

TEACHING TO FISH

RAPH
KOSTER

**There's an old saying
that it is better to
teach a man to fish
than to hand him
a tuna sandwich.**

**Leaving aside the question of how
practical it is for one person to
catch a tuna by himself,**

**It's worth thinking about the
fishing game we'd make, if
teaching fishing was our goal.**

**Once upon a time, four designers
gathered by the seaside to talk
about their fishing games.**

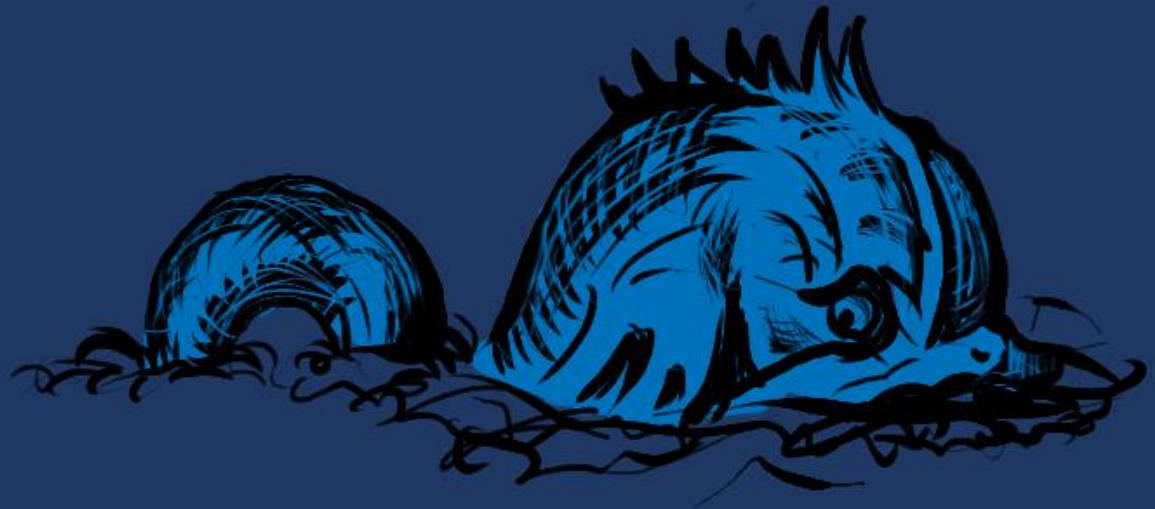
**The first brought in a game with a
custom fishing controller.**

The second had a luck-based system with a list of possible things to pull up.

The third had a really robust chat system, with the buzzing of dragonflies and evocative graphics.

The last had a detailed ecological simulation of the river, with the correct species of fish under the water.

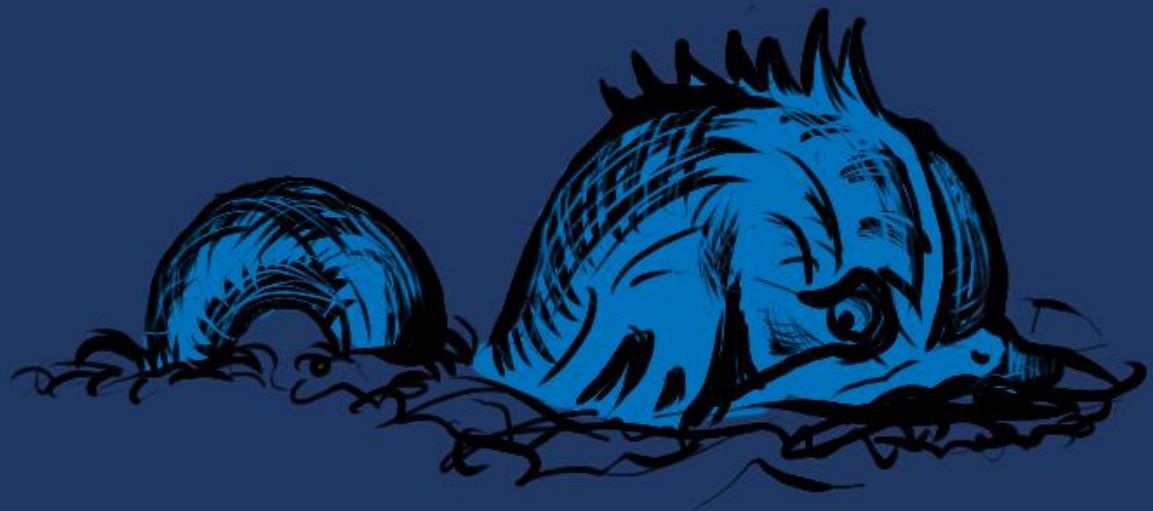
**Right about then, a magic fish
surfaced from the water.**



**The designers were horrified, and
tried to report it as a bug.**

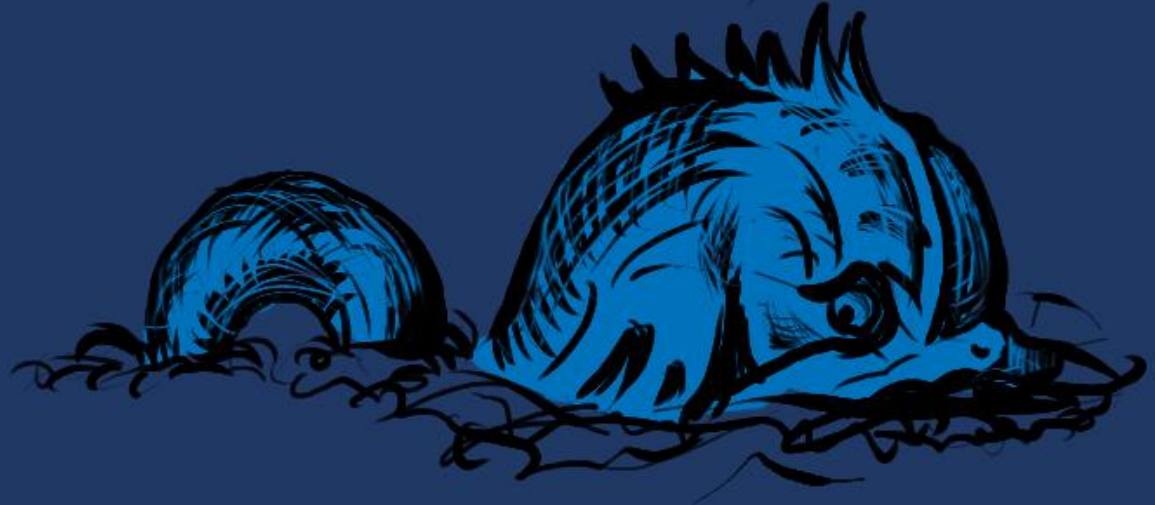
It came back “Do Not Fix” from the producer, with a note saying “it’s not a bug, it’s a fish, sure.”

“None of your games are the world I know,” said the fish.



The first one admitted that he just spawned fish when the player cast his rod.

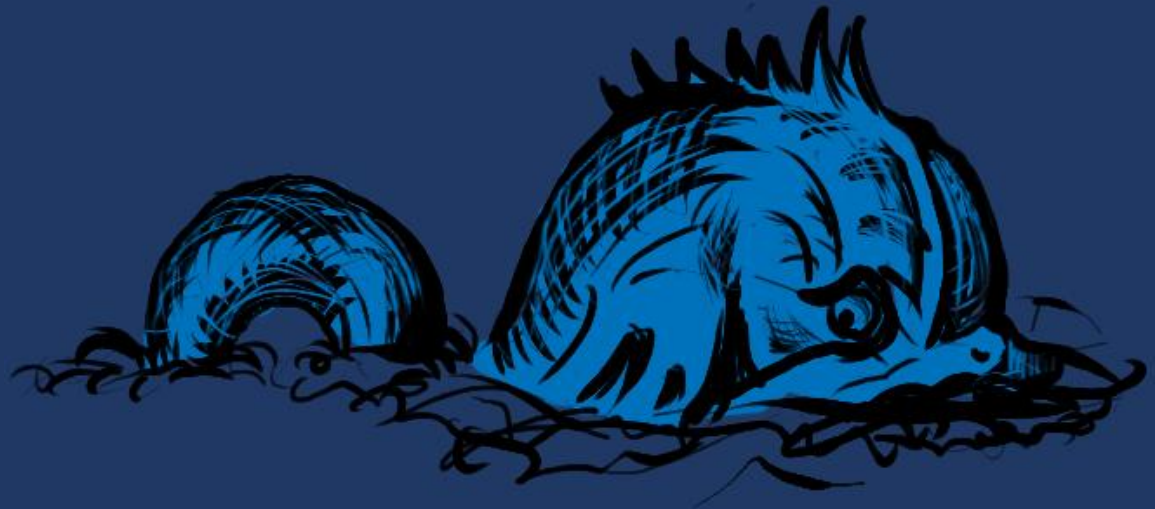
**“Fish do not spawn via
abiogenesis,” said the fish.
“Nothing does. That was
established in 1668 by Francesco
Redi.”**



**The second admitted that casting
just meant clicking on the water
and there was no skill involved.**

The fish was not impressed.

“We’re not stupid, you know.”

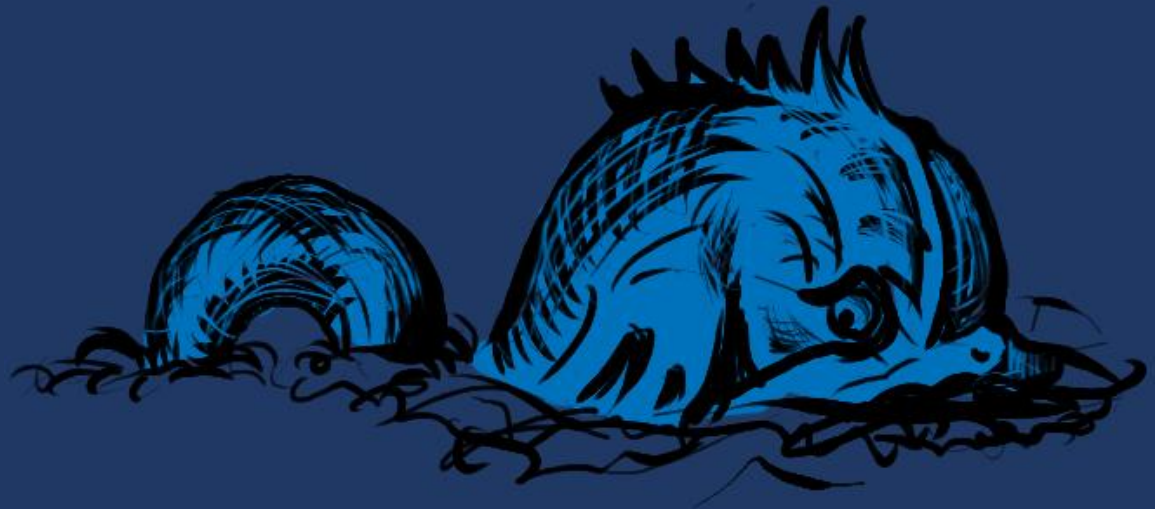


The third argued that fishing itself was the least relevant of the activities experienced while fishing.

**The others told him that he
couldn't have his tuna sandwich.**

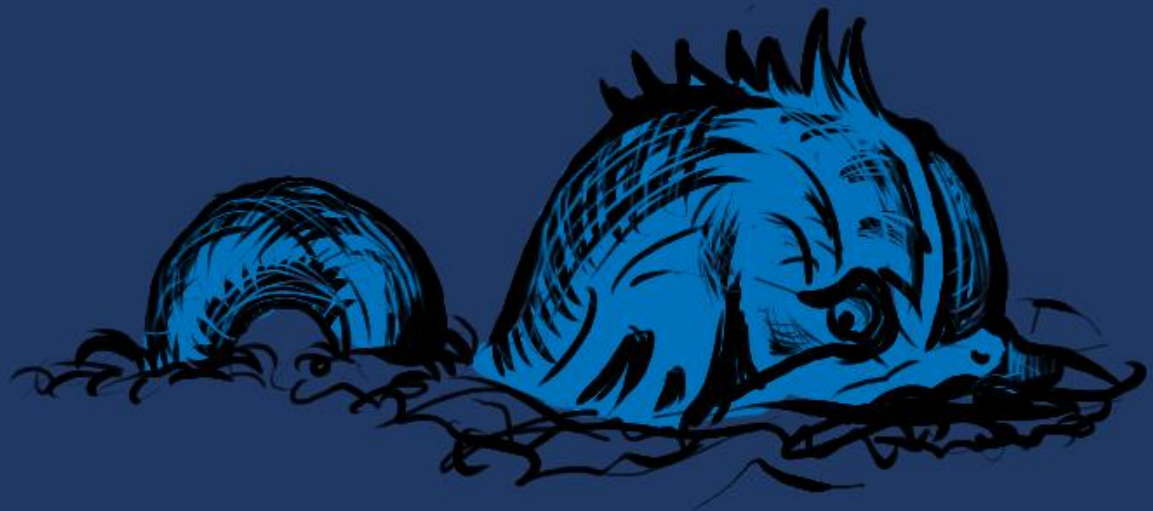
The last said that none of the others actually captured what was interesting about fishing: the fish.

The magic fish preened.



None of these teachers were wrong. Each one had made a fun game. But they were teaching different things.

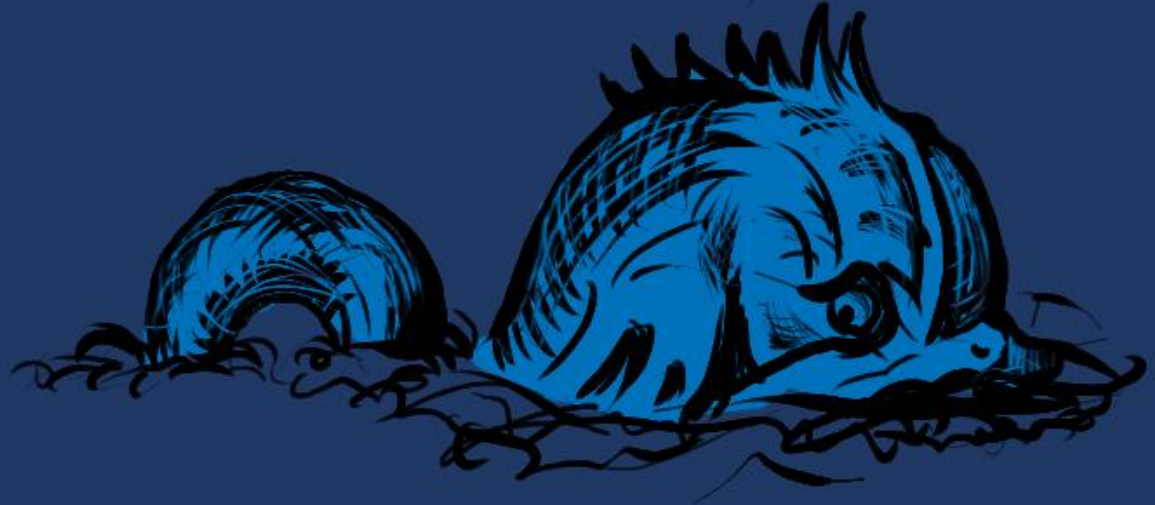
**“There are no
wrong games,”**



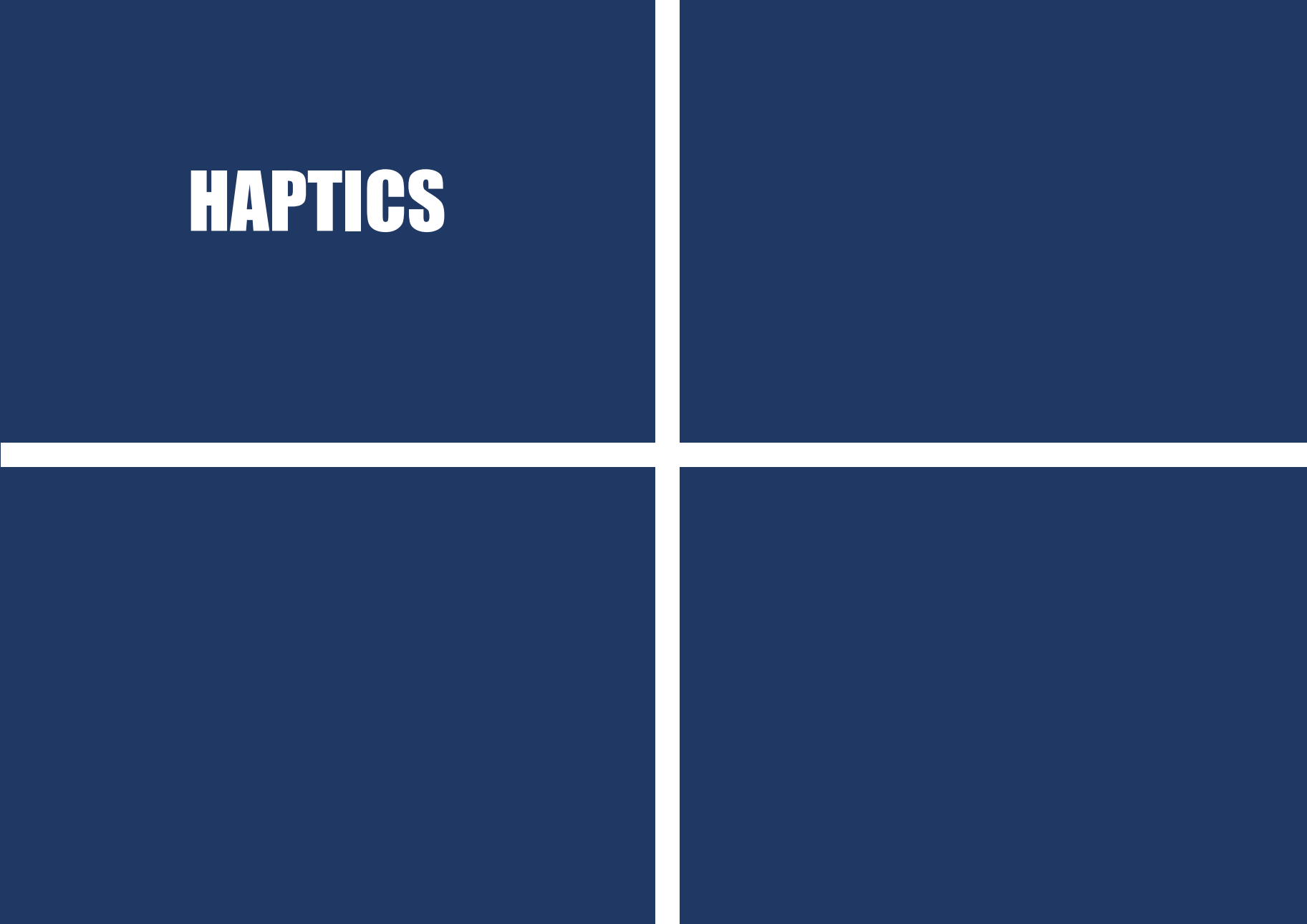
“But there are right games for different porpoises,” said the magic fish.

**The designers didn't groan,
because real game designers
love puns.**

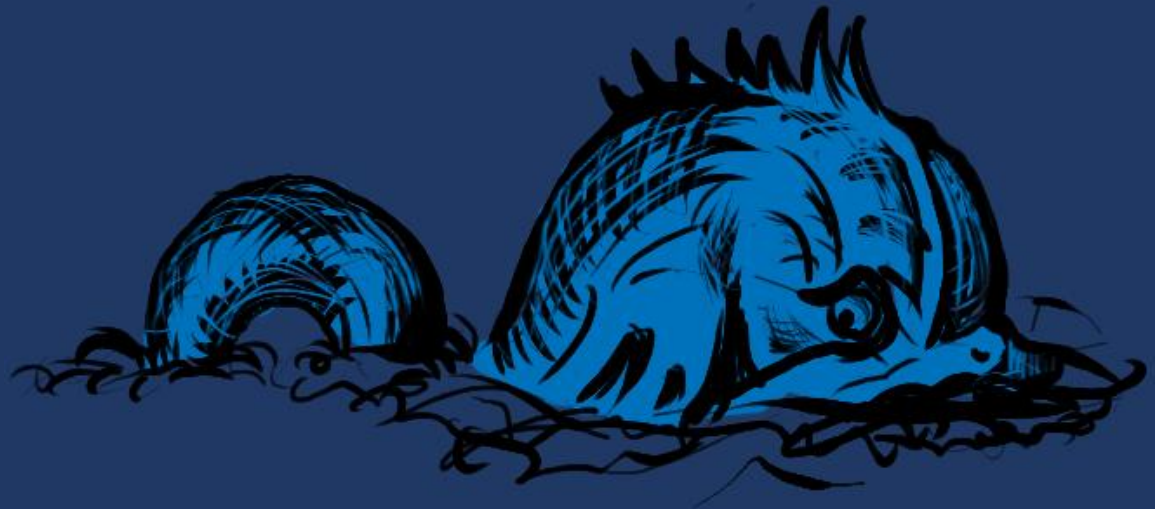
**“You have made a game about
haptics,” said the magic fish to
the first designer.**

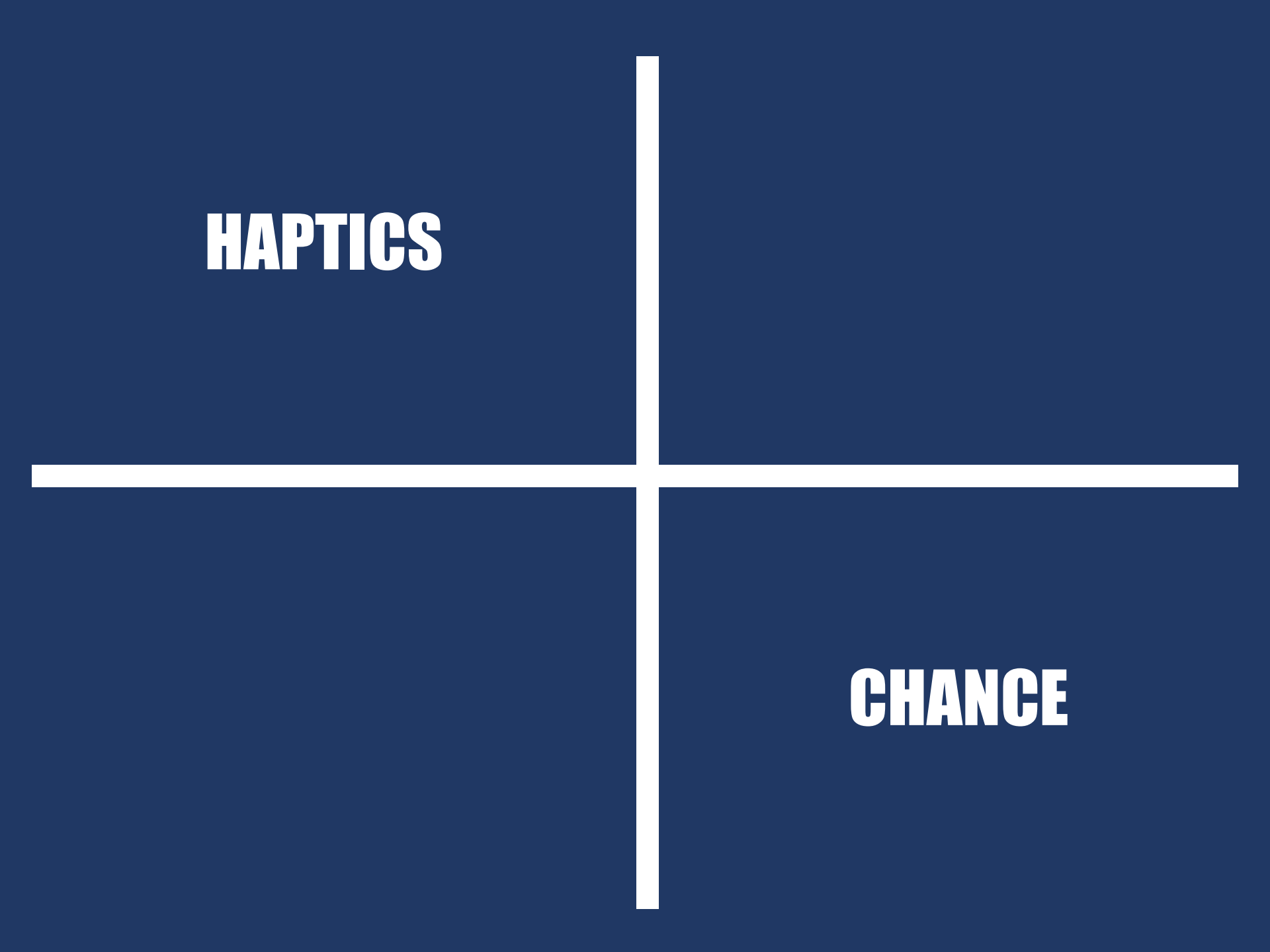


HAPTICS

A white crosshair graphic consisting of a horizontal line and a vertical line intersecting at the center of the image. The lines are thick and extend towards the edges of the frame.

**“Your game is about chance,” he
said to the second designer.**

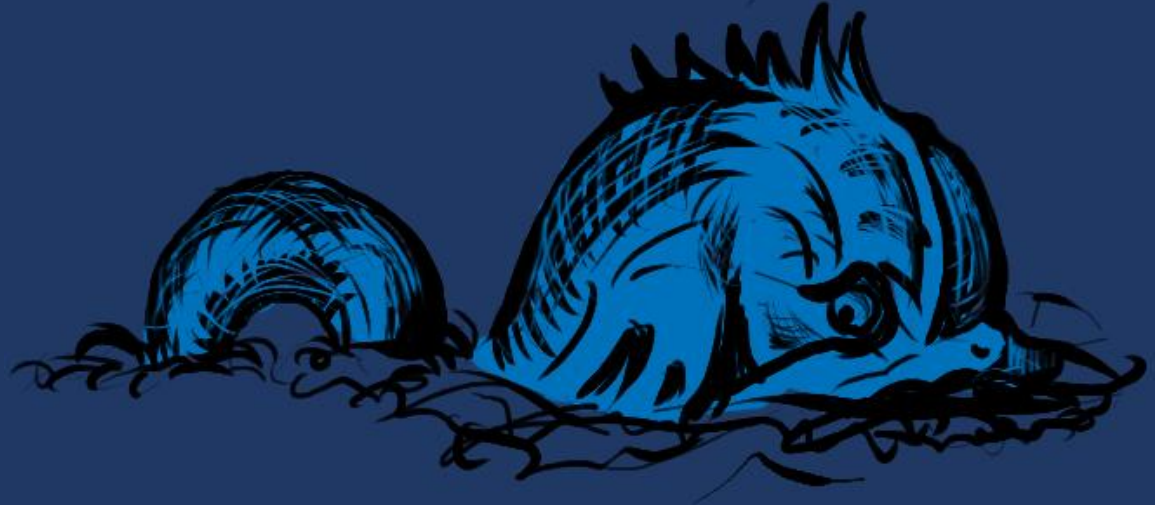


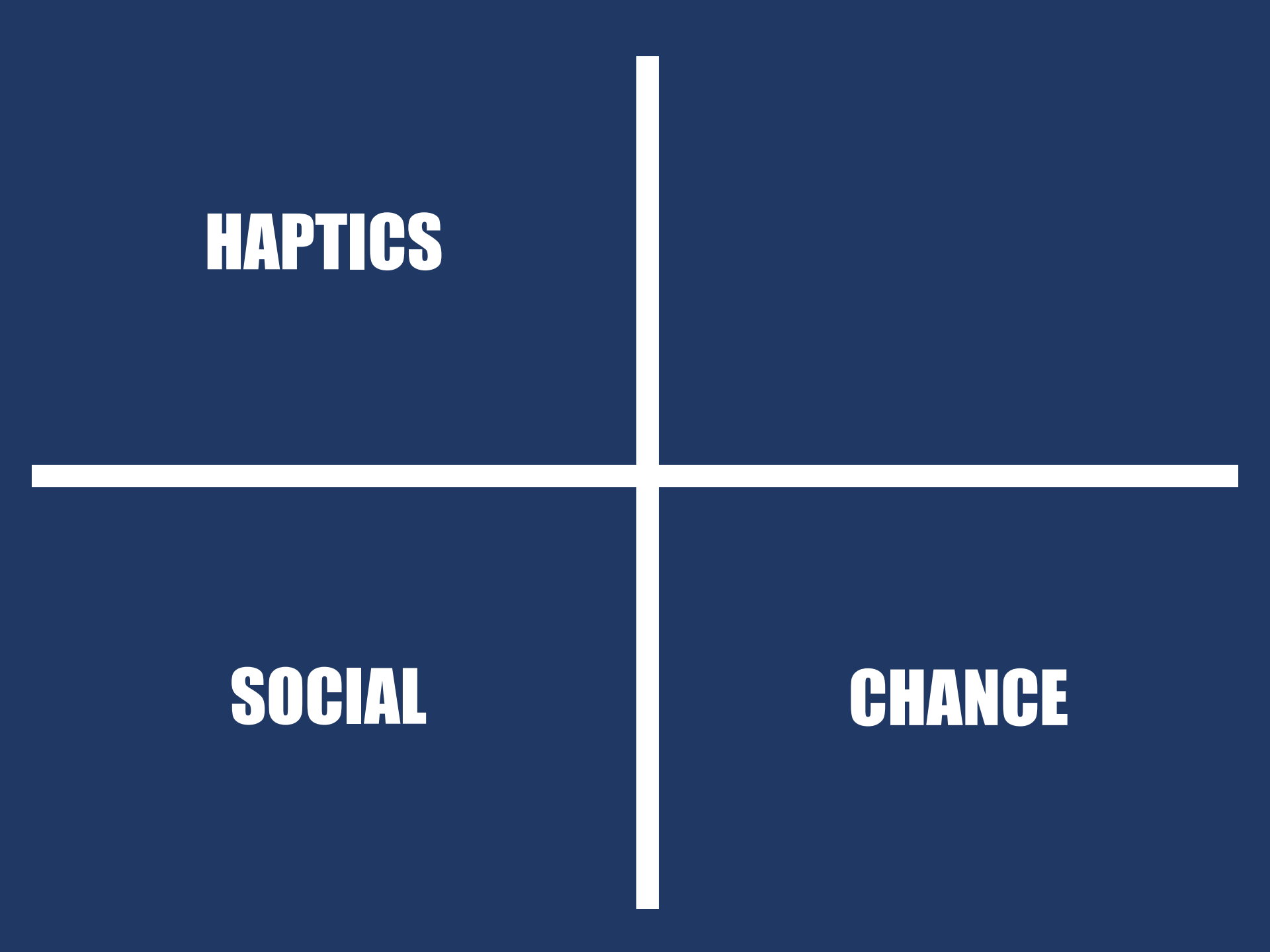


HAPTICS

CHANCE

**To the third designer, he said,
“Yours is about other people.”**



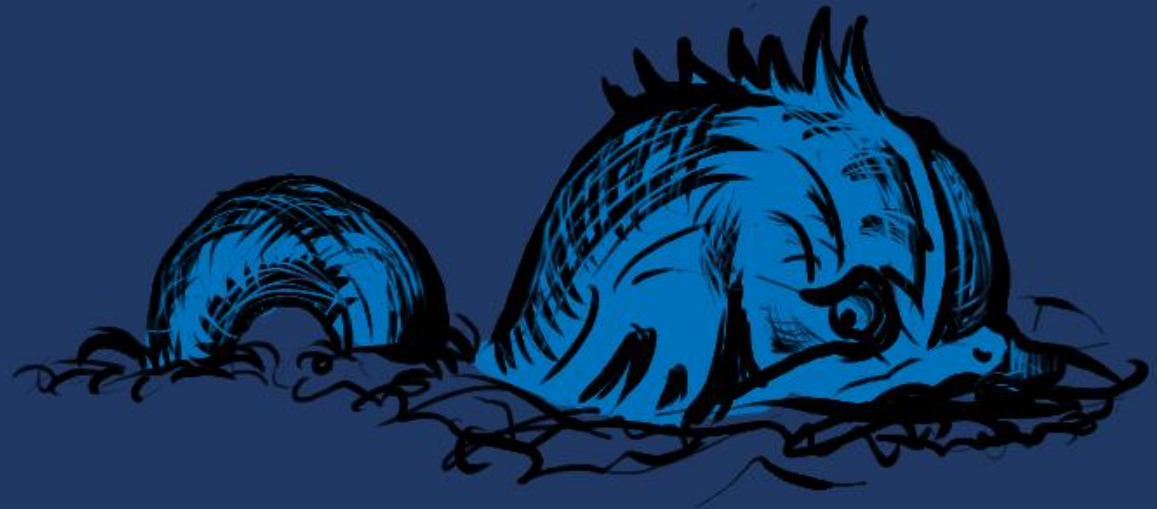


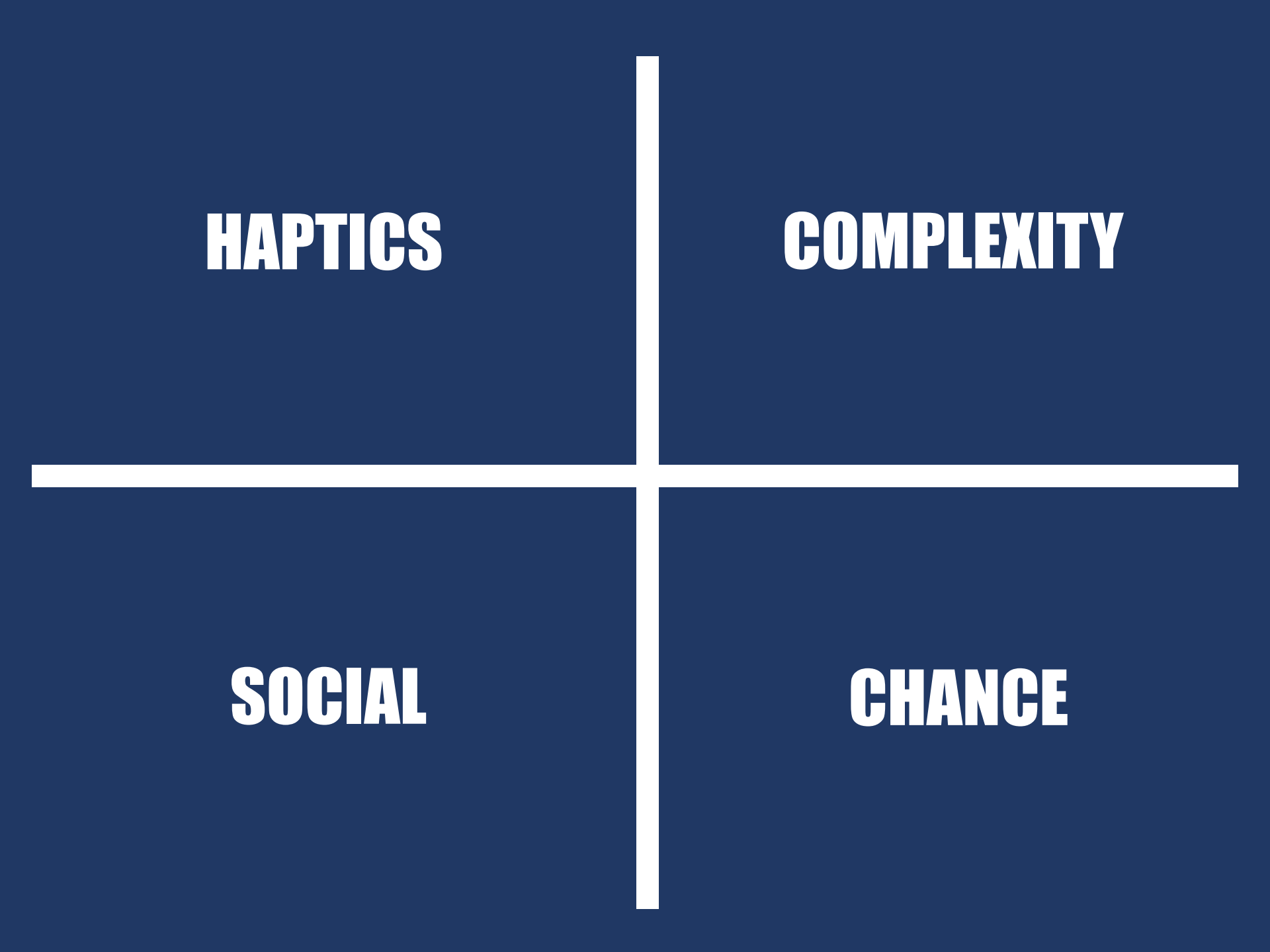
HAPTICS

SOCIAL

CHANCE

**“And yours,” he said to the last, “is
about complexity.”**





HAPTICS

COMPLEXITY

SOCIAL

CHANCE

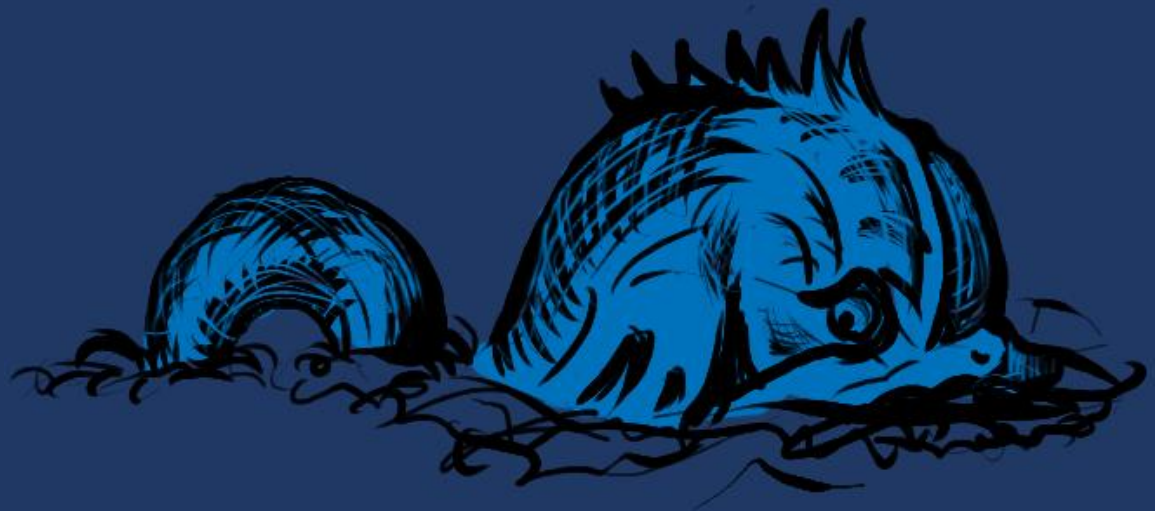
Each of these problem sets is large, of course.

In a sense, they are all about complexity, really.

People are hard.

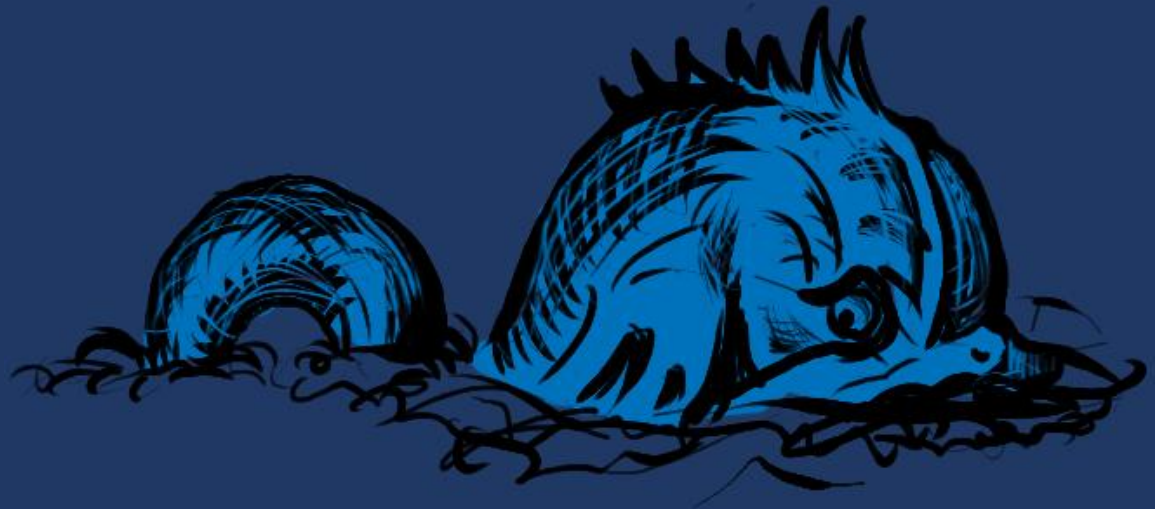
**Our bodies are hard to manage.
Anyone who has ever tripped
knows that.**

**“Fish don’t have that problem,”
said the magic fish smugly.**



**And of course, chance is easy, but
our brains suck at it.**

“Those are the four big types of games,” the fish said.



HAPTICS

**SPORTS, VERTIGO,
REFLEX TIME**

COMPLEXITY

**PERCEPTION OF
PSPACE-COMPLETE
TO NP-HARD**

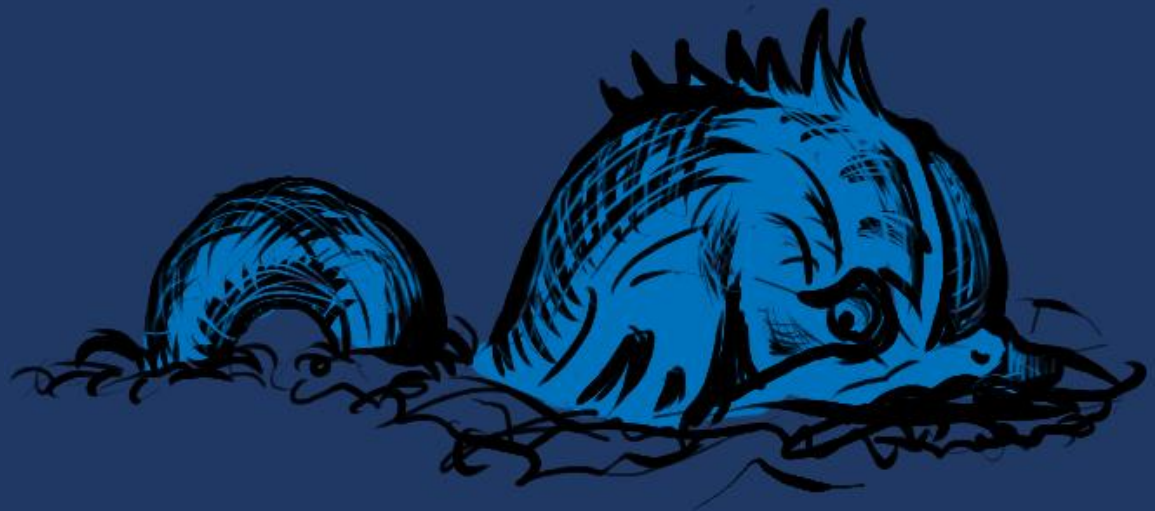
SOCIAL

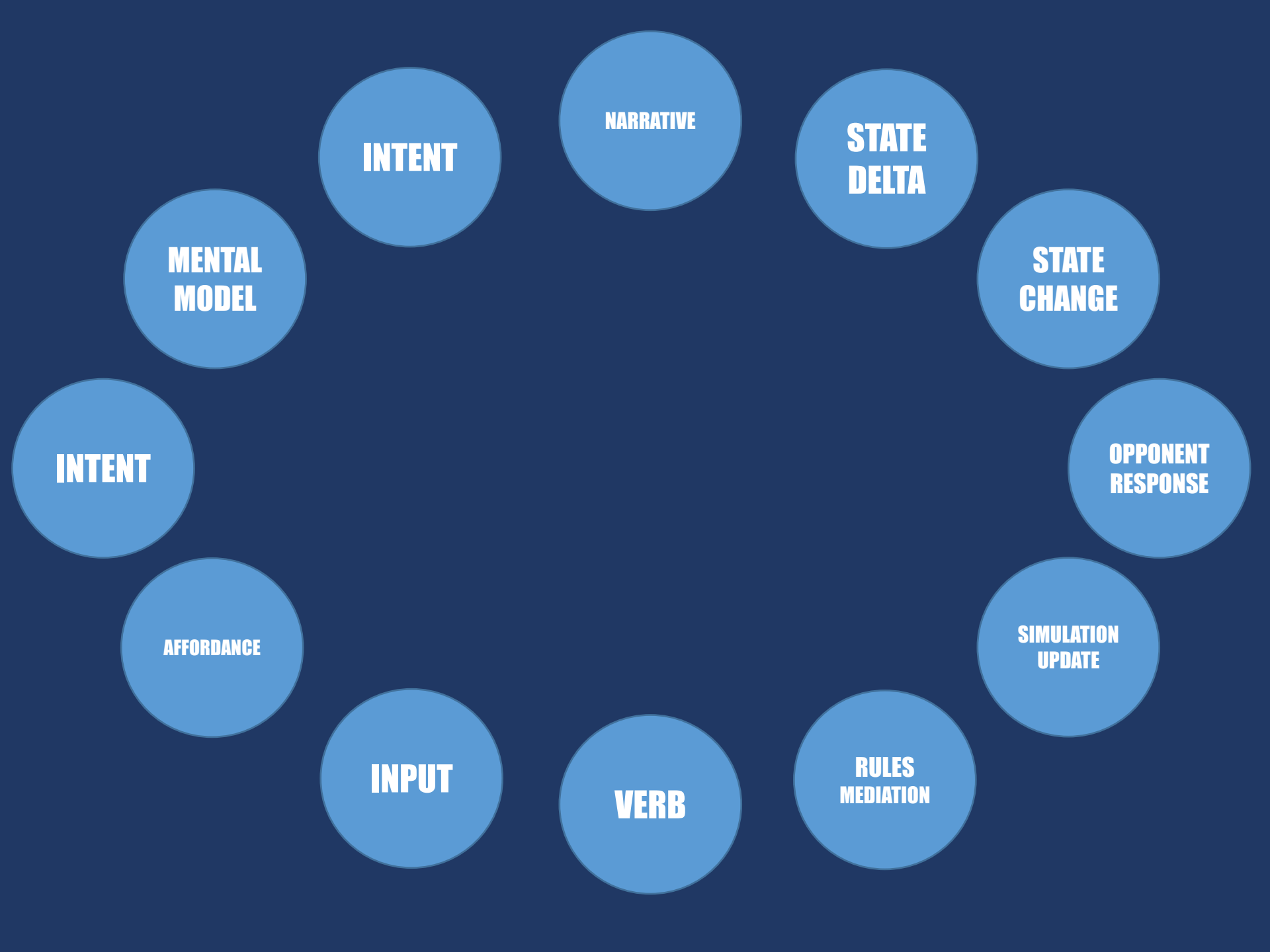
**HIERARCHY,
MENTORSHIP,
TRIBALISM**

CHANCE

**MISTAKEN BELIEF IN
A PATTERN**

**“Most games have a little of each,
of course,” the fish added.**





INTENT

NARRATIVE

**STATE
DELTA**

**STATE
CHANGE**

**OPPONENT
RESPONSE**

**SIMULATION
UPDATE**

**RULES
MEDIATION**

VERB

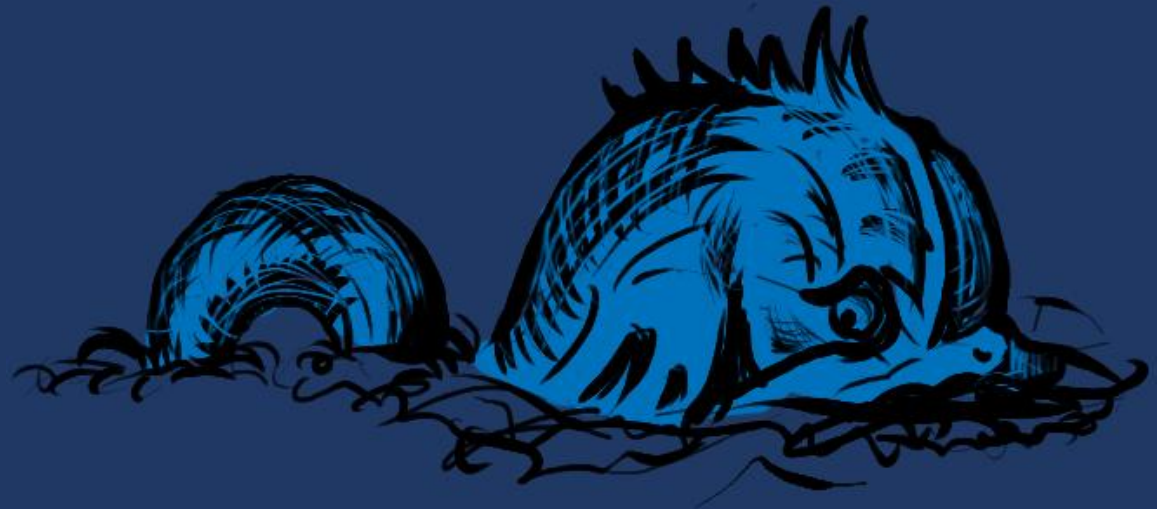
INPUT

AFFORDANCE

INTENT

**MENTAL
MODEL**

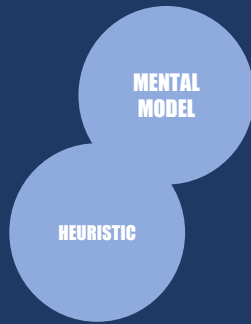
“Of course, I am oversimplifying.”

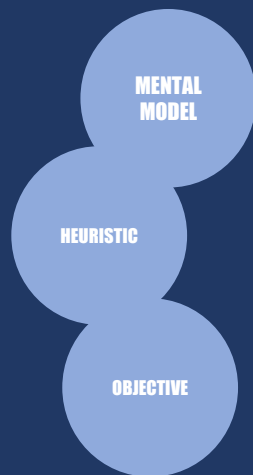


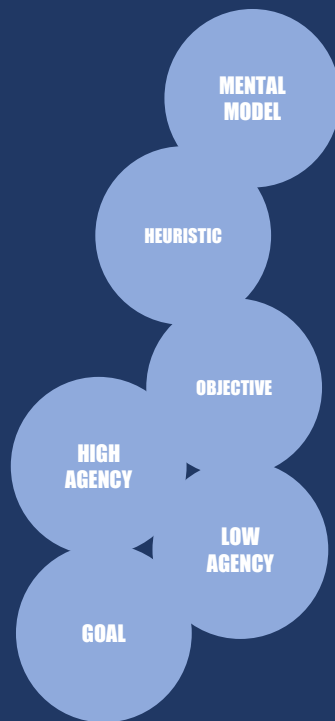
**The designers looked
bewildered. “Really? ‘Cause that
looked complicated.”**

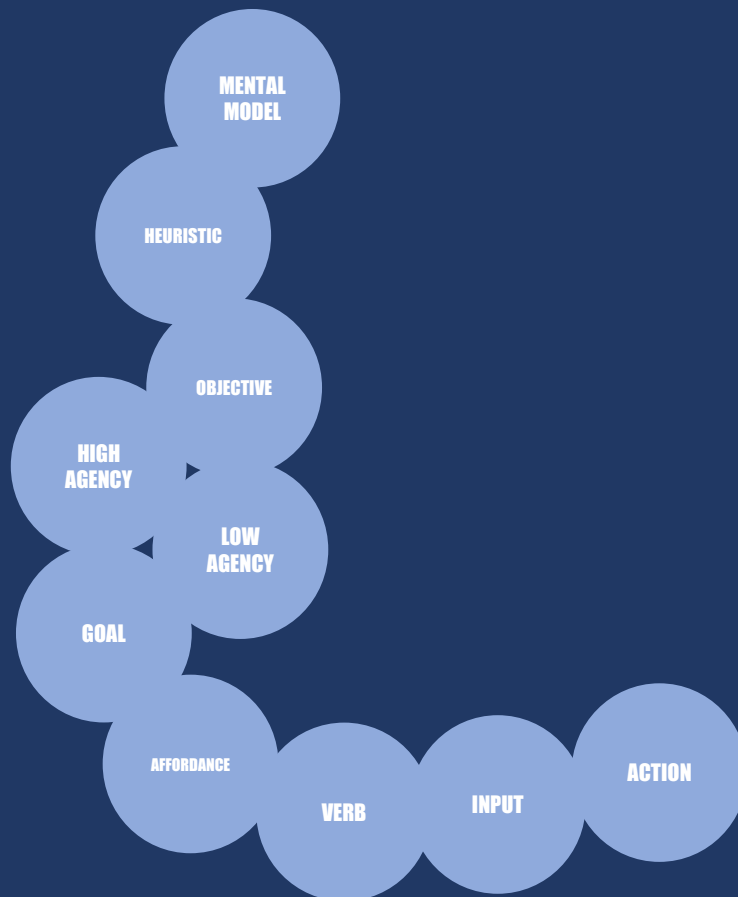
And the fish replied by blowing a lot of bubbles:

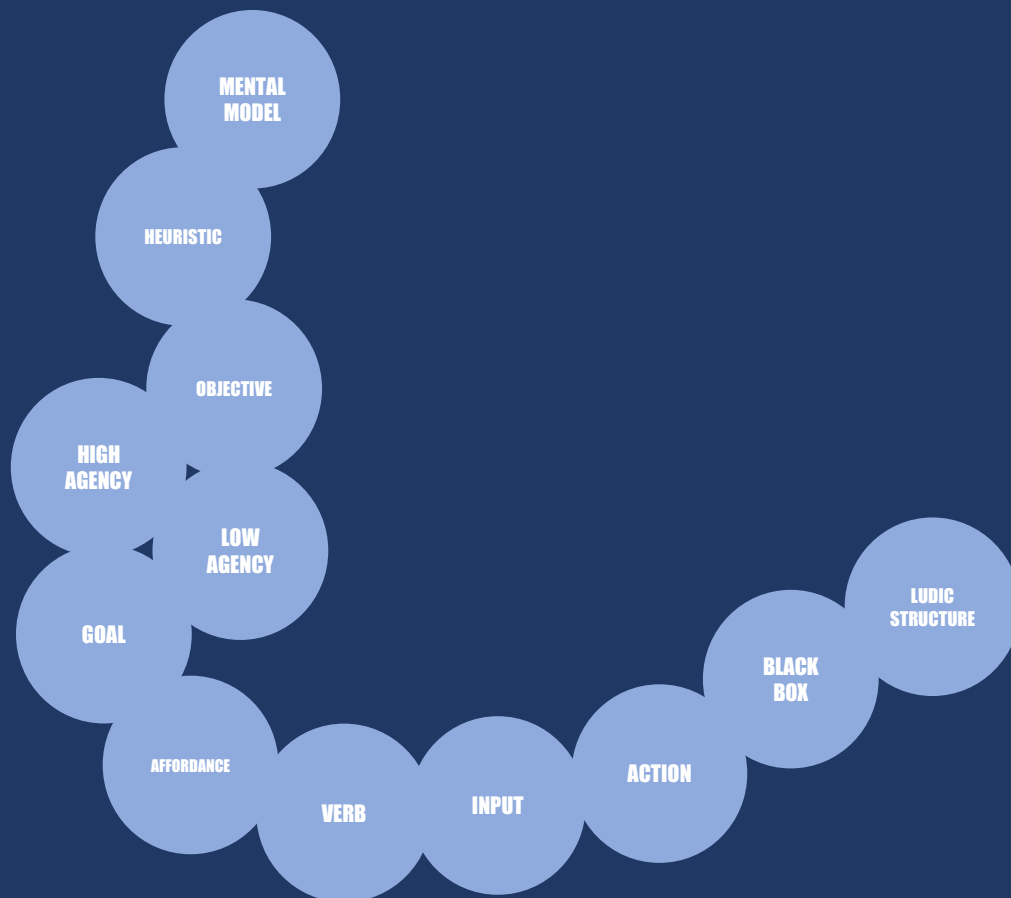
**MENTAL
MODEL**

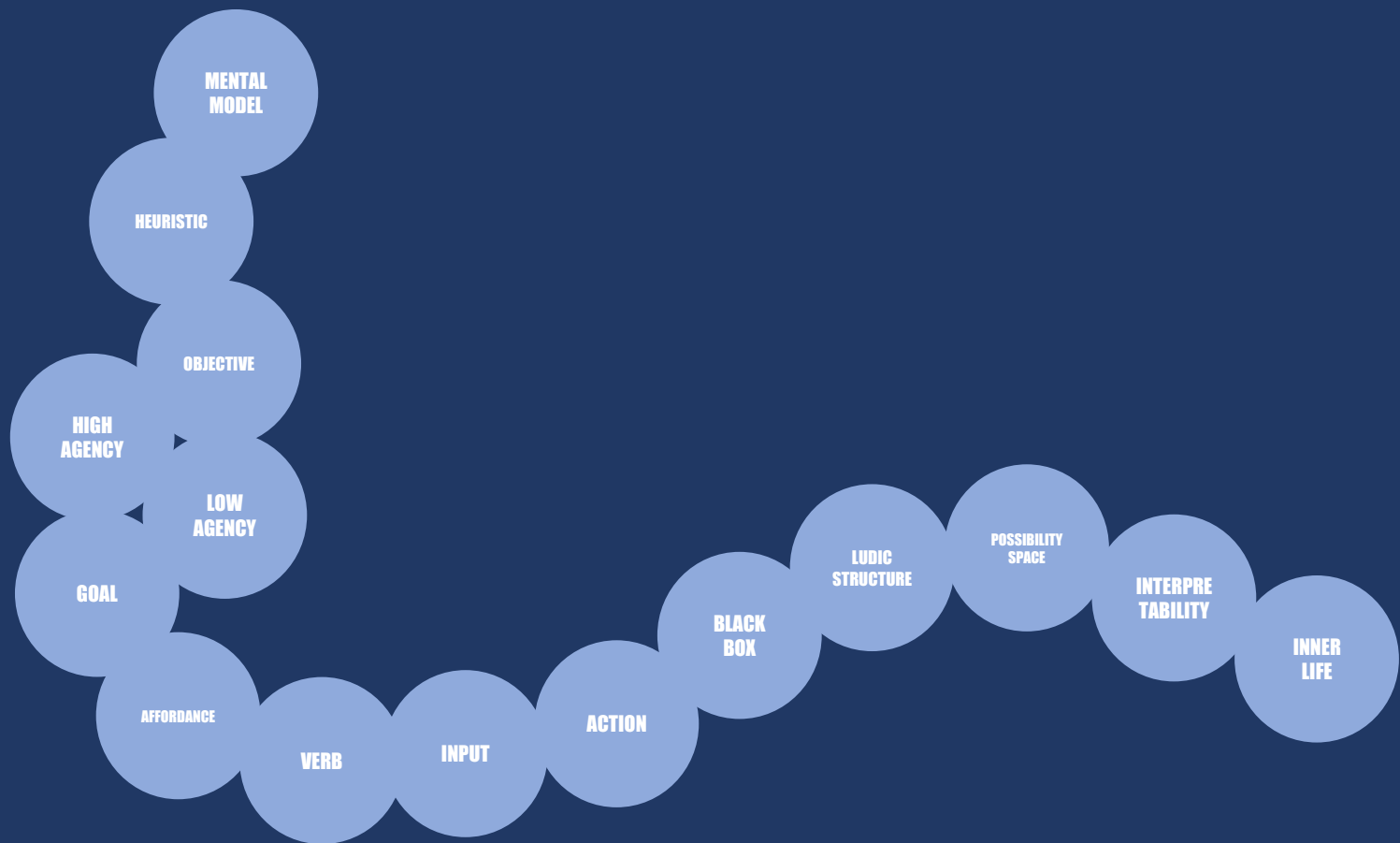


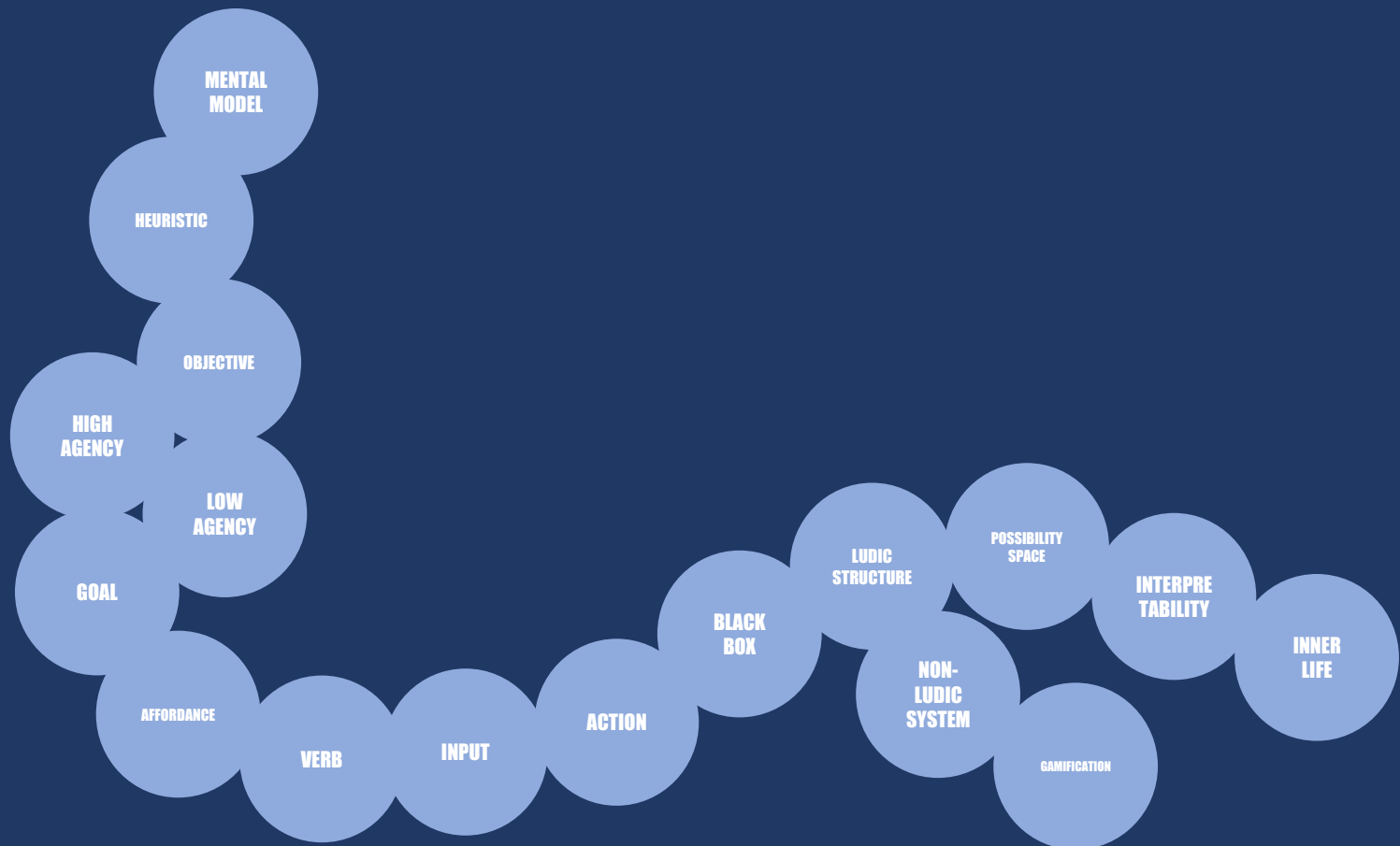


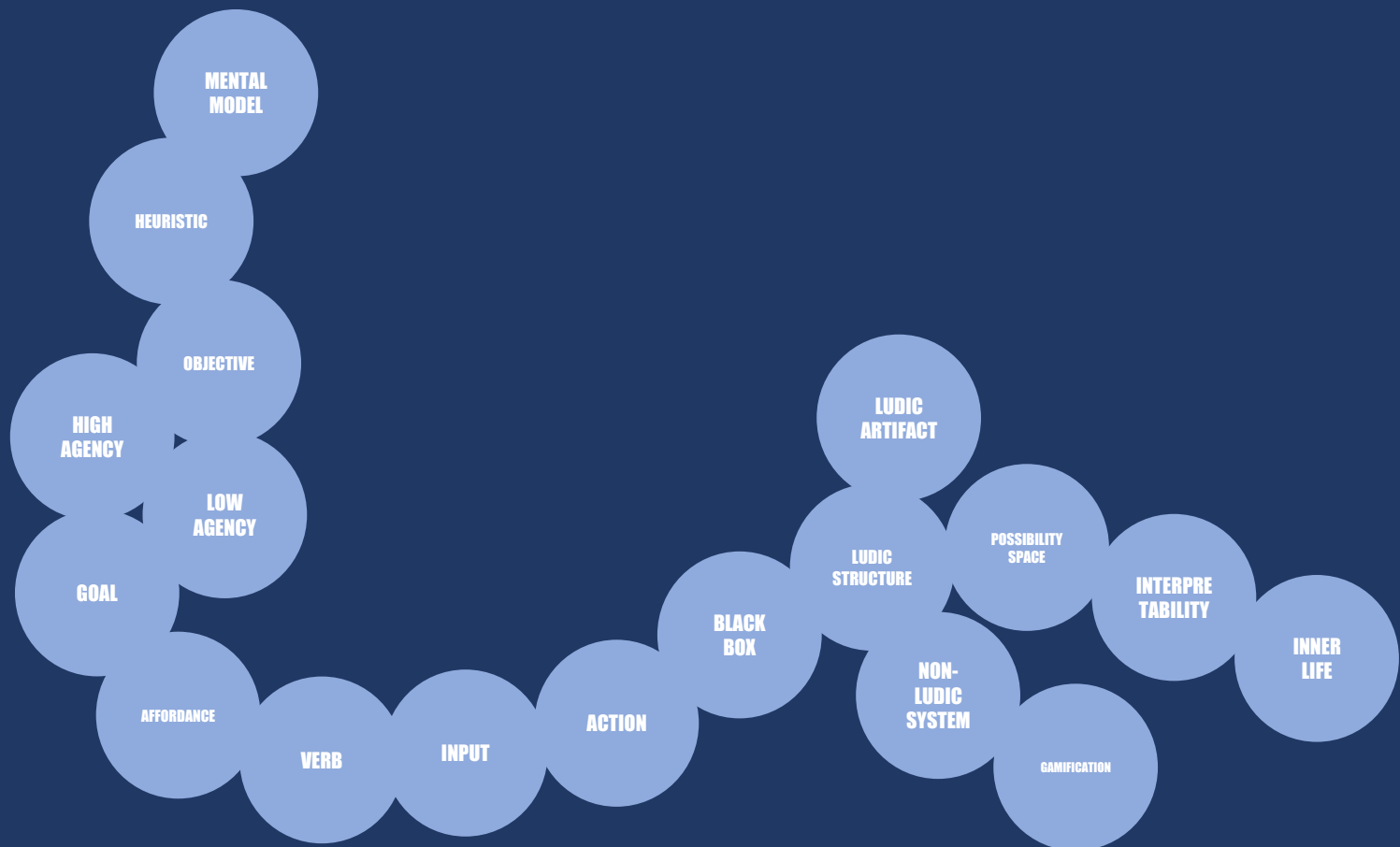


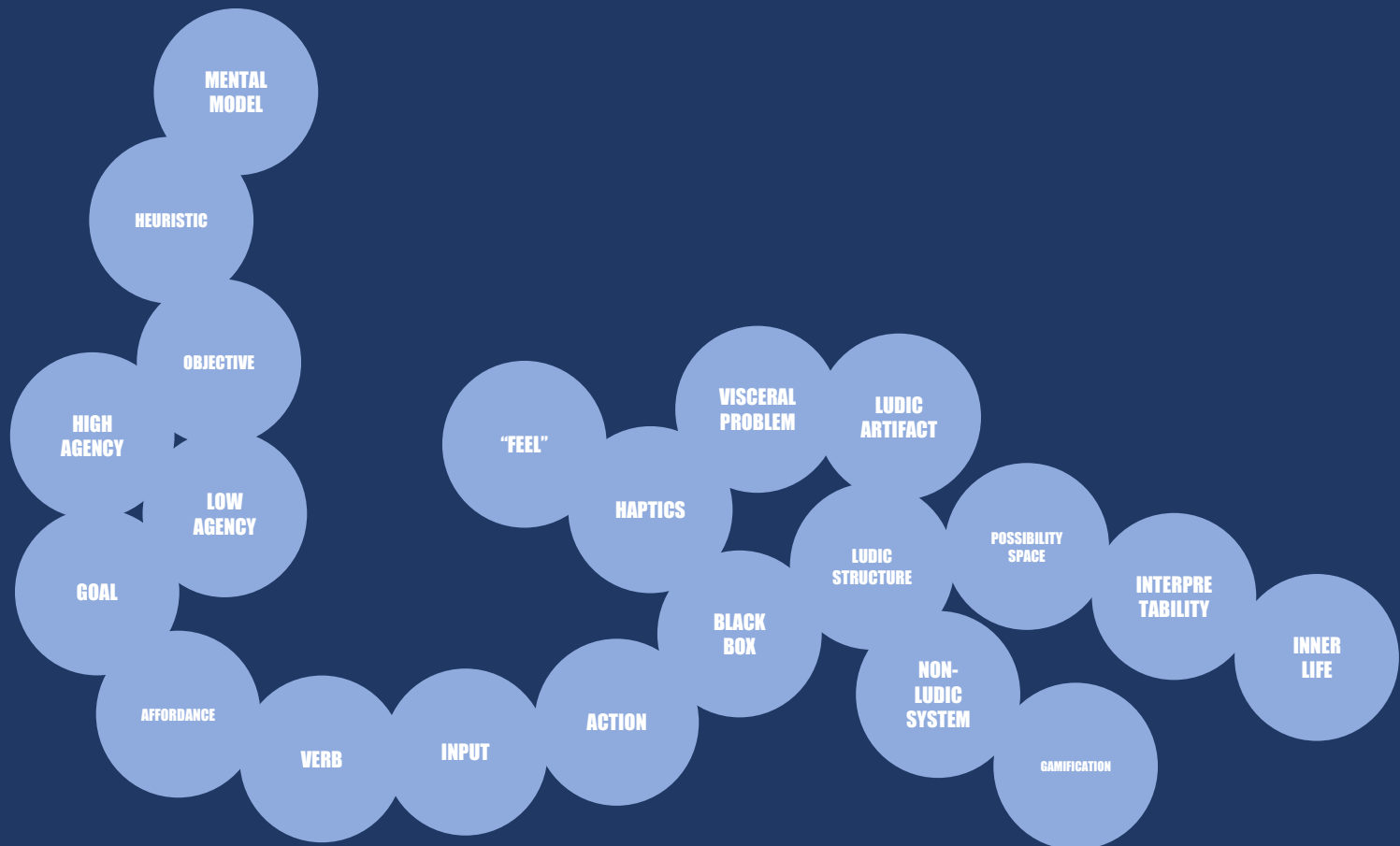


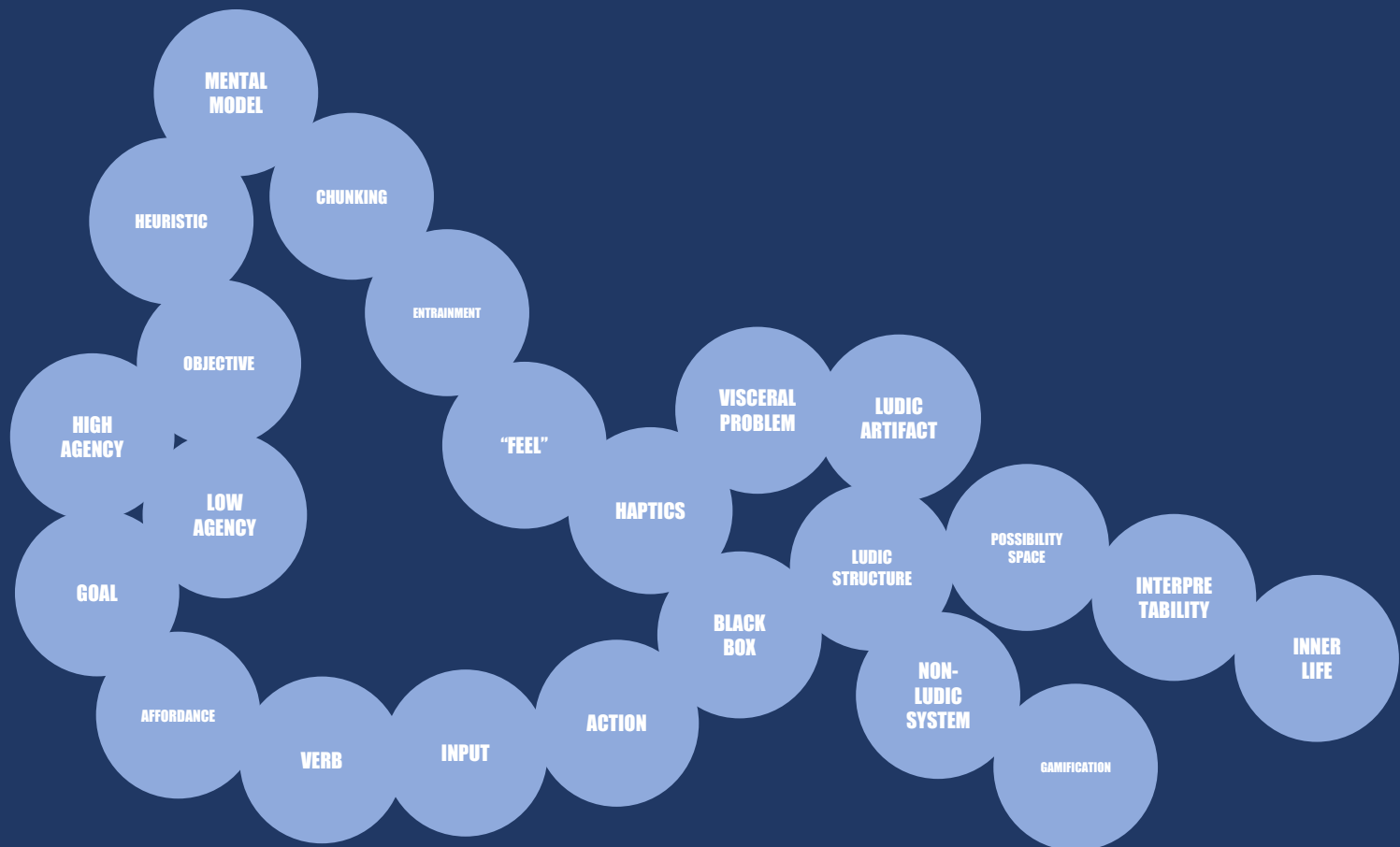


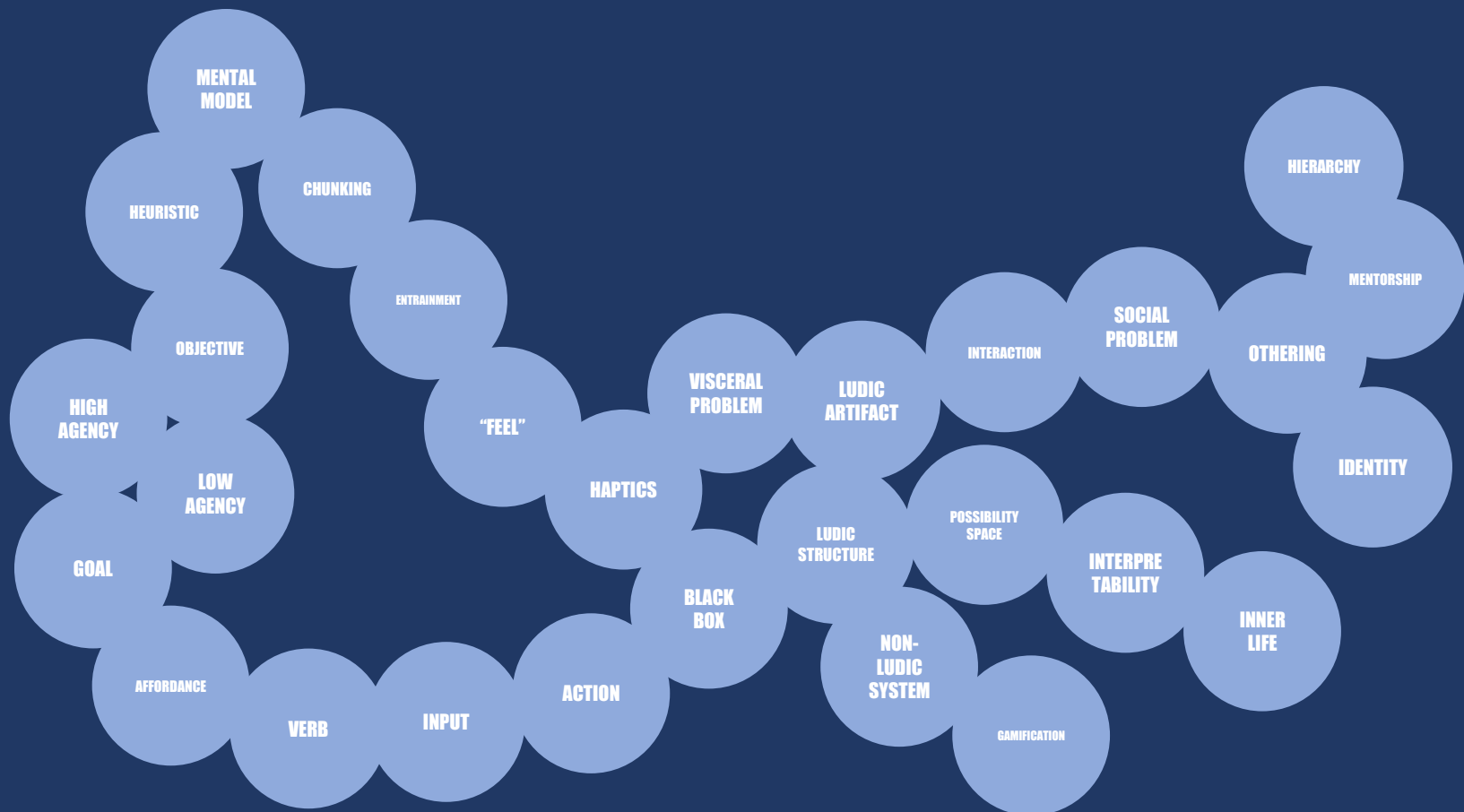


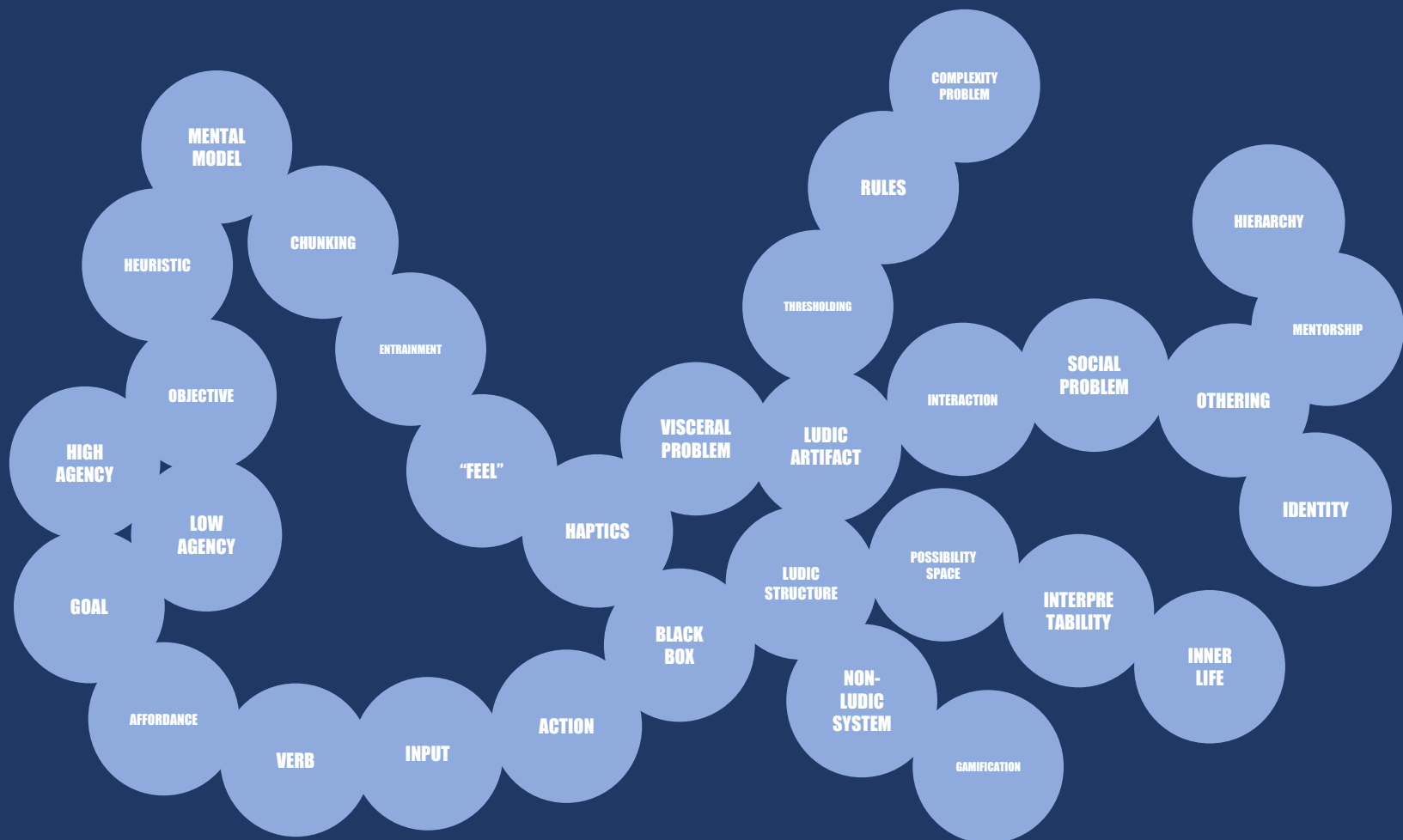


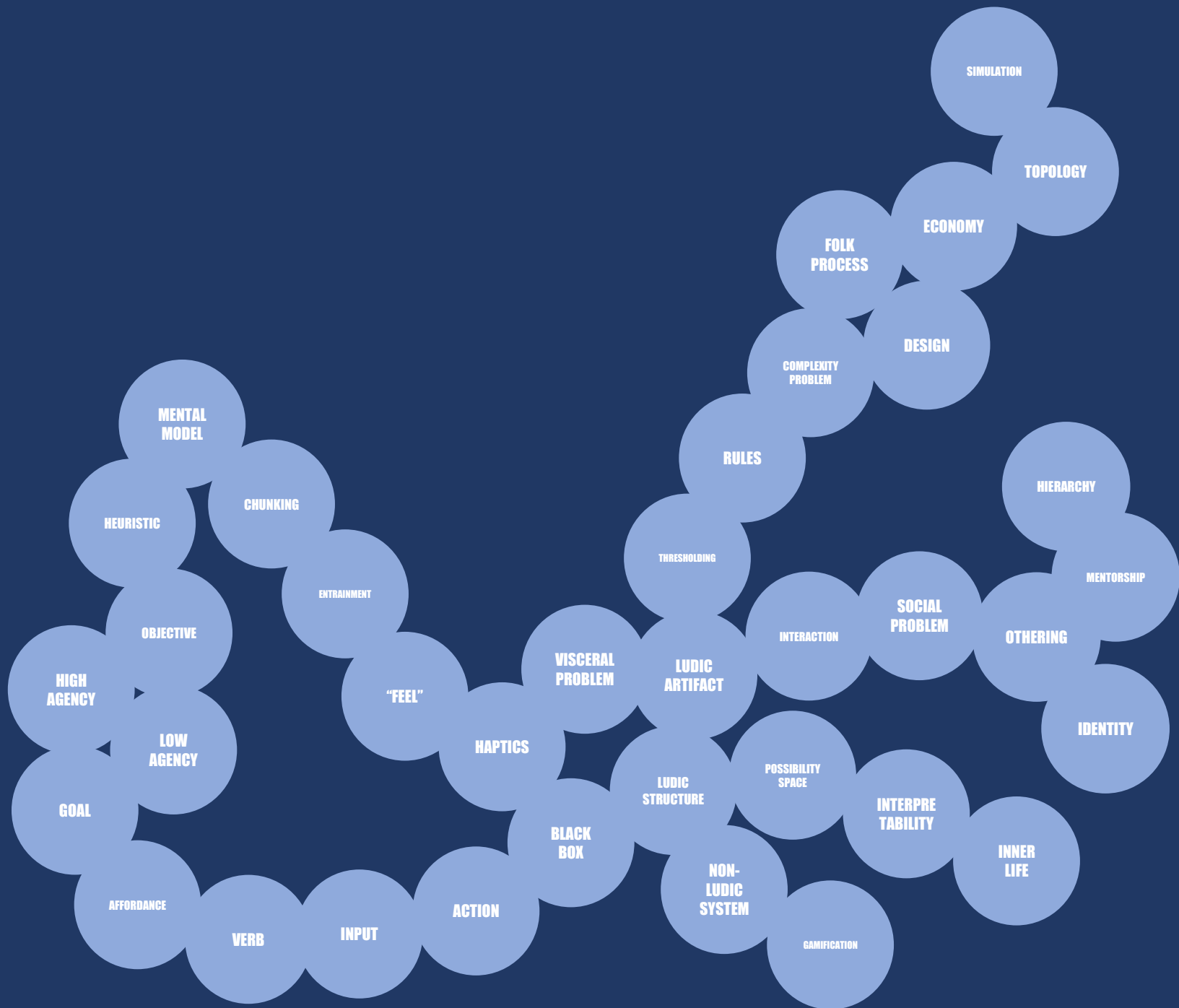


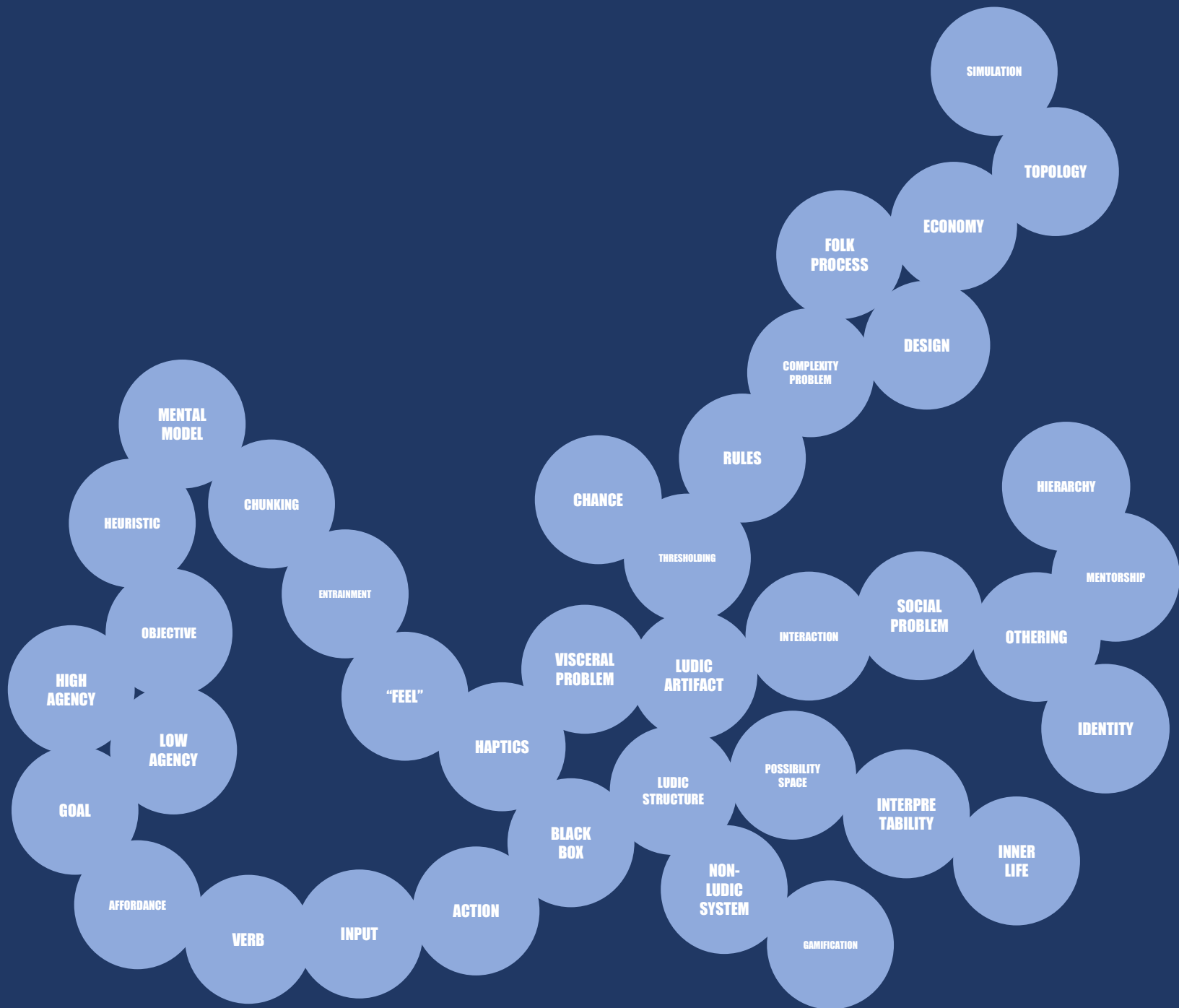


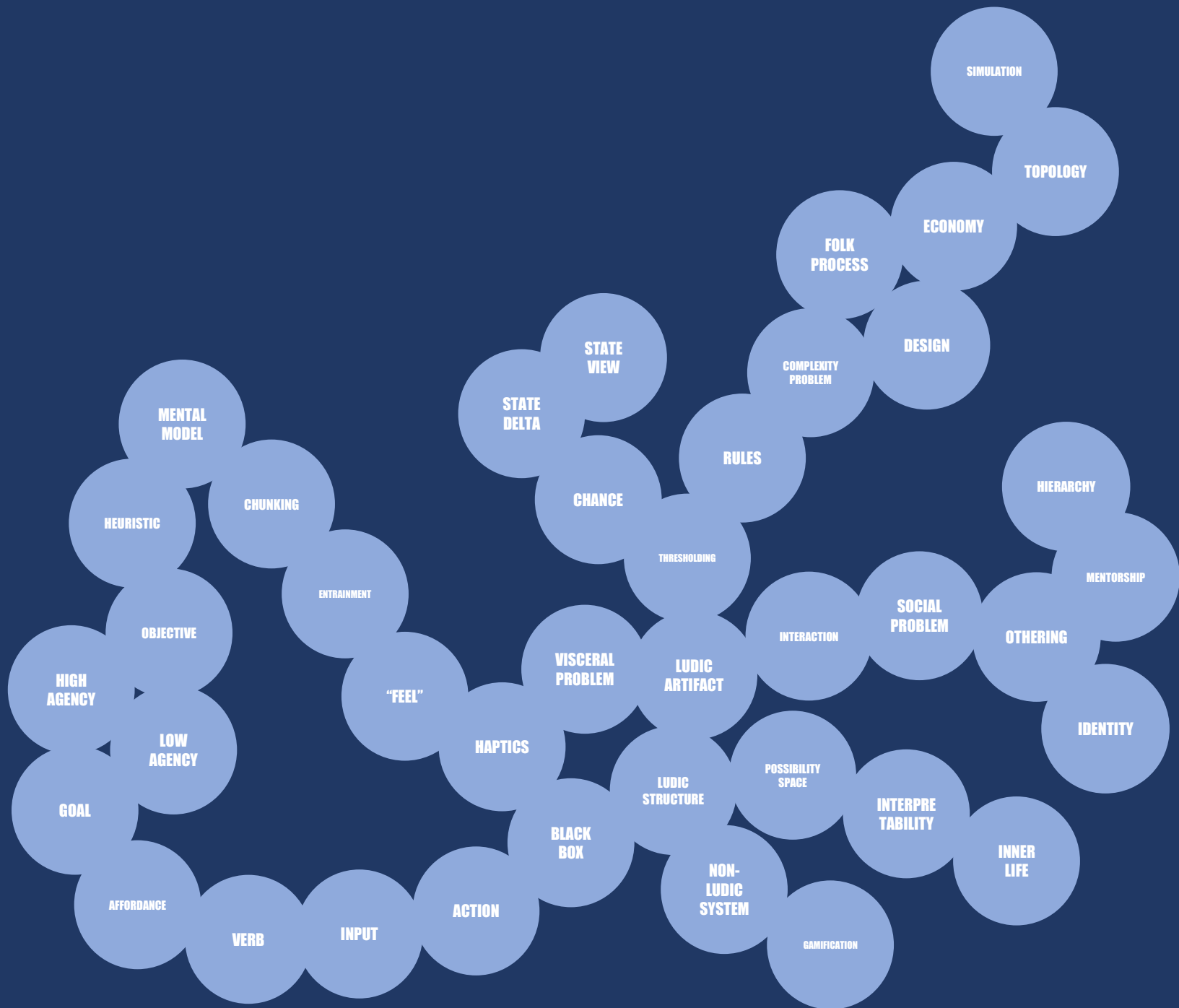


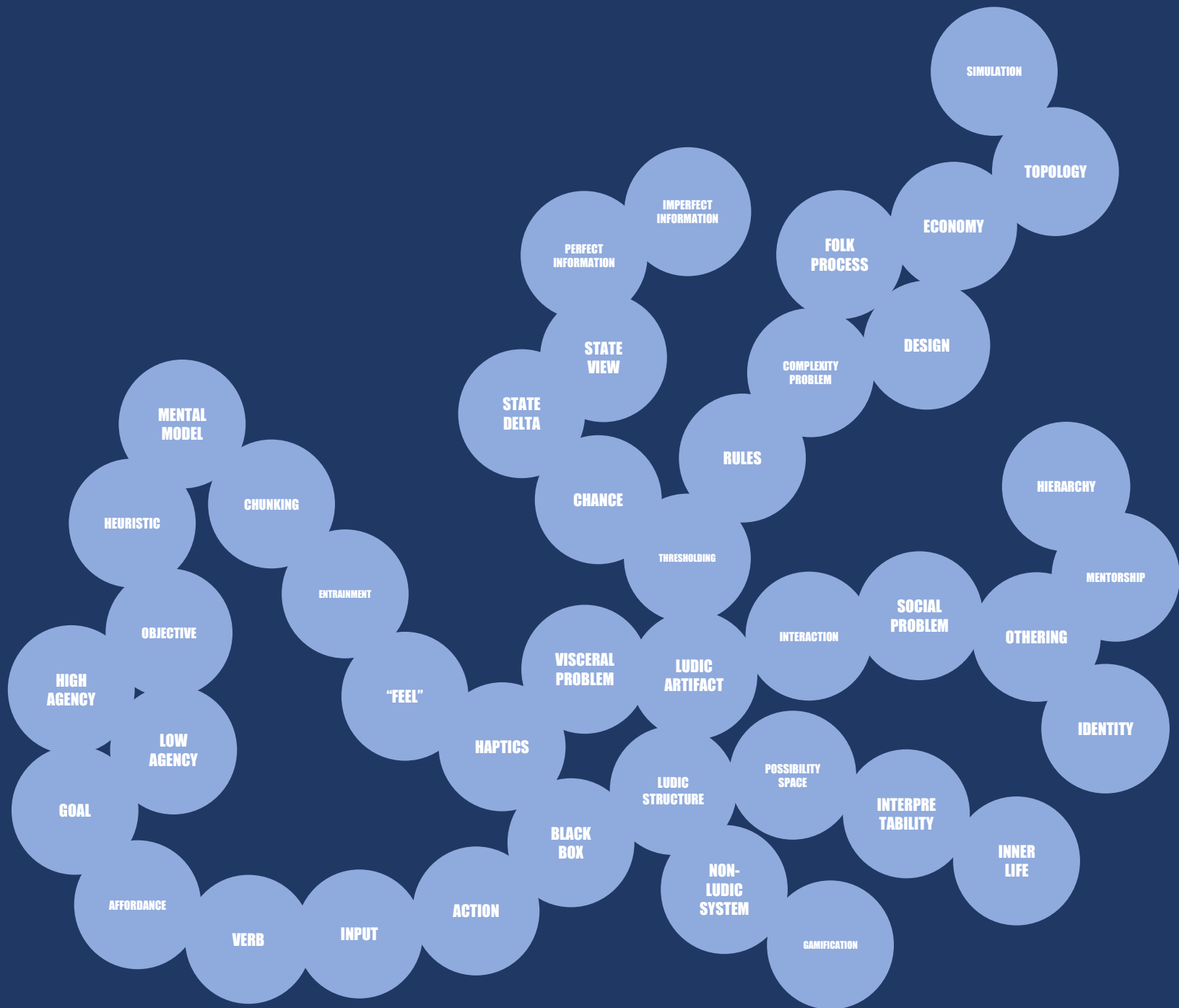


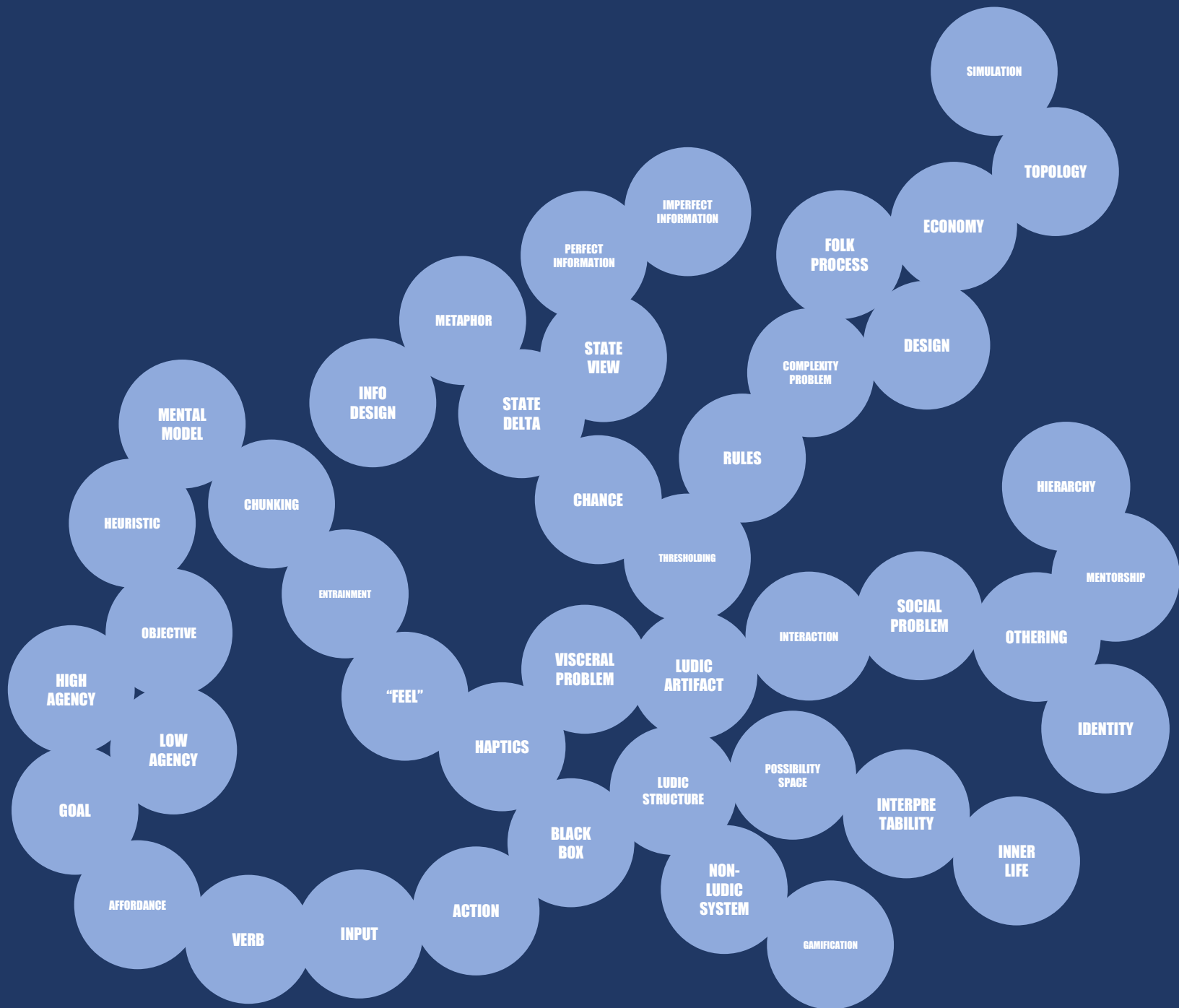


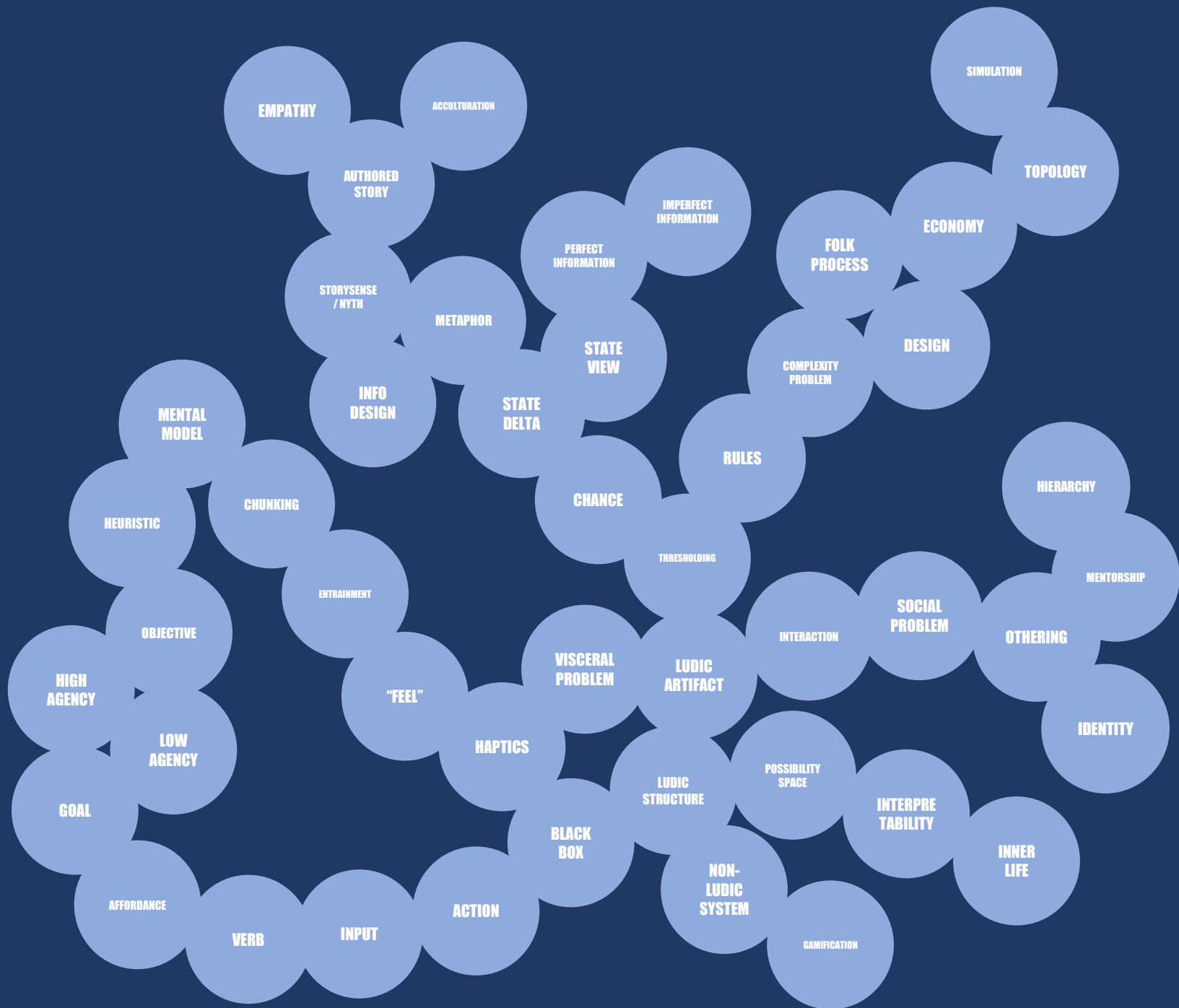


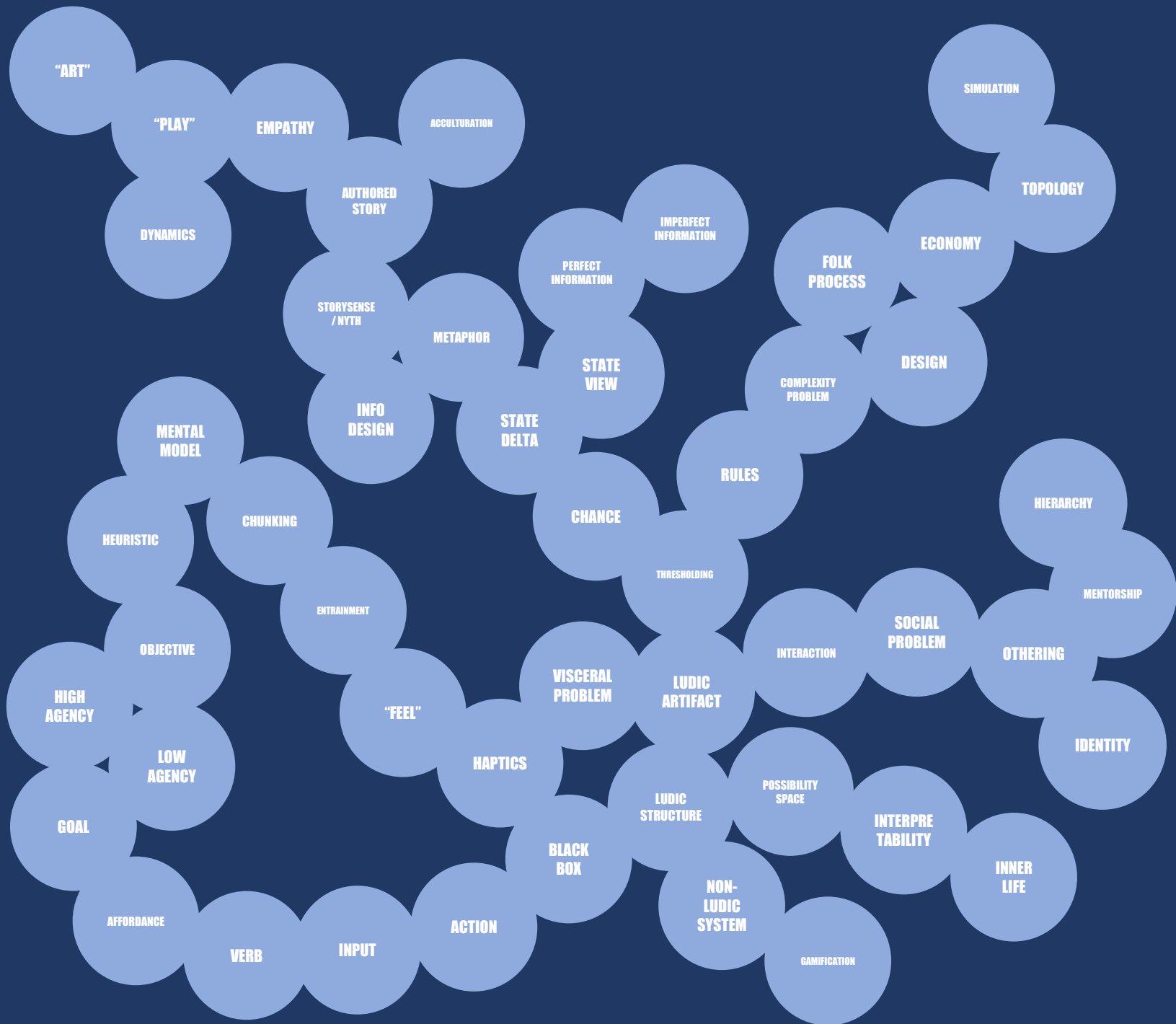


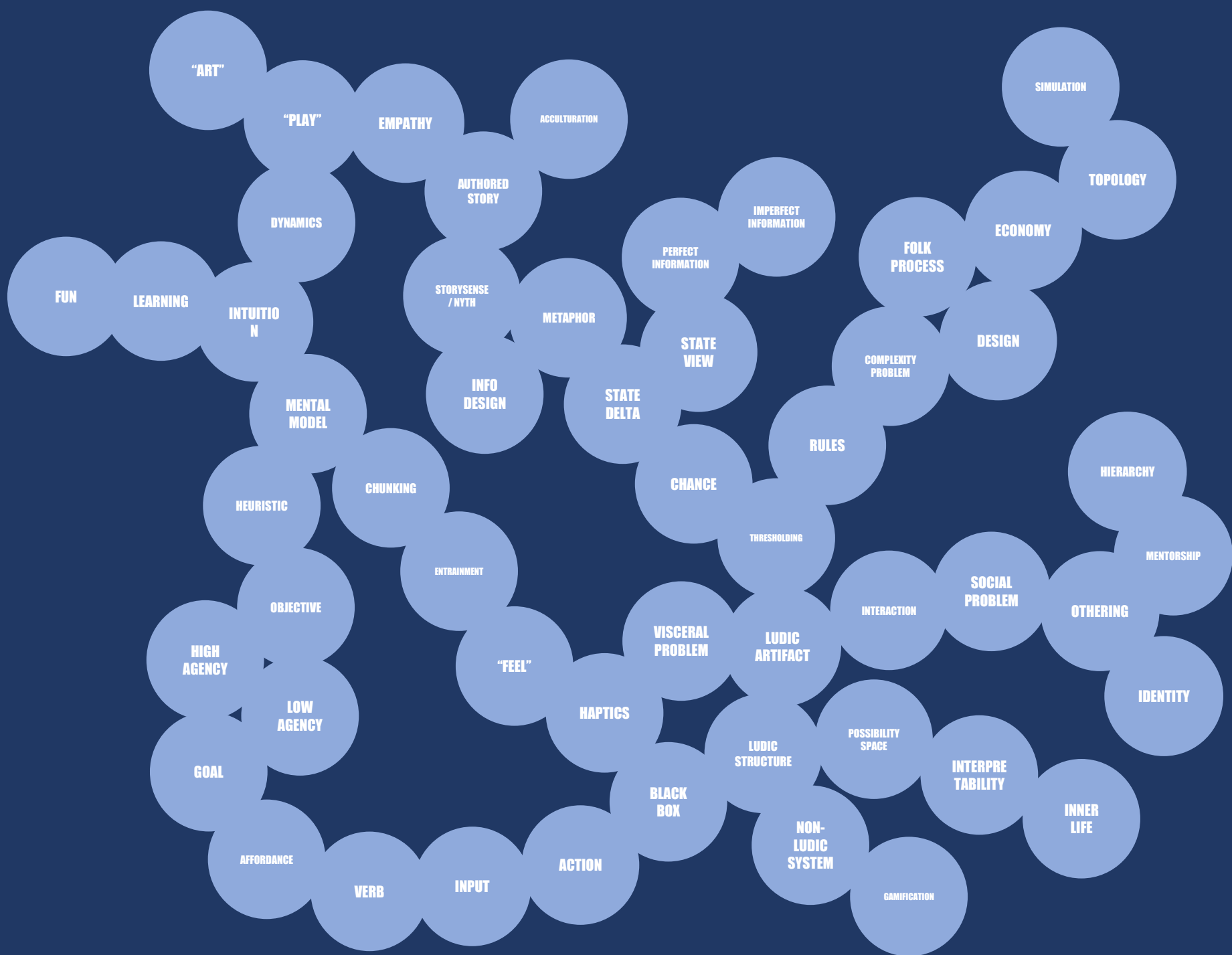


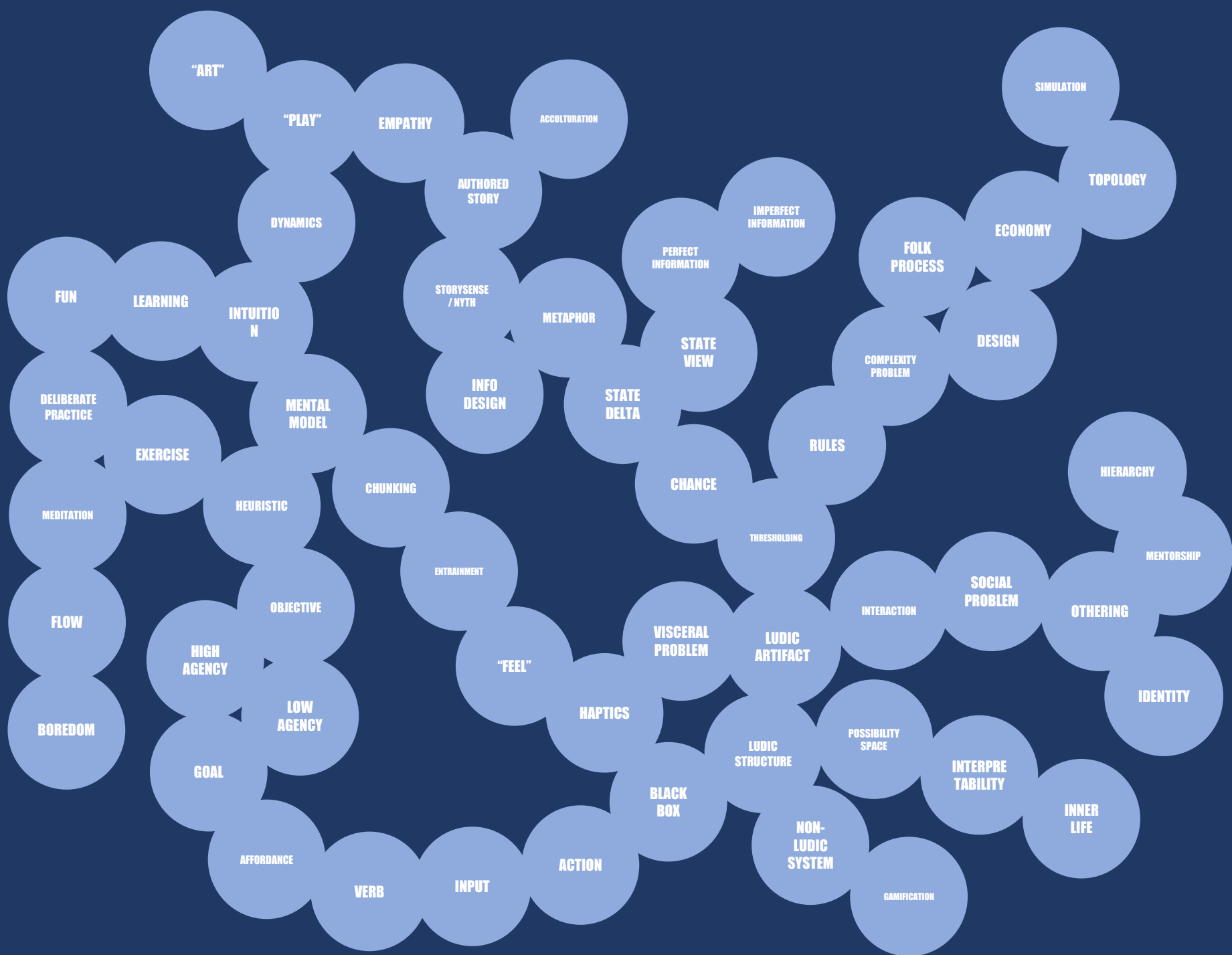




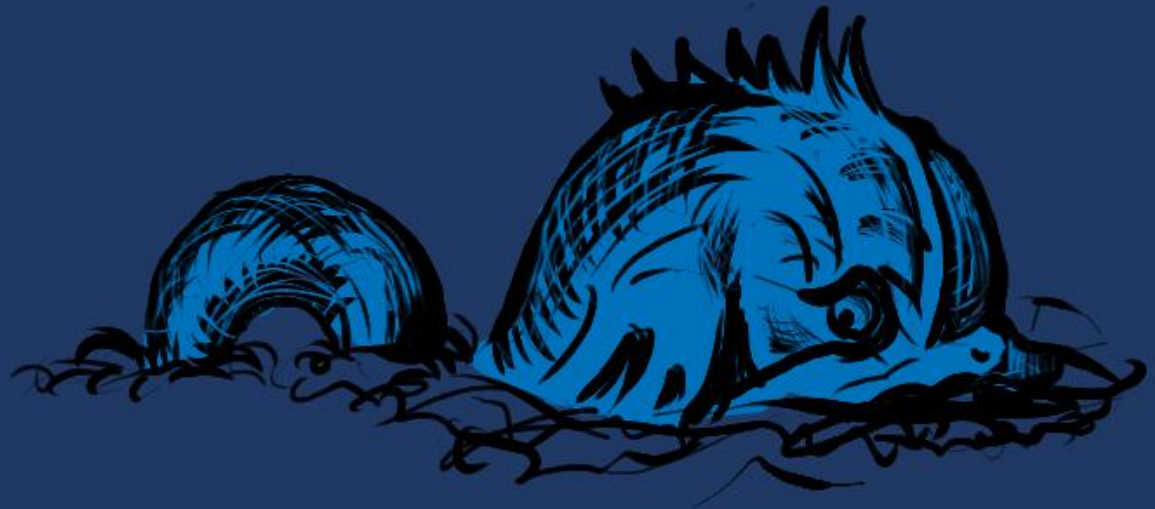






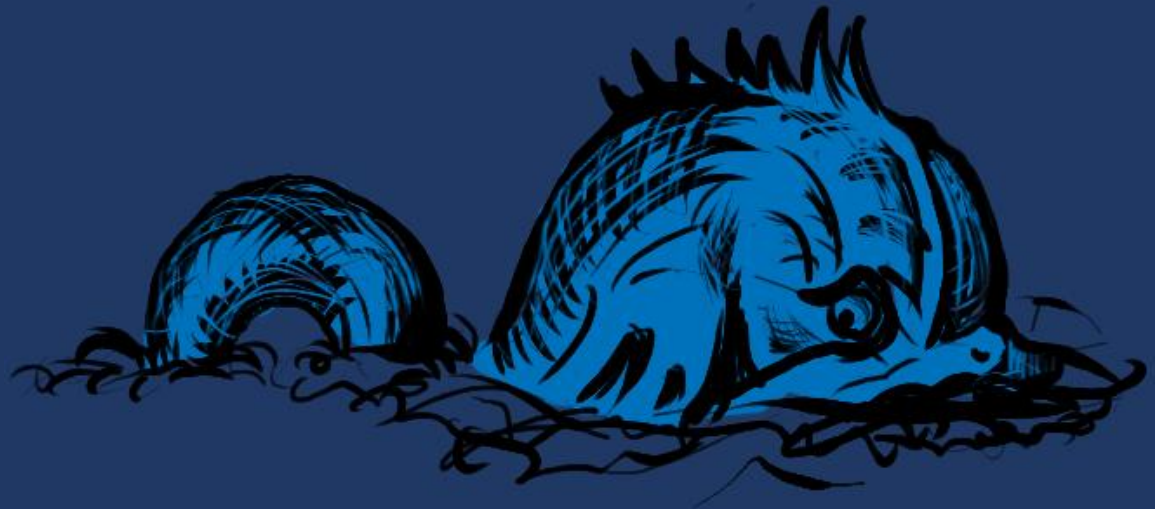


“Get it?”



The designers glared at the fish.
**“You expect us to learn all those
different fields of study?”**

“I did.”



**But one of the designers got
excited.**

“Wait, so that means that my game is ideally suited for training people?”

Entrainment techniques

**Stagecraft: cutscenes, triggers,
control**

String of pearls choice architecture

Scaffolding

Speed and reflex training

Selective agency (no choices)

Tropes as shorthand

Empathy techniques

Loose symbolic relationships

Layered symbology

Ambiguity of referents

**Anacoenosis: asking audience for
opinion, presenting multiple
opinions**

Surrealism, acausality

Acculturation techniques

Rhetorical repetition

Replay for achievements

Frames, labels

**Impose worldview thru viewpoint
character**

Othering

High causality

Intuition techniques

NP problems

Multiplayer

**Orthogonality (disparate games
in one)**

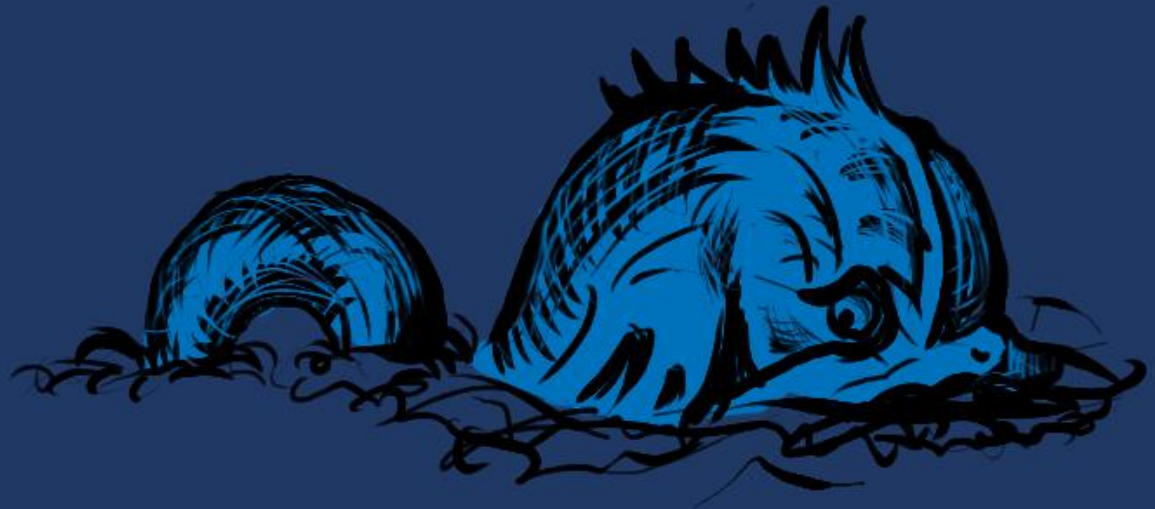
Simulations

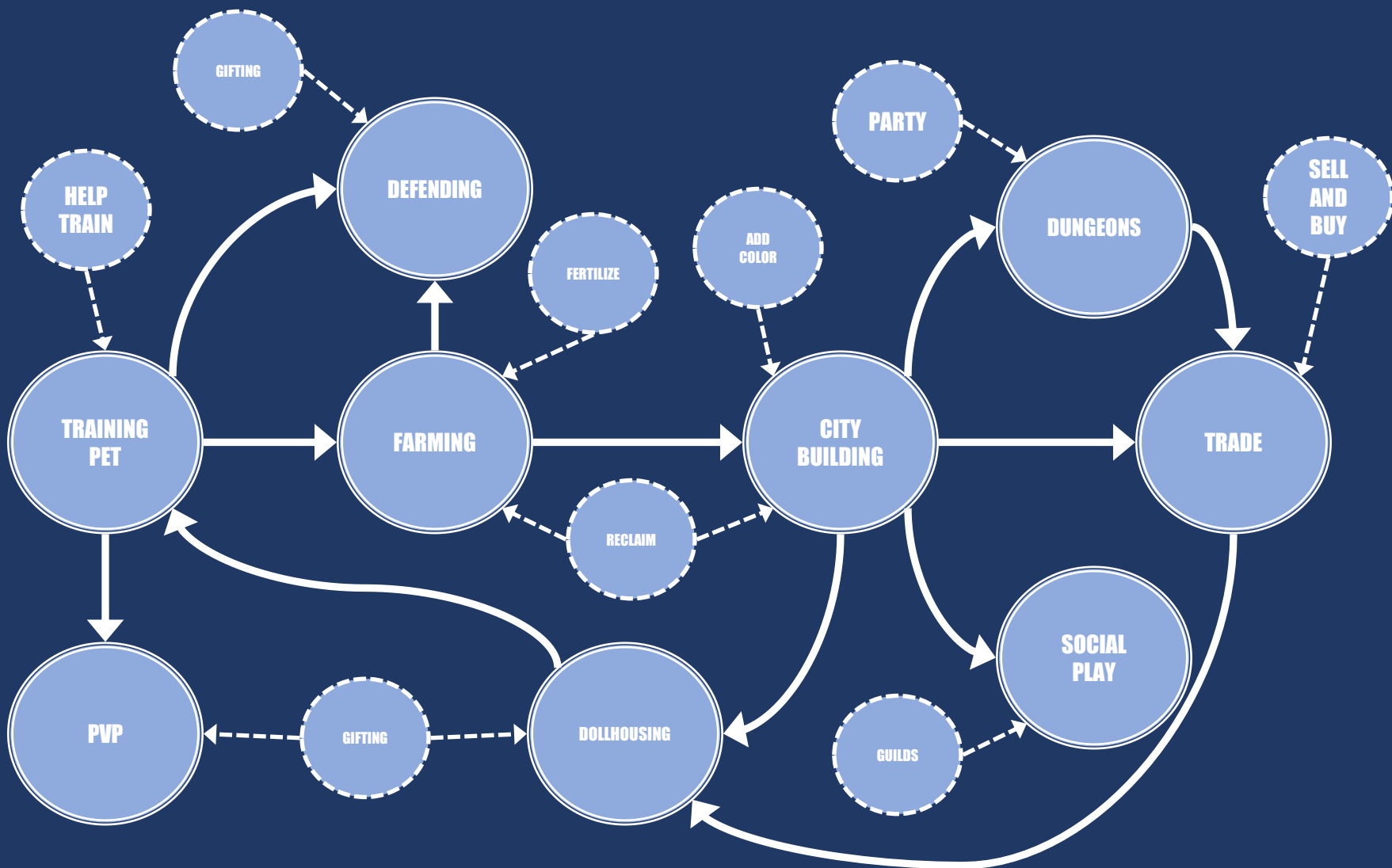
Signs as tokens (RPGs, Dixit)

**In fact, each of the designers
learned that their game had
special strengths!**

**“Wow,” said the designers. “Fish,
can you teach us magic?”**

**The fish groaned. “it’s not magic,
it’s just craft and a try at science.”**





Right around then, a metrics analyst ran up.

“Great news!” he said. “According to my regression analysis, our game should be about pickled herring!”

**And the magic fish said, “Glub
blub,” and swam away.**



The designers were pissed. “You spooked him!”

**“That’s OK,” said the analyst. “He
wasn’t a whale.”**

**“Besides,” he added, “on
average...**

**...FISH
DON'T
TALK."**

