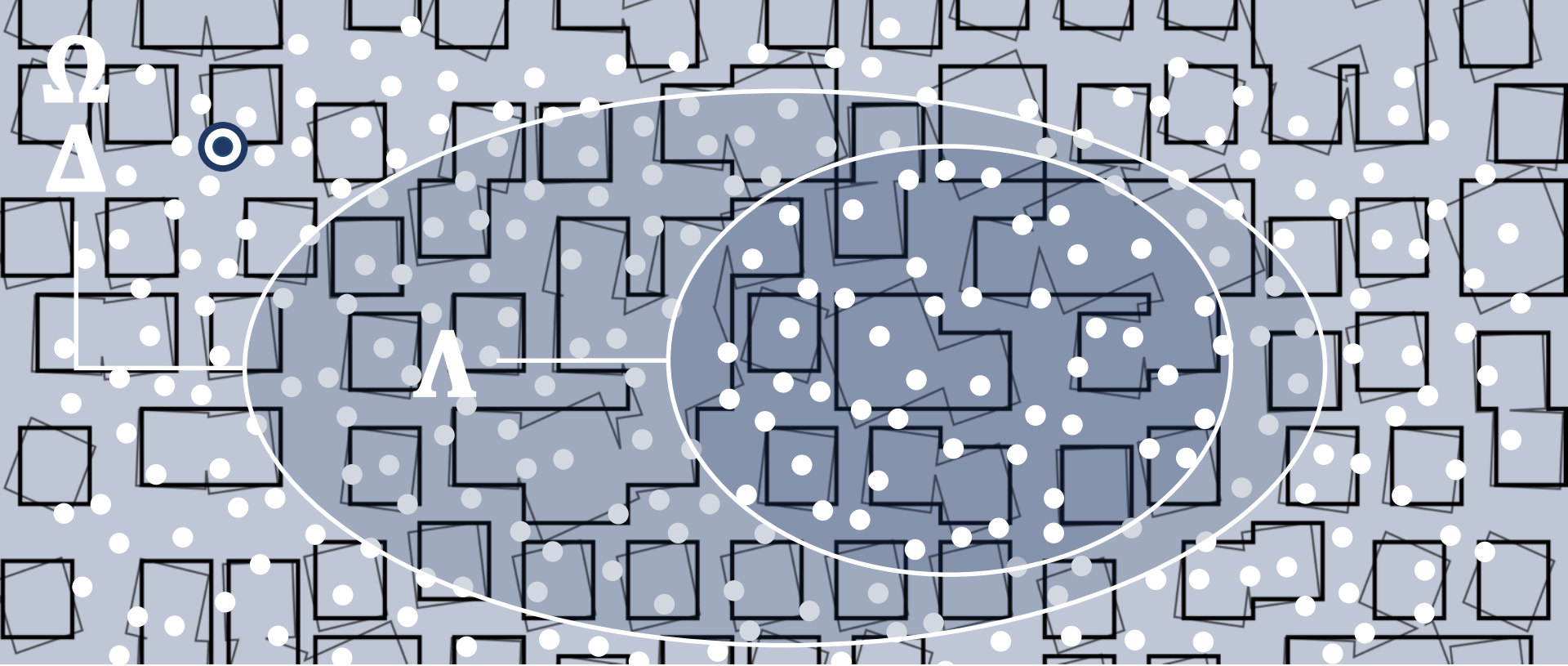
- > Creation - Remembering
- > Can a machine be an artist?



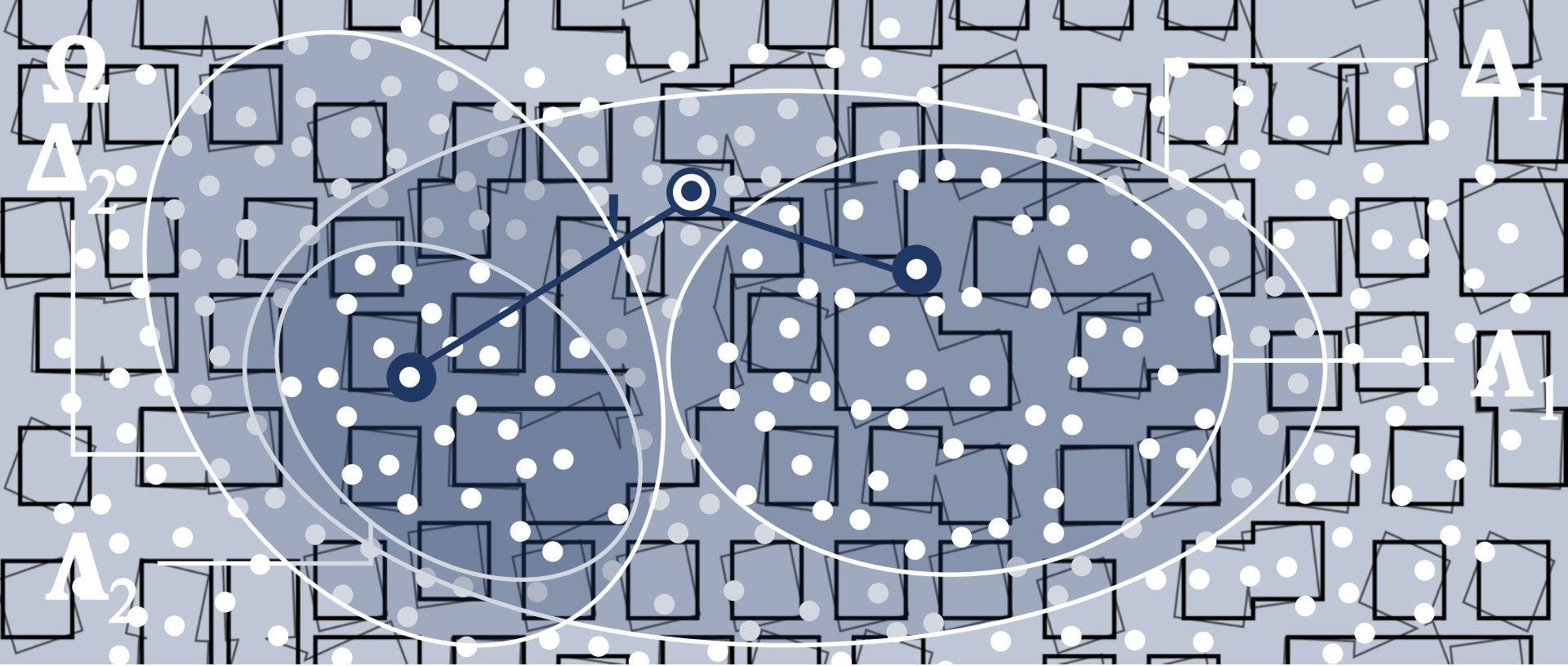
- > Creation - Novelty
- > Can a machine be an artist?



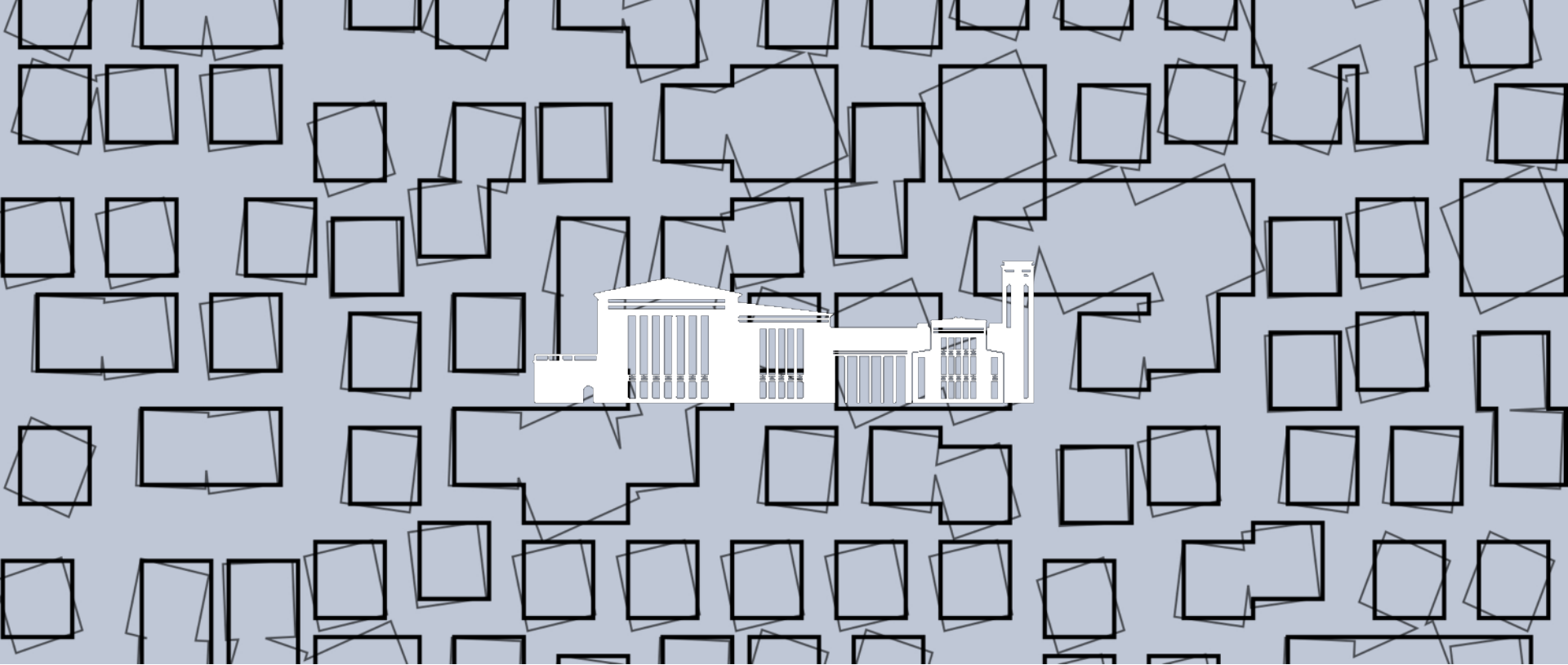
- > Creation - Out of the box
- > Can a machine be an artist?



- > Creation - Out of the box
- > Can a machine be an artist?

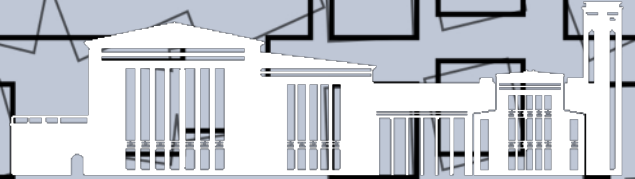
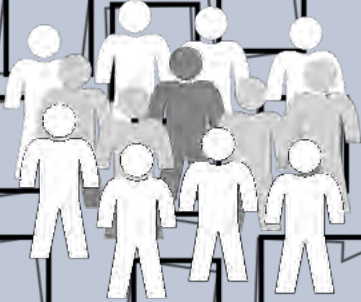


- > Creation - What makes us different?
- > Can a machine be an artist?

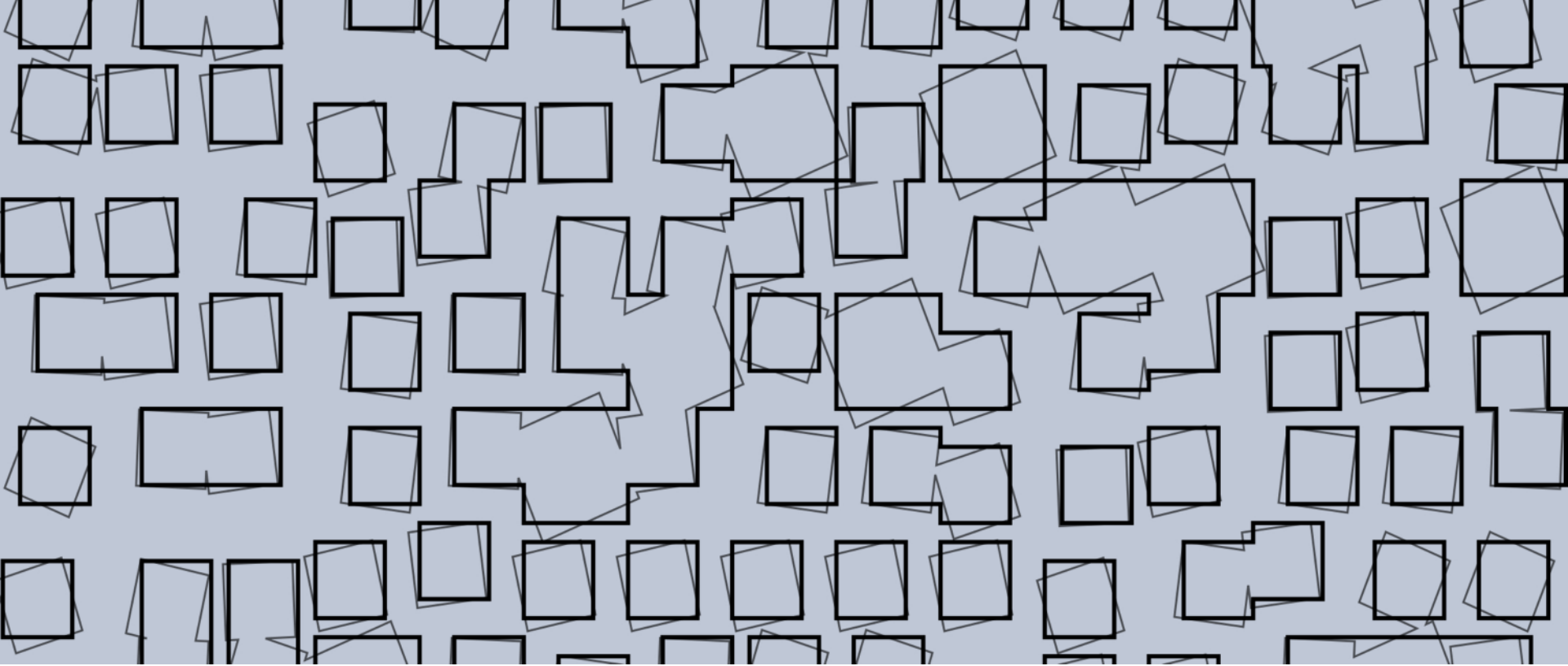


- > Institution
- > Can a machine be an artist?

Technique and skill | Expresses personality | Original creation | Institutional recognition



> Can a machine be an artist?

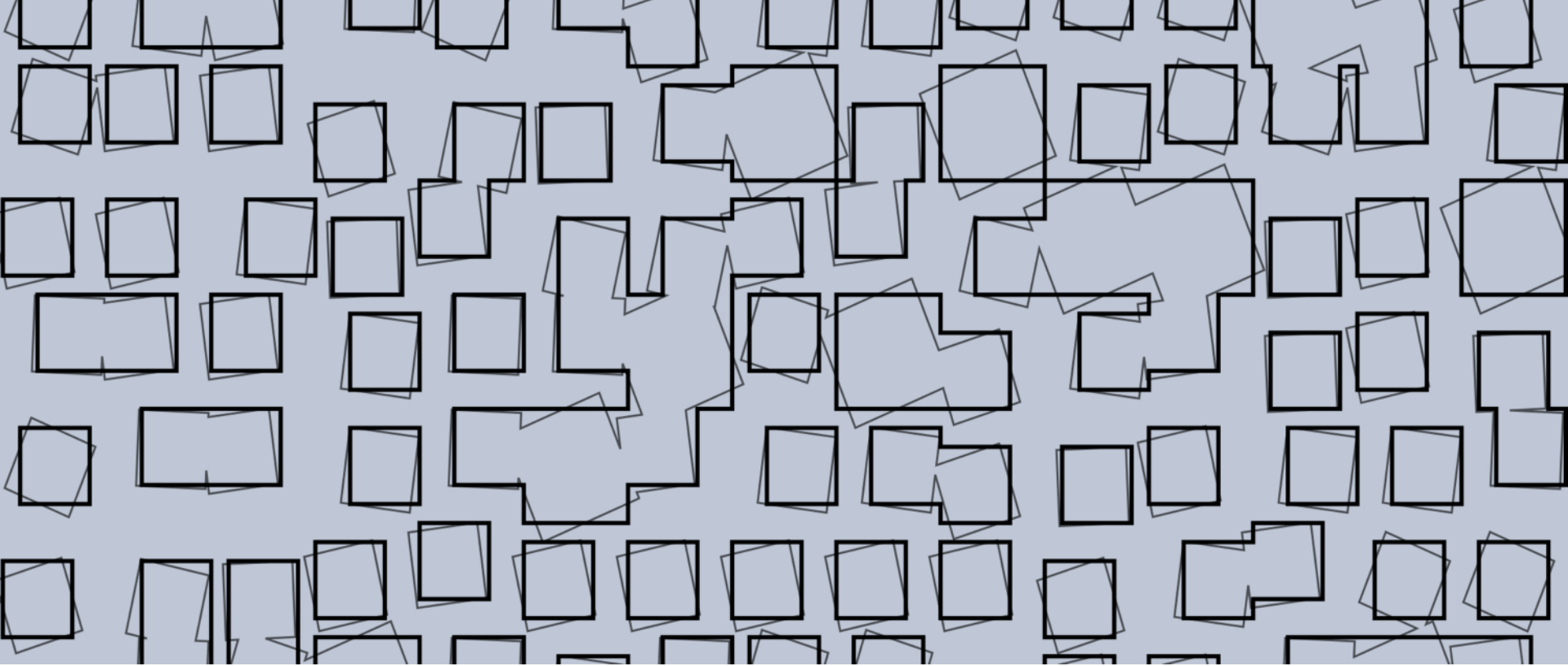


> Can AI produced artefact be an artwork?

something that:

- (1) possessing positive **aesthetic** properties;
- (2) being expressive of **emotion**;
- (3) being **intellectually challenging**;
- (4) being **formally complex and coherent**;
- (5) having the capacity to **convey complex meanings**;
- (6) exhibiting an individual **point of view**;
- (7) being **original**;
- (8) being an artifact or performance which is the product of a **high degree of skill**;
- (9) belonging to an **established artistic form**;
- (10) being the product of an **intention** to make a work of art

> Can AI produced artefact be an artwork?



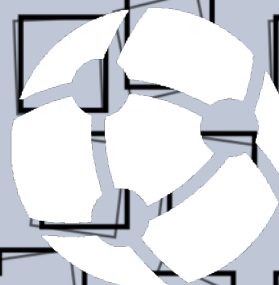
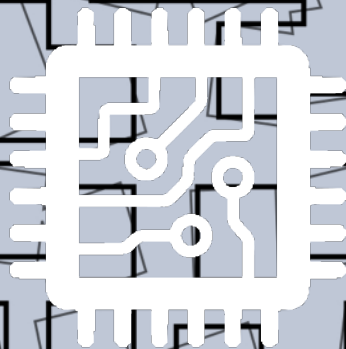
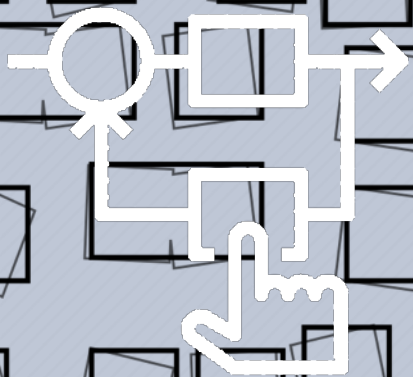
> Can AI and Art entwine?

The background of the slide is a light blue-grey color, covered with a dense, repeating pattern of black-outlined squares and rectangles. These shapes are slightly offset from each other, creating a layered, three-dimensional effect. A semi-transparent dark blue horizontal band runs across the upper third of the image, serving as a backdrop for the title text.

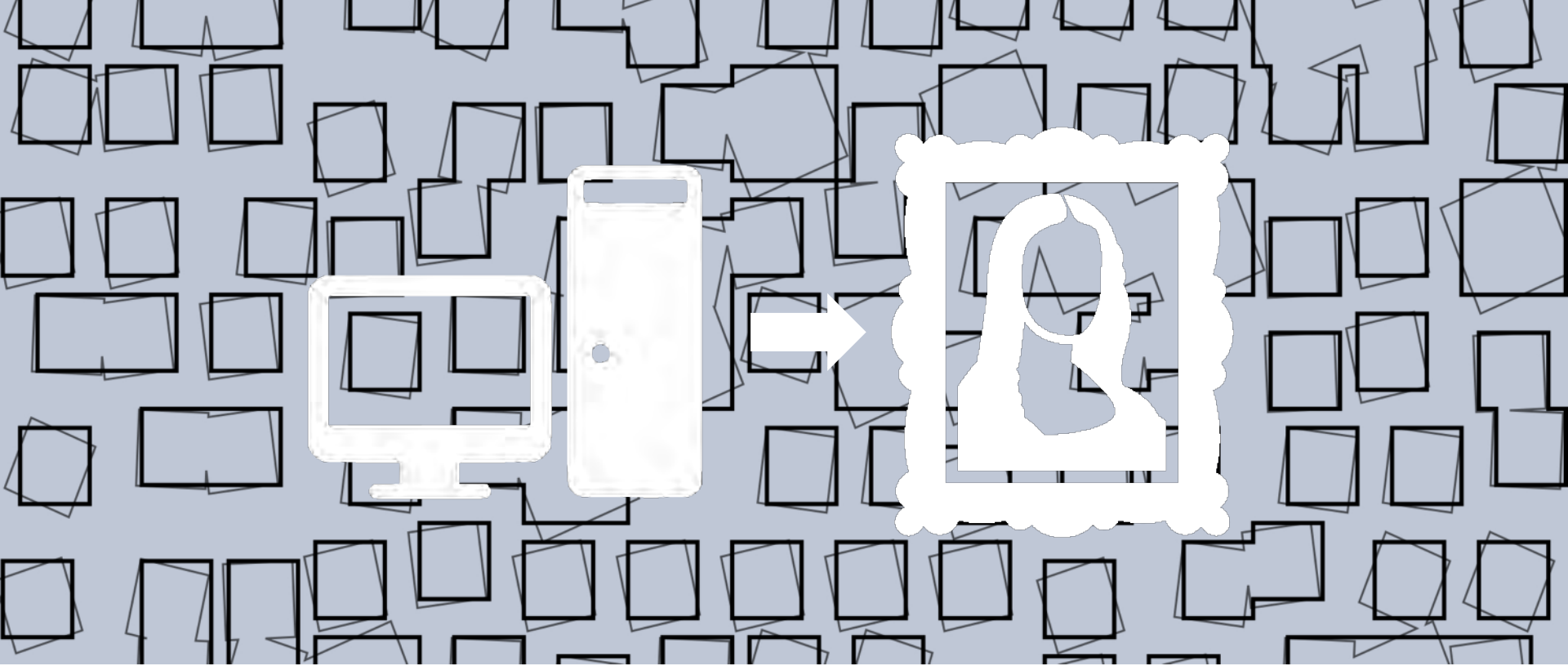
Art driven by number manipulation

- > Digital art
- > Can AI and Art entwine?

Art driven by number manipulation



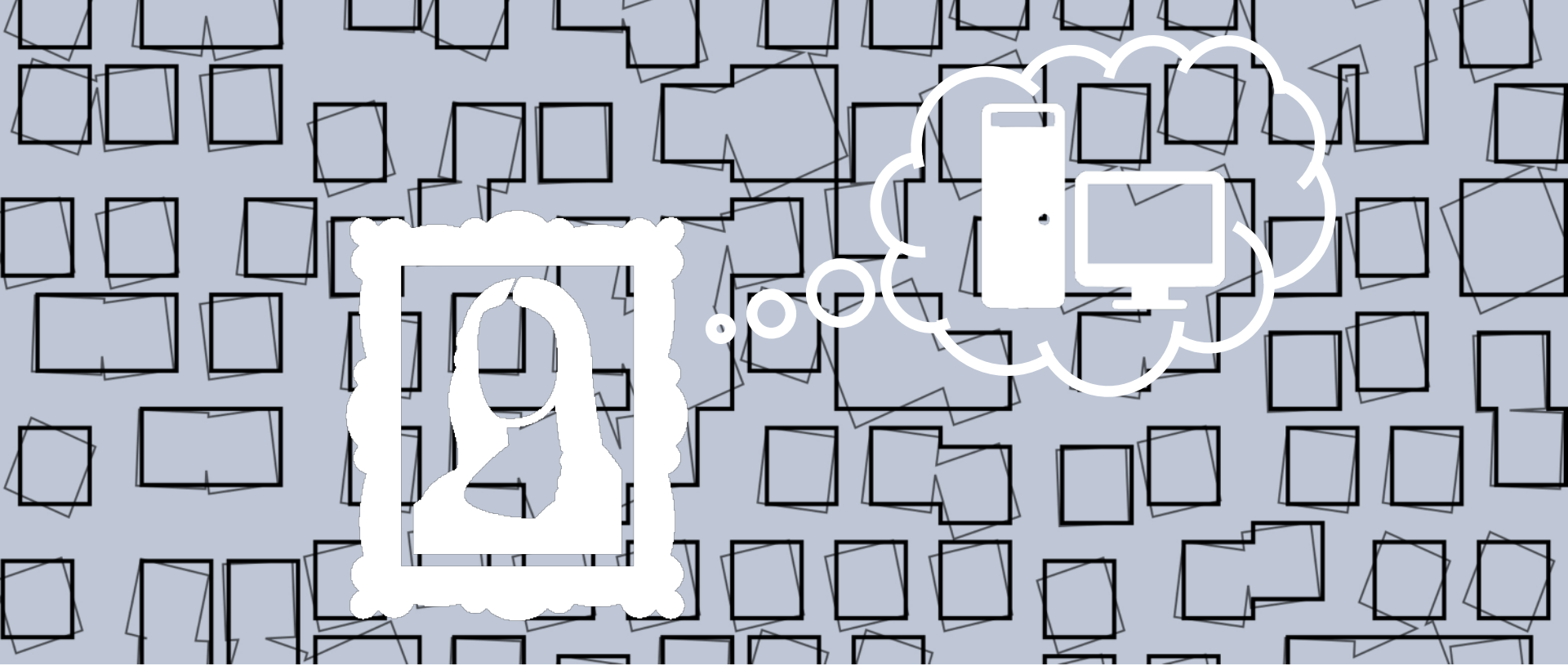
- > Digital art
- > Can AI and Art entwine?



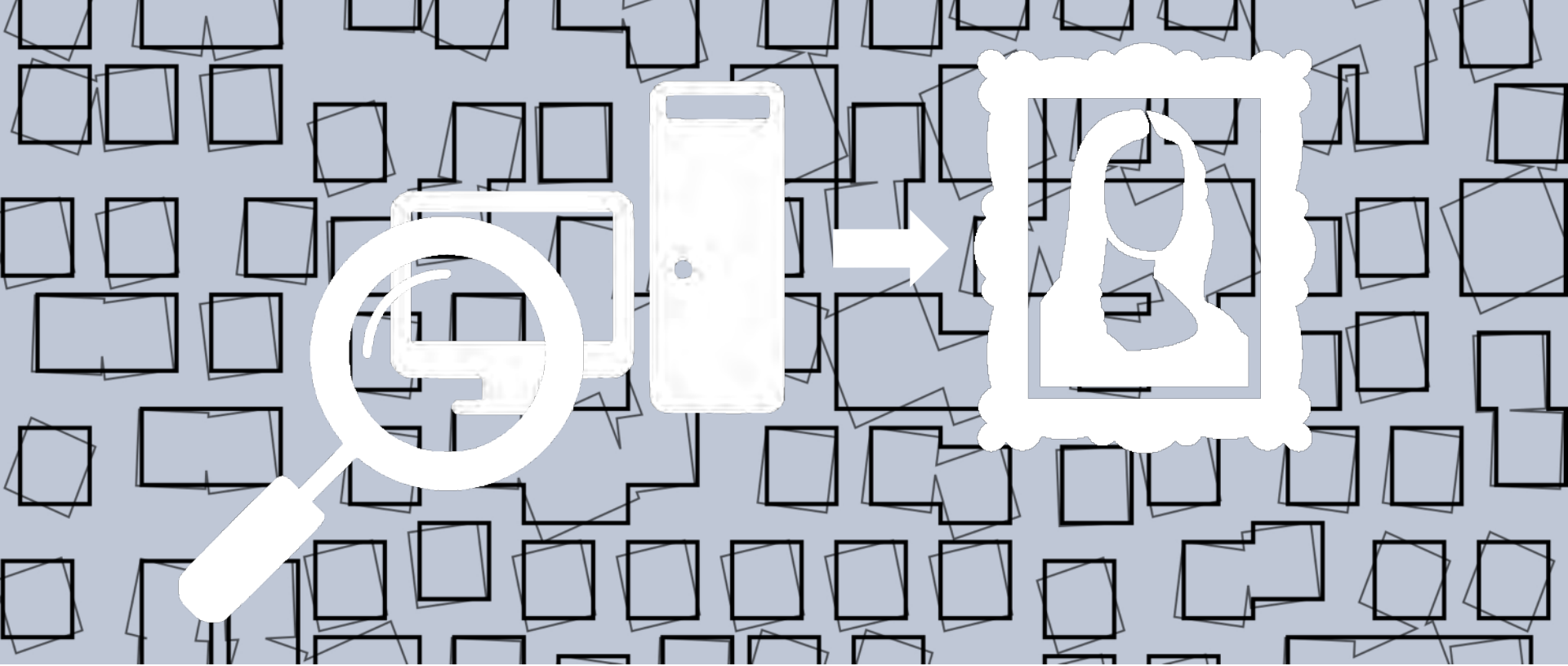
- > Tool
- > Can AI and Art entwine?



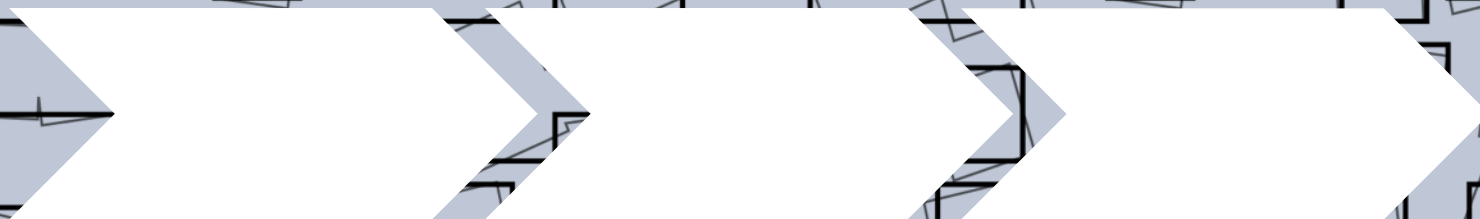
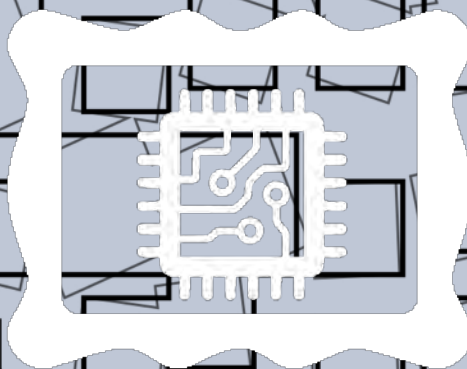
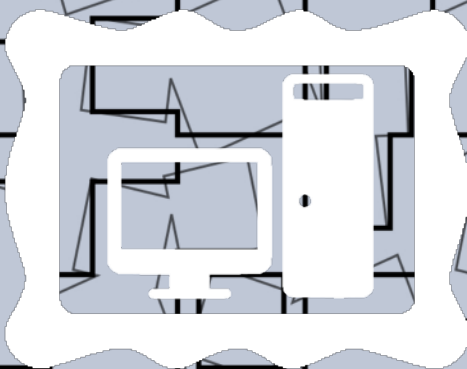
- > Material
- > Can AI and Art entwine?



- > Subject
- > Can AI and Art entwine?



- > Inspiration from science
- > Can AI and Art entwine?



- > Art history perspective
- > Can AI and Art entwine?



- > Inspiration for science
- > Can AI and Art entwine?


```

Visitor ID: Ujifdghhbkbiigwvp
Name: Harry
Gender: M
Age: 28
Generation: 0
  -> Currently visiting...
Visiting style:
  ant: 0.0693566198905
  butterfly: 0.306211508122
  fish: 0.344611653702
  grasshopper: 0.279820218285
PoI interest:
  Centre des arts: 0.0
  list-booth: 0.112542027909
  Salle des fetes: 0.112542027909
  Centre Culturel Francois Fillon: 0.112542027909
  Pergola Nova: 0.112542027909
  Mediatheque George Sand: 0.112542027909
  Ecole de Musique et de danse: 0.0996637767241
  Jardin des Roses: 0.112542027909
  La Serrurerie: 0.112542027909
  Theatre du Casino: 0.112542027909
Global co-presence time at different PoIs with other visitors:
  with Raymond (Utqgcsgwtcnucdiw, 0): 7.59502211412 minutes
  with Kathryn (Uccauxxadavkngss, 2): 0.133568517367 minutes
PoIs visited:
  Centre des arts during 0.133568517367 minutes
  list-booth during 0.0 minutes
  Salle des fetes during 0.0 minutes
  Centre Culturel Francois Fillon during 0.0 minutes
  Pergola Nova during 0.0 minutes
  Mediatheque George Sand during 0.0 minutes
  Ecole de Musique et de danse during 7.59502211412 minutes
  Jardin des Roses during 0.0 minutes
  La Serrurerie during 0.0 minutes
  Theatre du Casino during 0.0 minutes
Visit sequence: ['Ecole de Musique et de danse', 'Centre des arts', 'list-booth']
Looking for potential candidates to create an offset

```



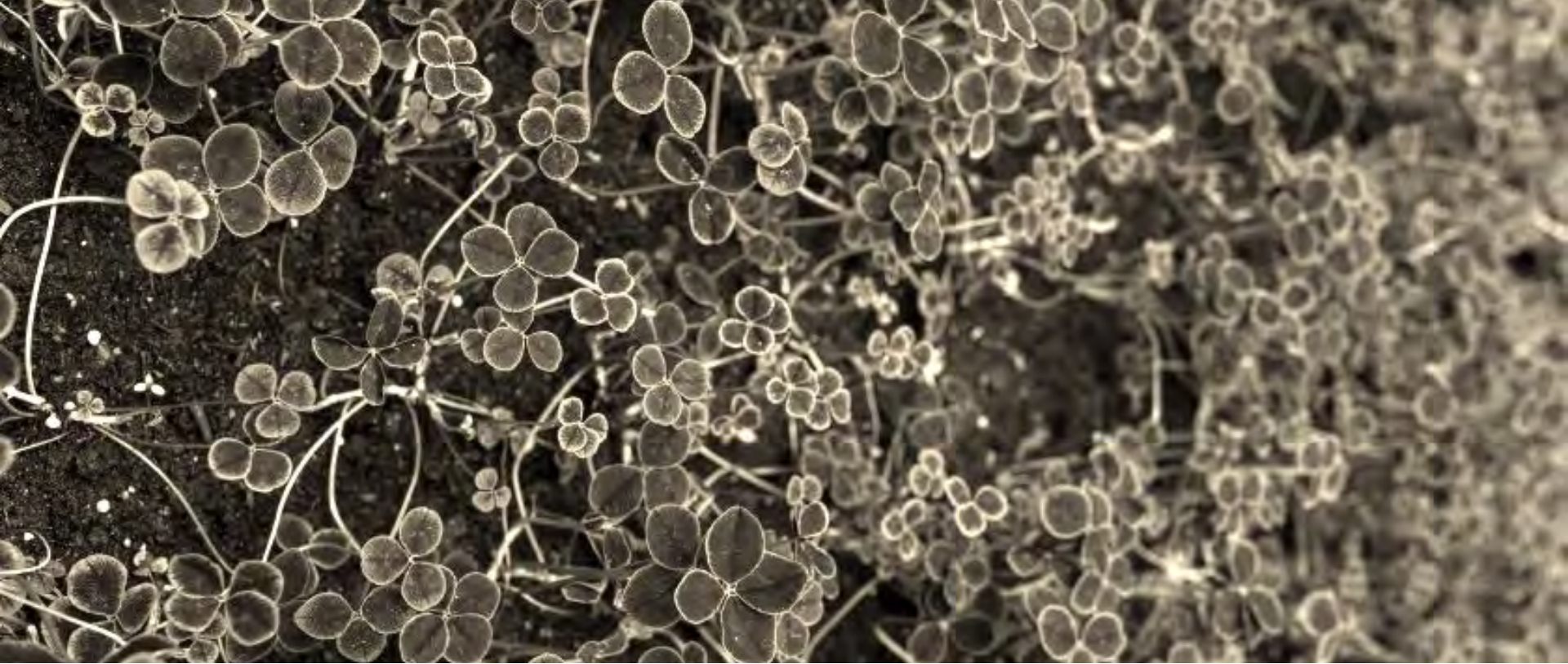
```

:09
> Alan will stay at Theatre du Casino 00 h 00 m 45 s
Cheryl (0) exits Jardin des Roses at time Mon, 17 Sep 2018 18:52:10
Tracey (0) exits Pergola Nova at time Mon, 17 Sep 2018 18:52:10
> Cheryl has updated visitor style: butterfly
> Tracey has updated visitor style: fish
> Brent has a visitor style: butterfly
Brent (0) enters in list-booth at time Mon, 17 Sep 2018 18:52:13
Johnny (0) enters in Theatre du Casino at time Mon, 17 Sep 2018 18:
52:13
> Brent will stay at list-booth 00 h 02 m 18 s
Barbara (0) enters in Theatre du Casino at time Mon, 17 Sep 2018 18
:52:13
> Johnny will stay at Theatre du Casino 00 h 00 m 07 s
> Barbara will stay at Theatre du Casino 00 h 00 m 07 s
James (0) exits list-booth at time Mon, 17 Sep 2018 18:52:18
> James has updated visitor style: fish
Harry (0) enters in list-booth at time Mon, 17 Sep 2018 18:52:19
> Brian has a visitor style: ant
Brian (1) enters in La Serrurerie at time Mon, 17 Sep 2018 18:52:20
> Brian will stay at La Serrurerie 00 h 06 m 38 s
> Harry will stay at list-booth 00 h 00 m 14 s
Johnny (0) exits Theatre du Casino at time Mon, 17 Sep 2018 18:52:2
1
Barbara (0) exits Theatre du Casino at time Mon, 17 Sep 2018 18:52:
21
> Johnny has updated visitor style: fish
> Barbara has updated visitor style: ant
Shirley (1) exits Theatre du Casino at time Mon, 17 Sep 2018 18:52:
27
> Shirley has updated visitor style: butterfly
Ellis (0) enters in La Serrurerie at time Mon, 17 Sep 2018 18:52:34
Donald (0) exits Ecole de Musique et de danse at time Mon, 17 Sep 2
018 18:52:35
> Ellis will stay at La Serrurerie 00 h 00 m 40 s
Daniel (1) exits Mediatheque George Sand at time Mon, 17 Sep 2018 1
8:52:35
Harry (0) exits list-booth at time Mon, 17 Sep 2018 18:52:35
> Donald has updated visitor style: ant
> Daniel has updated visitor style: fish
> Harry has updated visitor style: butterfly
Margaret (0) exits La Serrurerie at time Mon, 17 Sep 2018 18:52:36

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> Thibaud Latour, *Traces*. 2018

$$\frac{|' \wedge |)' - |' \wedge | \wedge |}{- |' \wedge | \wedge |}$$



> Lab[au], *Good Luck*. 2019



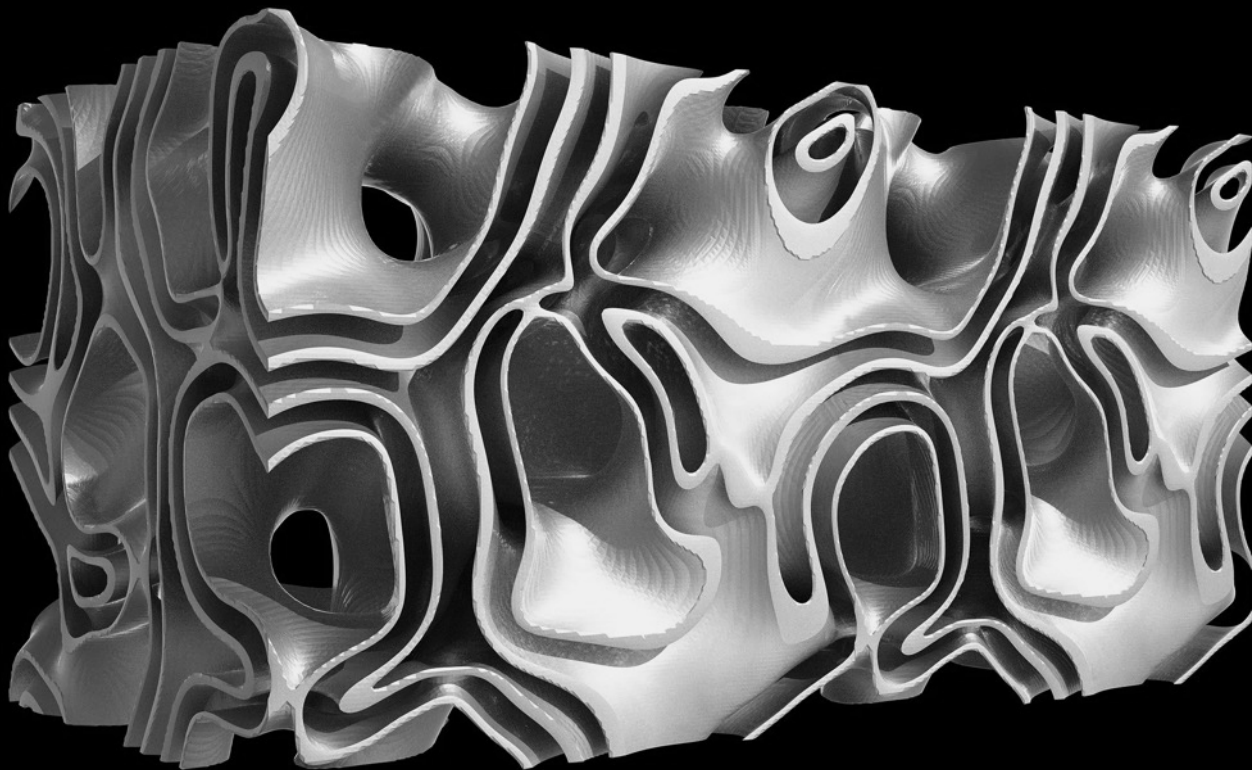
> Lab[au], *Thousand Six Hundred Light Years*. 2006-2016



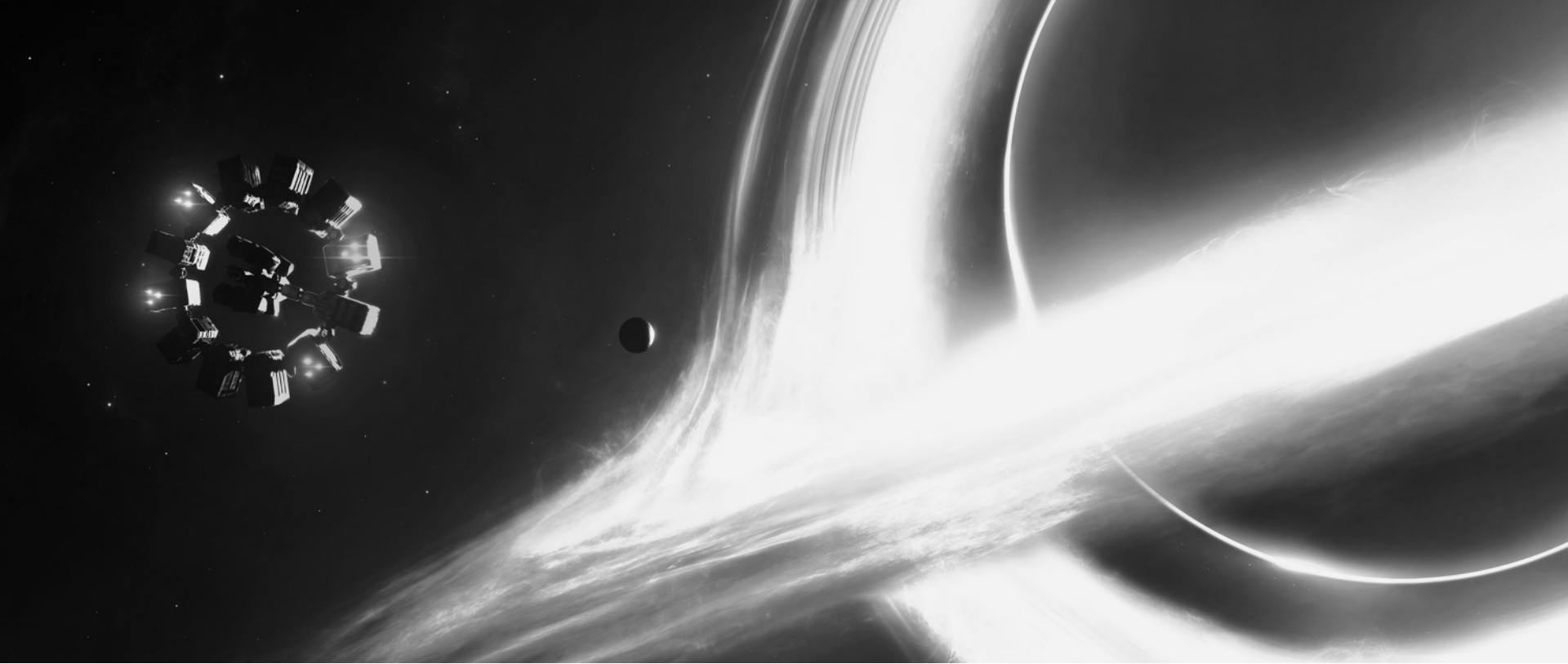
> Bill Viola, *Le ciel et la terre* - video installation. 1992



- > Kazuhiko Hachiya, *Inter DisCommunication Machine*
- > Interactive installation. 1993



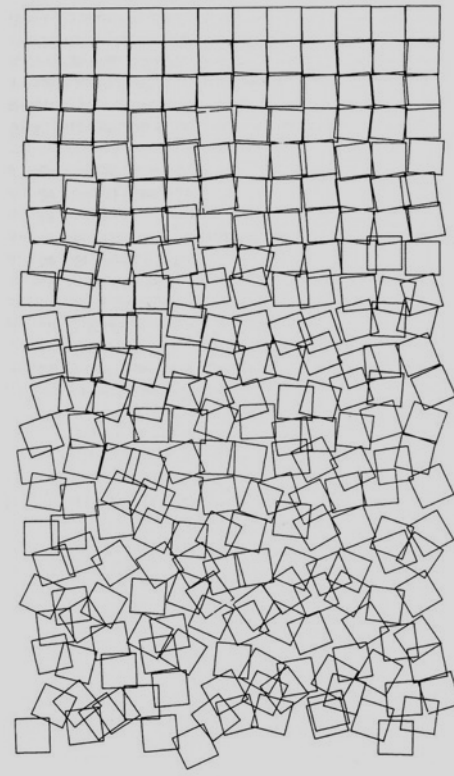
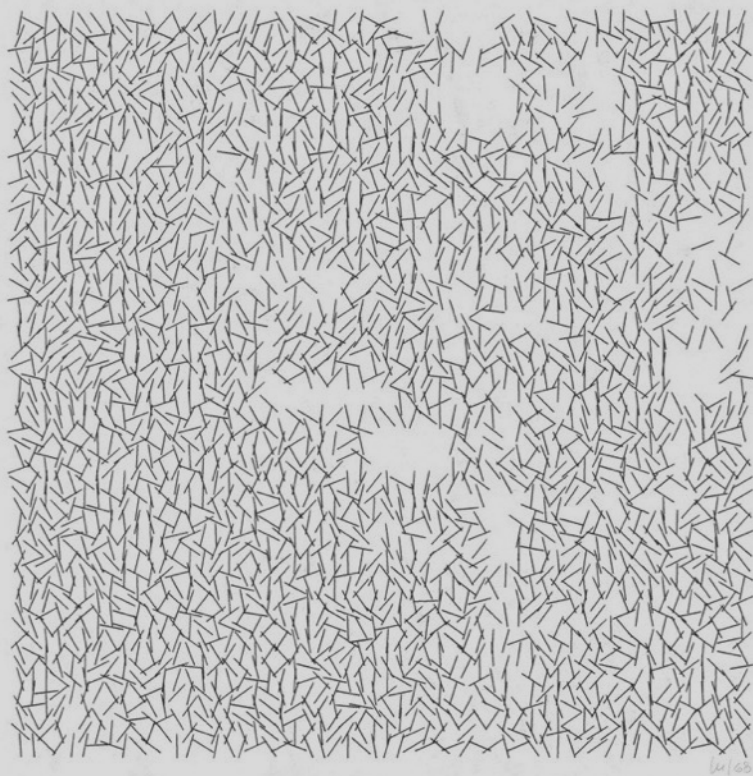
> Michael Hansmeyer, *Reaction-diffusion*. 2009



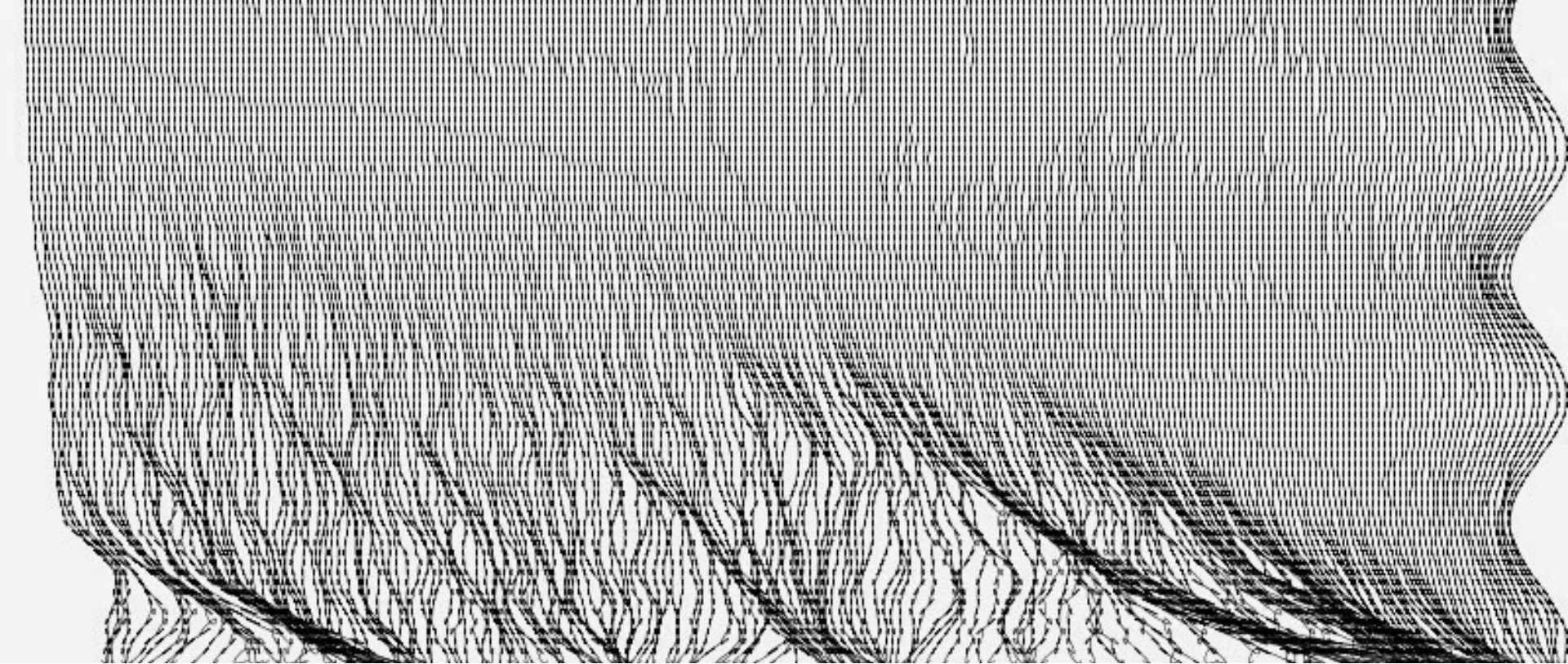
> *Interstellar*, Christopher Nolan. 2014



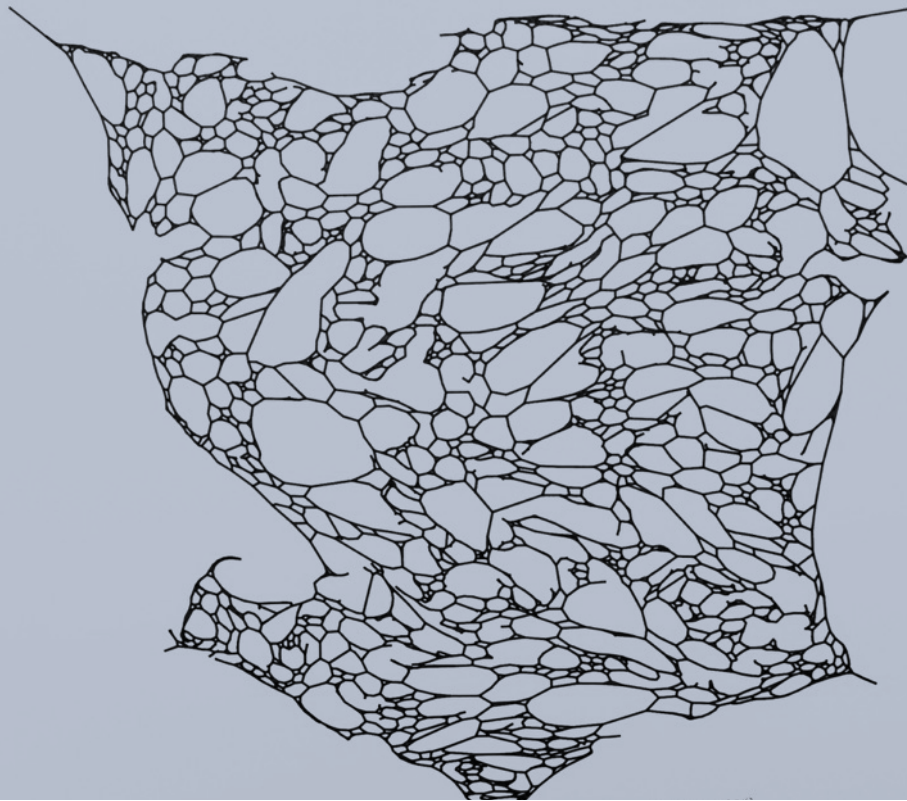
> *Pi: Faith in Chaos*, Darren Aronofsky. 1998



> Vera Molnar, *Interruptions*. 1968 | Georg Nees, *Schotter*. 1968



- > Thibaud Latour, *Wave-R0.1SX5.0SY3.0T0.3A15.0F0.05P0.5*.
- > Generative drawing. 2017



- > Anders Hoff, *2be71ed*.
- > Generative drawing. Plotter. 2018



- > Christa Sommerer, Laurent Mignonneau, *A-Volve*
- > Interactive installation. 1994



> *Minority Report*, Steven Spielberg. 2002



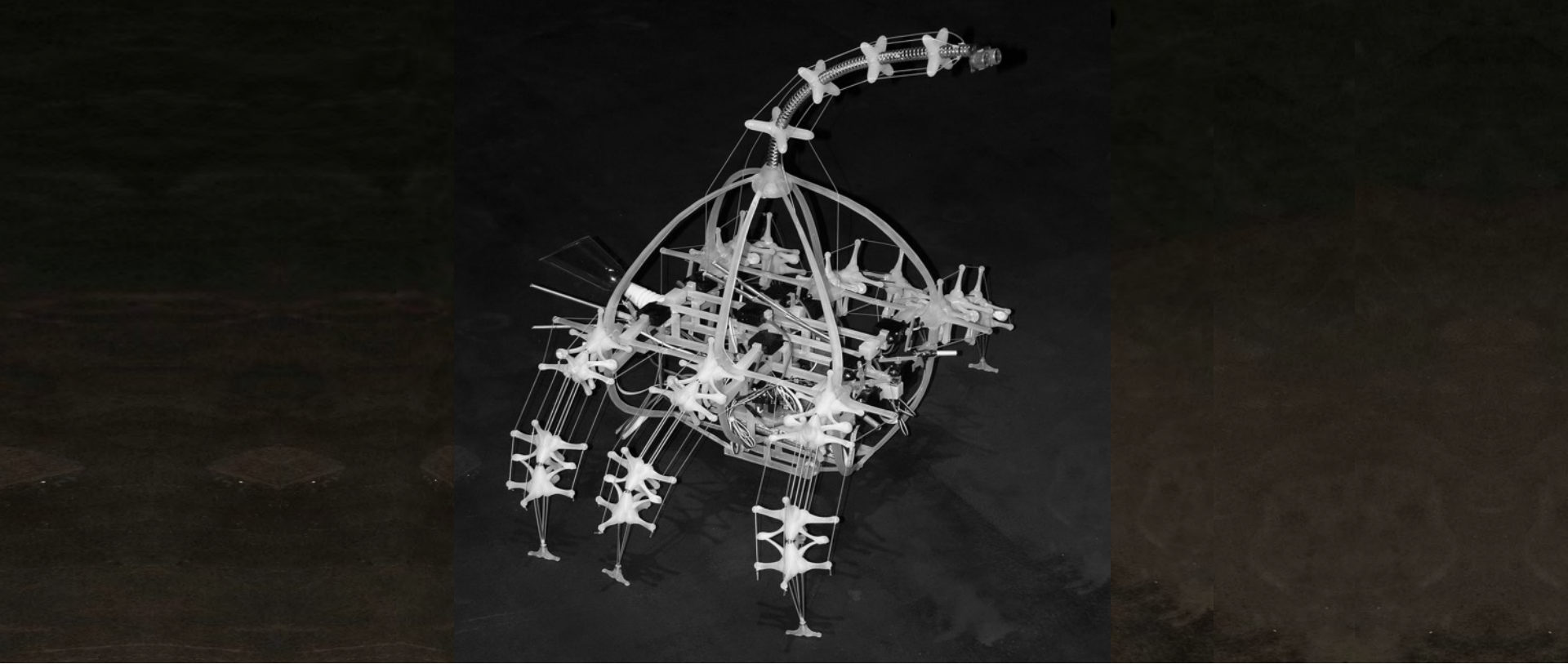
- > Alvaro Cassinelli, *Khronos Projector*. 2006
- > Ars Electronica



> Louisa Clement, *Aporias*. 2019



- > Uwe Rieger, Yinan Liu, *Light Tank*. 2018
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> Ken Rinaldo, Mat Howard, *Autotelematic Spider Bots*. 2006



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