



Gamifying relatedness

an iPad app-in-progress

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I was very tempted to subtitle this presentation: 'a **world-changing** iPad app-in-progress'. It's a *little* premature because we're still building the prototype :) But it also feels right to be bold when I'm talking about this game.

Origins

The game came about as a solution to a problem the Museum had.



Photo by Robert Montgomery



This is the National Museum of Australia. It's an astonishing building, saturated in symbolism, and full of interesting stuff.

90,000 students visit each year; 30,000 take a facilitated education program. And that's about as many as we can handle given the staff and space that we have. The other 60,000 are 'teacher-guided', so their experience depends largely on the resources and capability of the individual teacher. We'd like to provide a consistently good experience for those students as well.

Sembl

a real-time

multiplayer iPad game

in the galleries

Enter Sembl. It's an iPad game for groups of students to play in their one-hour visit to the Museum.

It's all about relatedness, and it gives visitors aged 10 and up a fun, structured way to engage with the exhibits and what they say about Australian culture and history. It's fun and structured, but it's not prescriptive, which is what I like about it. And actually, this game gives people a fun, structured way to engage with and think about the world in general – which is why I'm so excited about it.



Lindy Chamberlain 'guilty' verdict
court drawing

dangerous
dingoes?



Dingo trap
used by Ned Wilson,
who killed almost 5000 dingos

The challenge is to look at the seed content - an object on display at the Museum - and find something that is somehow related to it.

You can make any kind of connection you want...



Reed basket

made at **Mossman**, Queensland

from Mossman



The Governor's arrival

at **Mossman**, 1910

The two things might be from the same place.



Cocoa tin
used by Scott in Antarctica



Message stick
from Arnhem Land

←
cylindrical
shape
→

Maybe they are the same shape.



Welsh organ



organ/less



Thylacine 'puppet'

You might make a more playful link.



Branding iron
used to control cattle



Breastplate
given for rescuing shipwrecked sailors

labelling bodies

And in **some** cases you might actually come to think about something in a new way – Aboriginal breastplates as a form of branding.

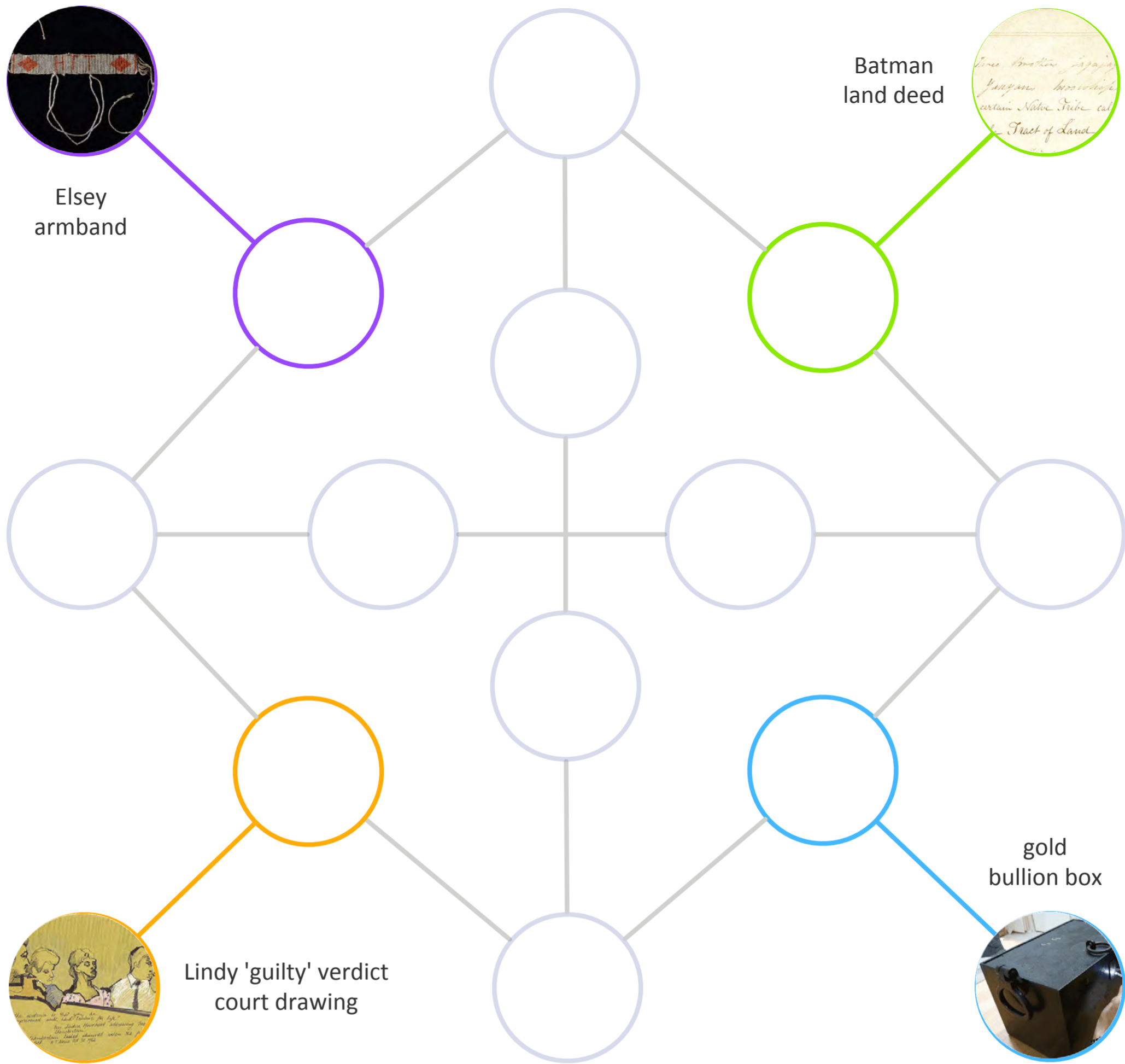
Paper playtesting



Eley armband



Batman land deed

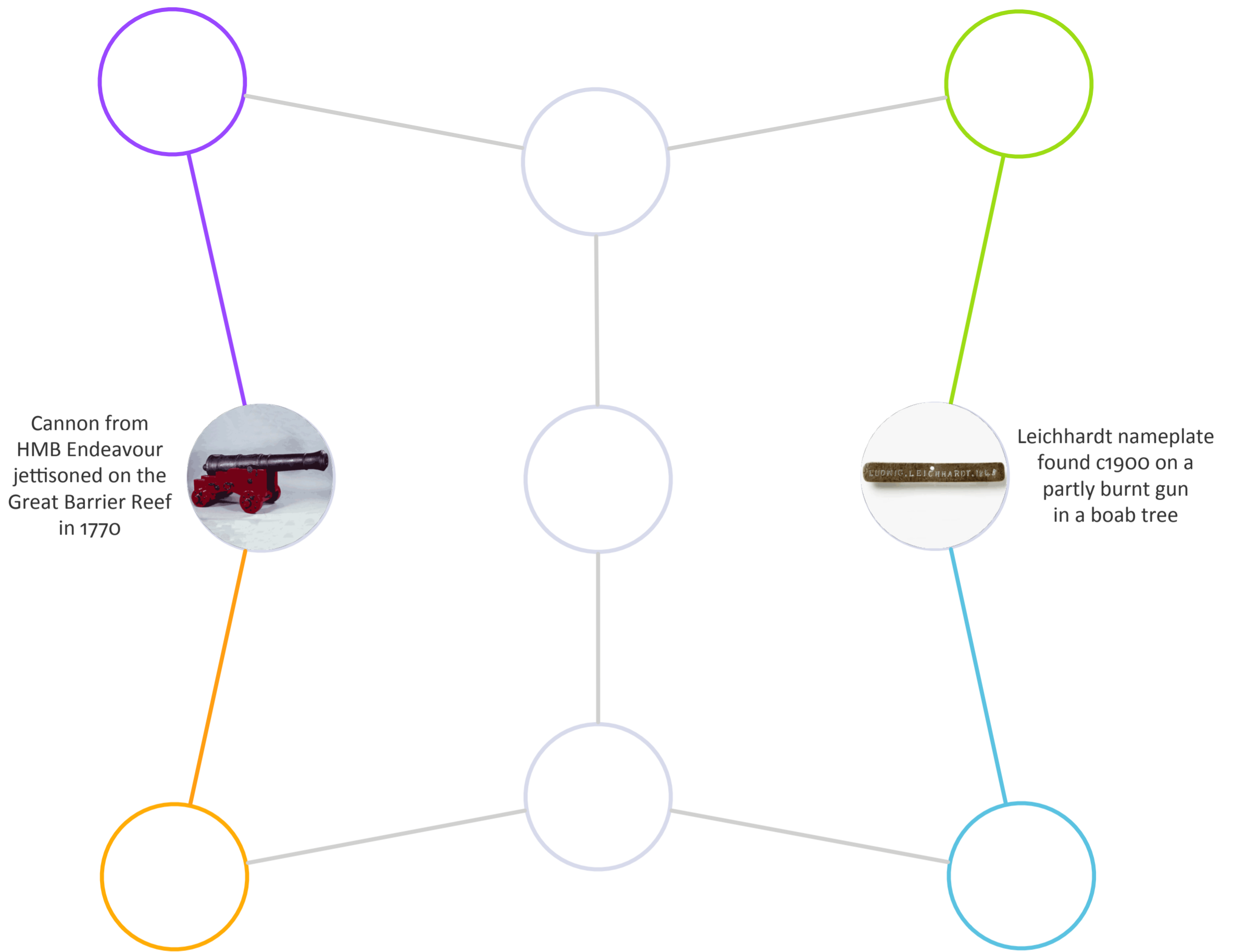


Lindy 'guilty' verdict court drawing



gold bullion box

We've been using a paper board to test the concept and logistics. Each team starts in a corner.



And this is a simpler board we've used with kids in Years 4/5.

In the first round, you are guaranteed a place on the board. You just need to find one thing related to your seed content, photograph and name it, and identify what the relationship is.

In later rounds you compete with other teams for places on the board. So once the time is up for finding something, you can vote on which thing you most want placed on the board.

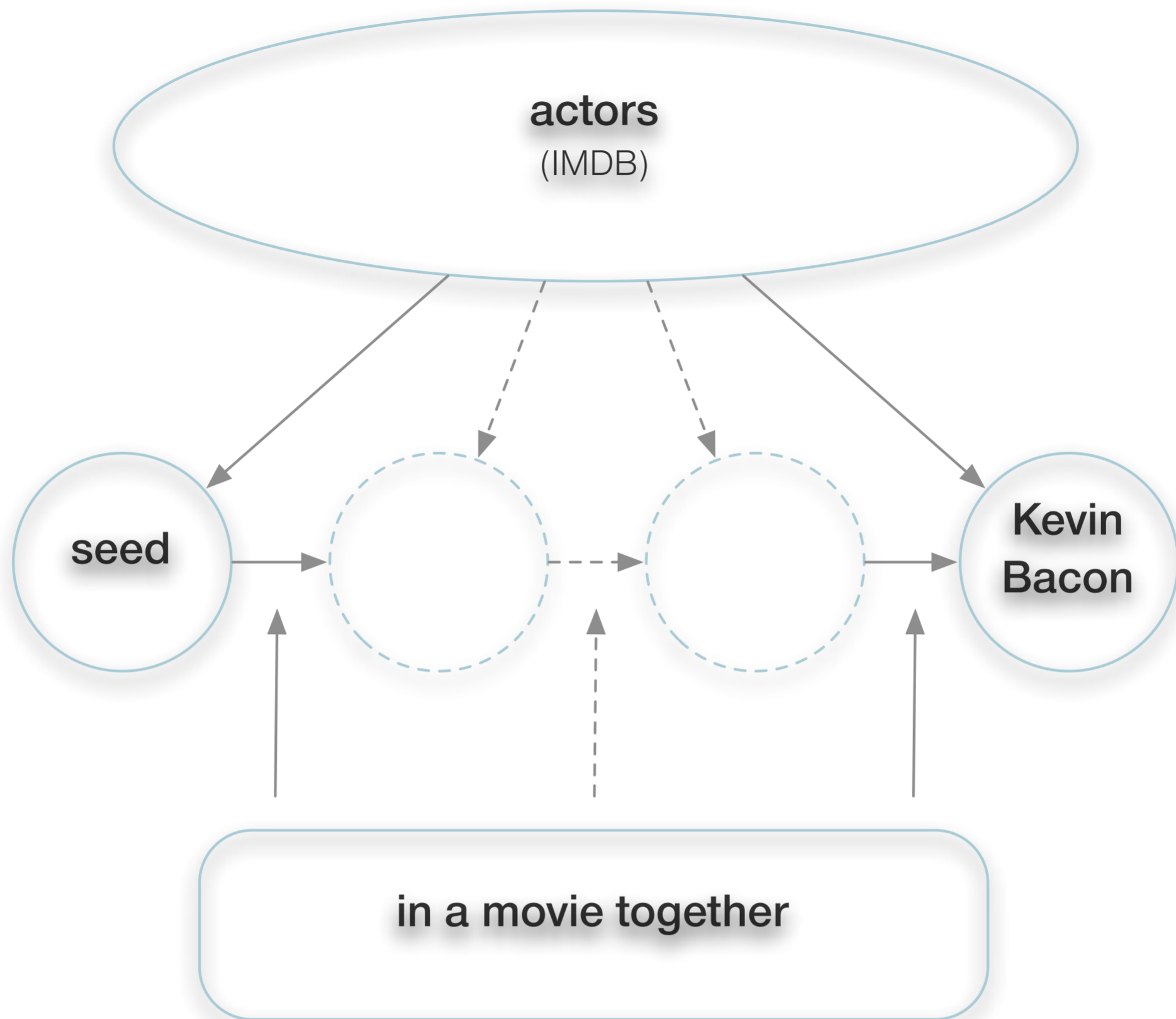


Here's the group of 9–11-year-olds we enlisted to playtest the game. Each team had a copy of the paper board they could draw and write on, and an iPad to take photographs of the objects they found.

- You can see the sickle being documented, and then presented to the group.
- Three others chose the ballast from Cook's ship Endeavour that was thrown overboard when the ship ran aground on the Great Barrier Reef.
- And you can see a voting round.

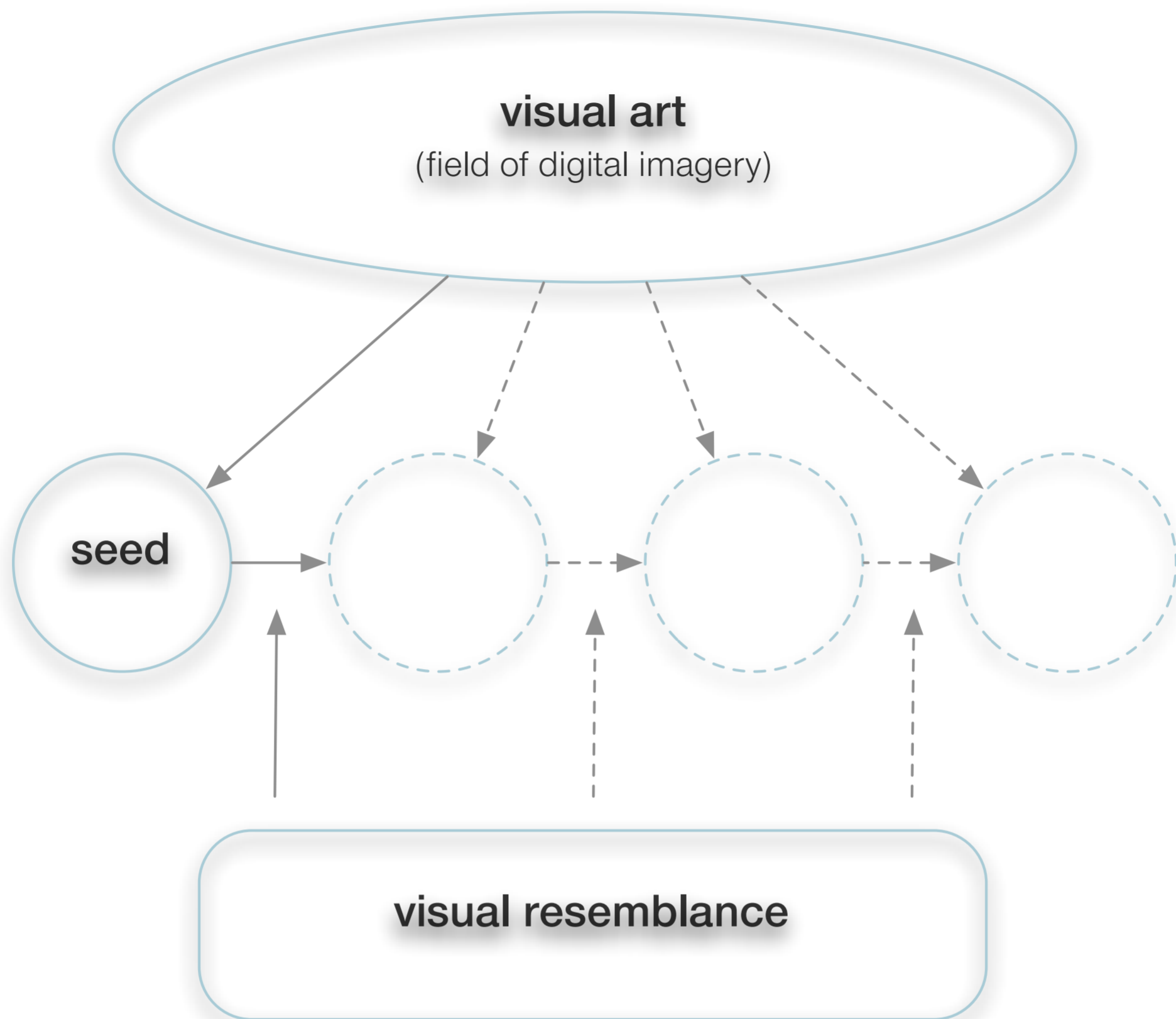
Unique?

Six degrees of Kevin Bacon



The Sembl game concept may bring to mind other games, such as Six Degrees of Kevin Bacon, where each node is an actor, and the aim is to look at the seed actor and connect him or her to Kevin Bacon in as few moves as possible. So in each case, the connection is 'in movie x together'.

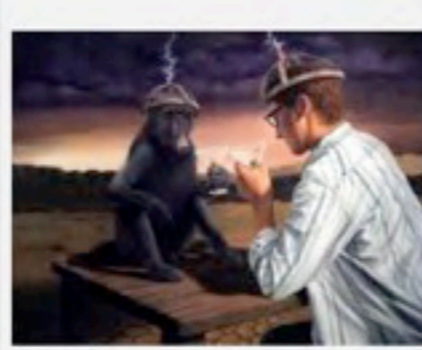
Open Museum 'TAG' (the association game)



You might also think of this game hosted by the Open Museum, called the association game, or TAG for short. Here, the pool of content is digitised visual art; there's no pre-defined end point; and the aim is to post an image that visually resembles the previously played work. So the connection here is 'looks like'.



#1 - Ape & model



#2 - In Your Image



#3 - Cone of Silence



#4 - Dome Over Manhattan



#5 - Blistering 1



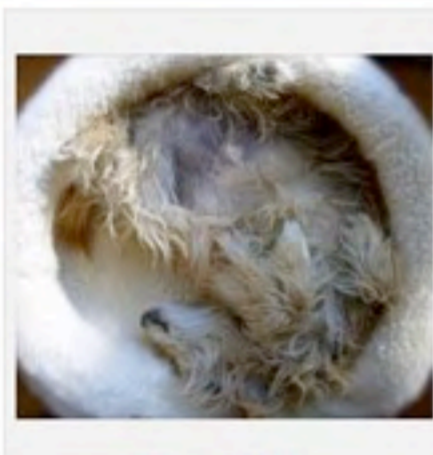
#6 - Gulf and Caribbean satellite radar image



#7 - Obra de Joan Miro



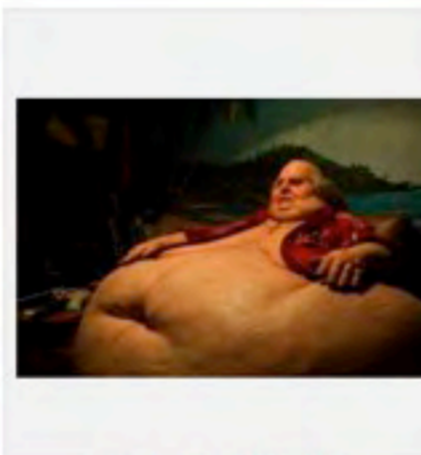
#8 - Human Embryo



#9 - Pistou



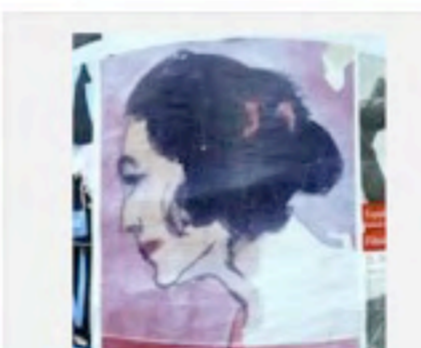
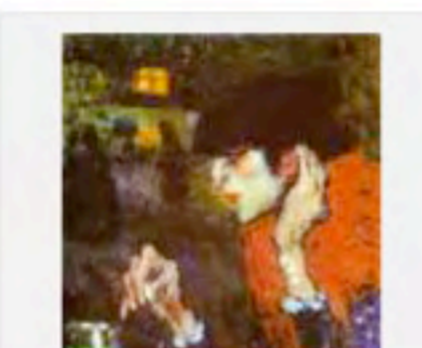
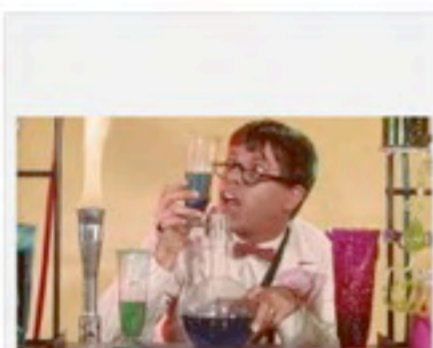
#10 - Benefits Supervisor Resting



#11 - Taxidermia



#12 - Ticks

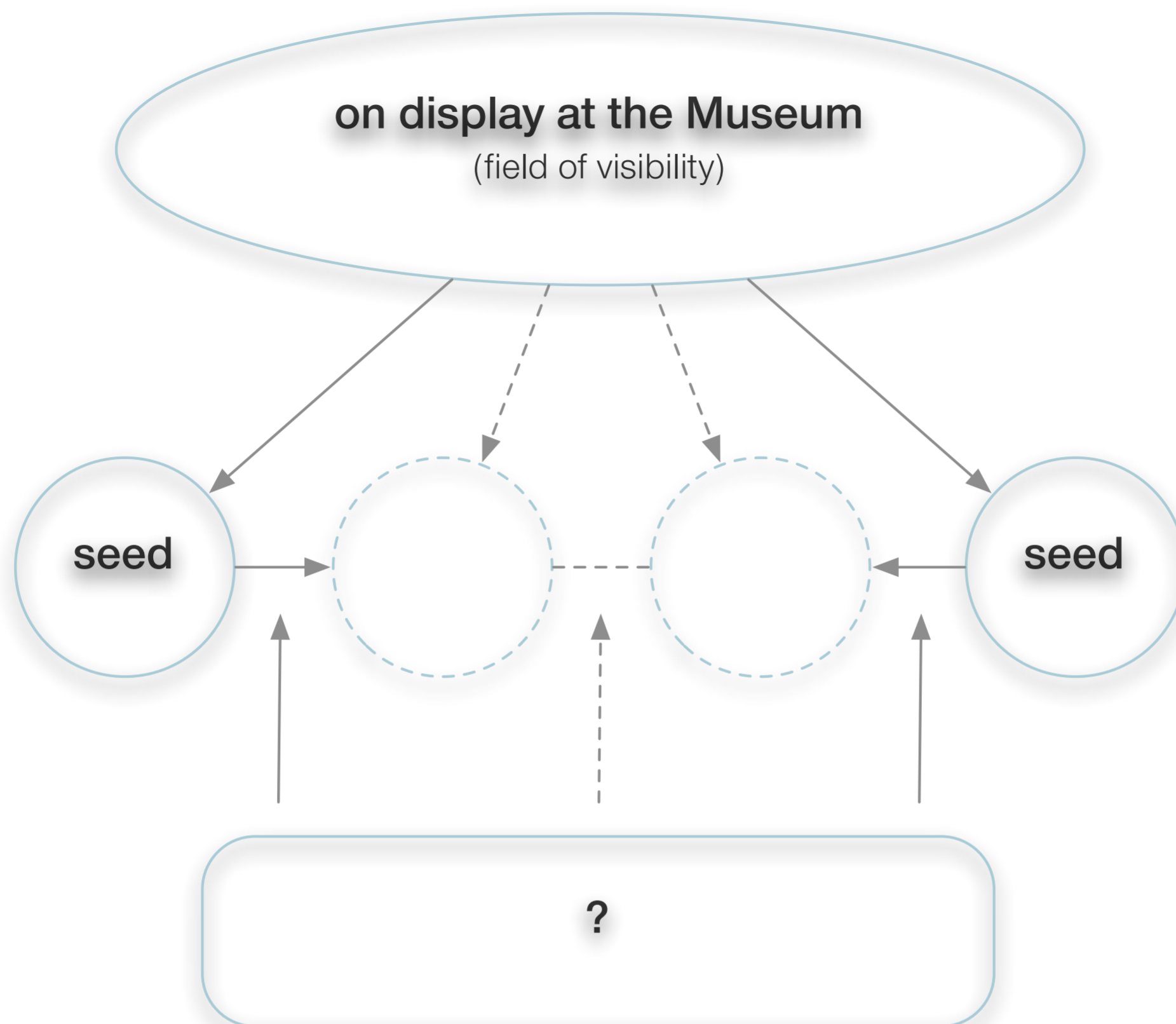


This is how one game played out.

As in Sembl, players post an image as a proposed next move. Whichever candidate attracts the most 'kudos' wins the place on the conceptual gameboard. The game ends when it loops back to where it began.

(This one went on for a few more rows, so you can't see the full loop.)

Sembl



In Sembl, the pool of available content is anything on display at the Museum. There are multiple starting points because we're aiming to accommodate groups of up to 32 students – or eight teams of four players.

But the key difference here is that question mark at the bottom. In Sembl, the relationship from one thing to the next is not fixed; in fact the task of identifying the connection is the key challenge of the game. And the surprise or intrigue of the connection is the core of its appeal.

So to win the place on the board, you need to identify a connection that is the most 'interesting'.

Interestingness

So what makes something 'interesting'? Probably, there are many answers.



Branding iron

used to control cattle



Breastplate

given for rescuing shipwrecked sailors

labelling bodies

In this example, the fact that both the branding iron and the breastplate label bodies is surprising but instantly intelligible, and **interesting because of the tension it creates**. It draws together two unlikely objects and in so doing, it casts new light on the colonial practice of giving breastplates to Aboriginal people.

The act of seeking resemblance, consistency, patterns – simultaneously renders visible the inconsistencies, structures and textures of the social world: differences. So in *Sembl* we can **explore difference** in a safe, structured, playful, contemplative way.

Installation view: Metalwork.

Subject: Wilson, Fred, 1954-, African American history, Exhibitions, Mining the Museum



This is not from a Sembl game; it's part of an installation by African-American artist Fred Wilson at the Maryland Historical Society almost 20 years ago. He placed a set of slave shackles into a cabinet with fine silverware and gave it the innocuous title, 'Metalwork'. He says of the juxtaposition:

“Who served the silver? And who could have made the silver objects in apprenticeship situations? And [...] whose labour could produce the wealth that produced the silver?”

By uniting these objects under the heading of 'Metalwork', Wilson draws our attention to the social differentiation between white and African Americans. So even a **very simple connection** can arouse contemplation of complex economies and histories.

Leg irons

convicts were forced to wear them



Welsh organ

makes music

And kids as young as 10 years old can make interesting connections. Convict leg irons and a Welsh organ. Can you identify a connection here?

Both require keys. It's a simple play on words, but it points to considerable interestingness. In both cases, these items don't work without their keys. Keys are key to their function.

And here's a significant difference that this resemblance clarifies: one set of keys is used to subjugate; the other to please.

Feedback

“

- nurtures **collaboration, storytelling, literacy, problem-solving**
- inspires **discussion / interaction** with others you mightn't know so well
- requires you to **think quickly** but also **laterally** and **creatively**

”

These are comments from educators about the value of the game as a learning experience.

“

- I was very **nervous** at the beginning – not keen on enforced ‘fun’ – but it’s a **great idea** and **good fun**
- a **great concept** that will work with **people at all levels**

”

We’ve persuaded curators to play as well – and ultimately, they liked it.

SOMETHING

SOMETHING I

A QUESTION

I LEARNT

FOUND INTERESTING

I HAVE



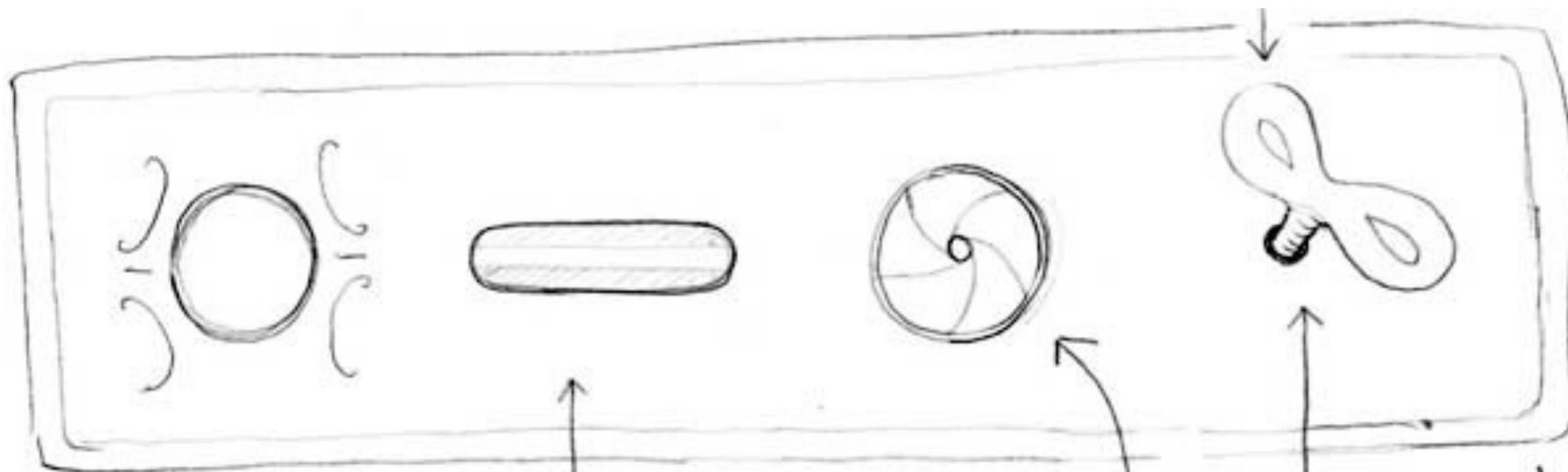
After the kids' playtest, when we asked them three questions, they came up with some gems.

“

- I learnt that **all objects have a similarity**.
- **Weird things relate.**
- I found it interesting what **ideas** we, in our group, came up with.
- Sembl is **a fun way to learn**, not like work sheats [sic].

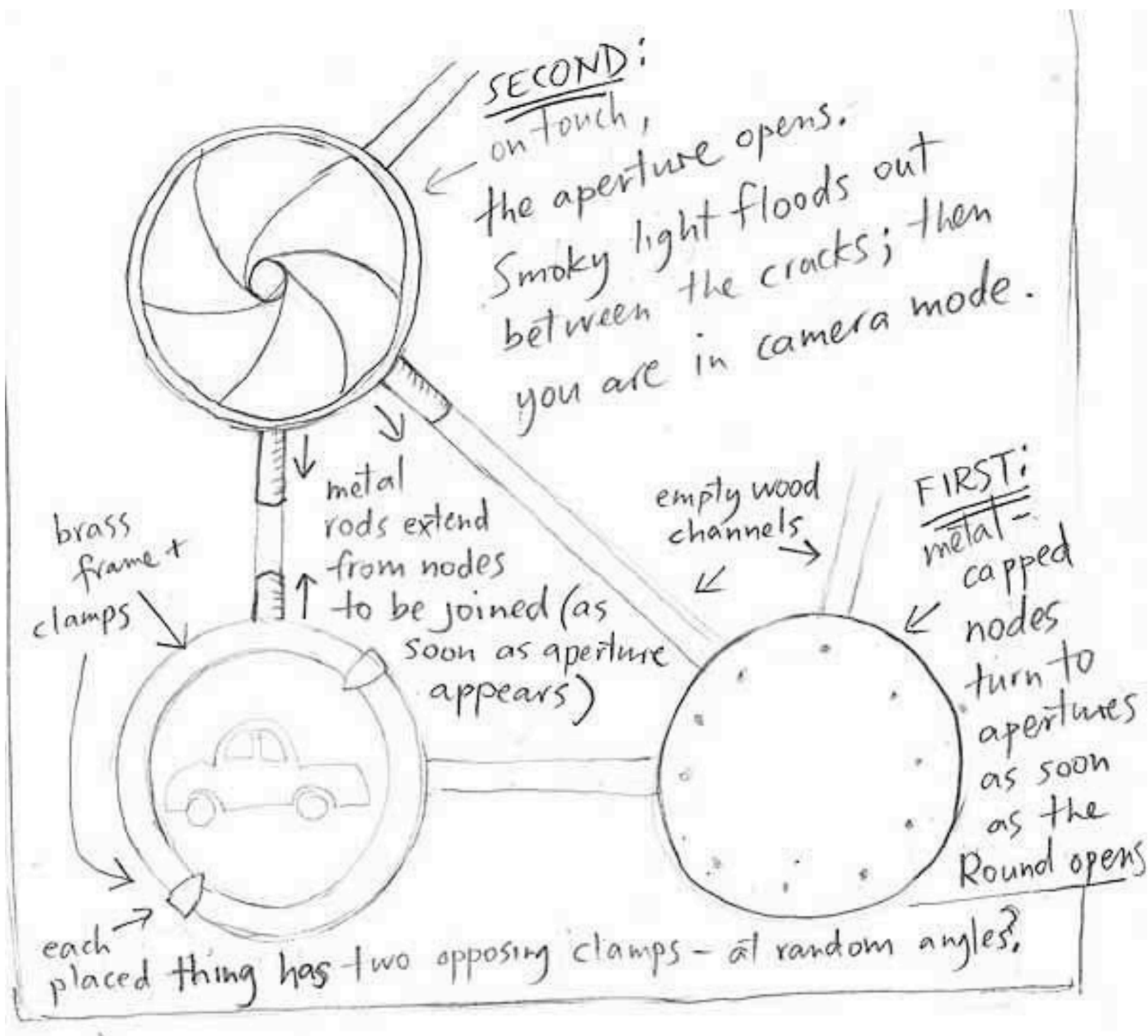
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Visual design



We'll present Sembl as a wooden device; very early on we started imagining it as a steampunk device.

This is a sketch I made ages ago now, showing the spine of the device, where you can register your team and add a team photo. As I imagined it, you would turn the key, the device would rotate, and you would enter the game world...



This second sketch was me thinking through how the nodes on the gameboard might change as they become available to players, and then acquire content.

So there are closed nodes, metal-capped, available nodes, with an aperture that opens on touch to reveal the camera, and populated nodes.

Having been drawn into the retro-futurist Steampunk zeitgeist, I wondered where these wood and metal devices would have come from, and a backstory began to emerge.

A set of **devices** has been **sent** back **from the future**, after the **apocalypse**. People have **forgotten** about the time before, and they **yearn to know** of the richness and diversity of their former world.

So they made us a **game-in-a-box**. The more we play, the more the future folk remember and understand.

There is an **ulterior motive**, but it is not evil: it is only to **prevent the apocalypse**. The future folk have a fragile hope: if people could **understand** the world better – and appreciate the **connectedness of all things** – the apocalypse may never happen.

So the devices will look like how 19th-century people might have imagined the future; and the idea is that they have come from a post-apocalyptic future to collect data about the present.

Maybe the data will transmit through the Museum's iconic loop, which points to Uluru.



This is an aerial photograph of the Museum showing the 'Uluru line'. You can see the orange loop and how it continues up the wide red path and ultimately points northwest to Uluru.

Could that not be an aerial for transmitting data into the future?

Now then...



While we're whizzing back and forth between past, present and future, I should note that Sembl the iPad game will work in the context of any museum with a good wireless network. One of our playtests was at the Tasmanian Museum and Art Gallery.

And to go a bit further into the future—as-I-imagine-it, Sembl escapes the confines of physical museum space and takes the form of an online game.

Sembl #2

an **online** game
anywhere

And this is where I can see Sembl as a world-changer. It's a fun, structured way to engage with and think about the world, and a safe way to explore difference.

Once Sembl is playable over the internet – environments in which it would be valuable proliferate: school, university, U3A, learning circles, brainstorming, team-building, professional development, conferences, diplomacy.

Unlike the fixed-site game, you could play items from any collection – and the content could take any form – image, text, audio, video.

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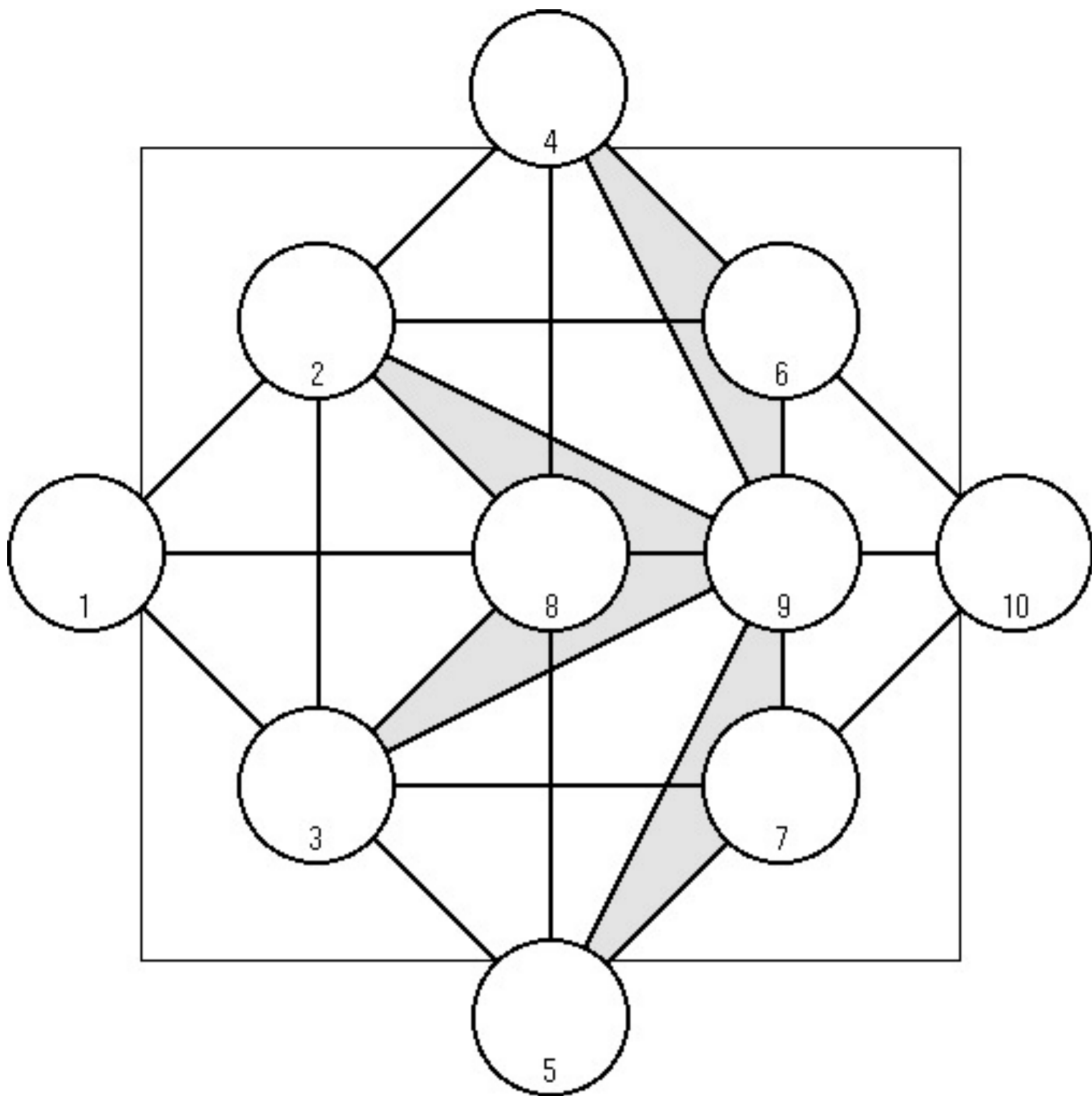
a model ‘**elaboratory**’ for investigating the analogical, poetic, creative **potencies of the mind**

”

Derek Robinson, ‘HipBone games, AI and the rest: An overview’

In fact, this idea of Sembl unleashed onto the internet would closely match the intention of Charles Cameron and his Hipbone games, on which Sembl is based.

Hipbone games are in turn based on the fictional Glass Bead Game in the Herman Hesse novel of the same name.



Charles' Hipbone games have been played for many years through online or face-to-face discussion with a static gameboard image like this.

Charles and I have been talking online for almost a decade about converting the games into a form that is playable online. And because of Charles work over the years, an online community of prospective players already exists!



Where our Stories live

Yes

... I'm excited

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