

Creative Coding & Creative Computing Frameworks

Week 5: Randomness/Noise + Inputs/Interaction

Through technical examples and theory we explore concepts of randomness, noise, the unpredictability of tech and the problematics of datacapture.

Hour 1:

Git and code-along exercise JavaScript and HTML.

Hours 2 & 3 (lecturers swap rooms between hours):

Room One: 1 hour - Theory + Q&A.

Room Two: 1 hour - Nicola p5 code along.

Hour four:

A coding exercise to play with and take away - incorporating randomness/noise+Inputs/Interaction.

Resources for this week

- Git examples: <https://github.com/IrtizaNasar/CCI-Diploma22-CreativeCoding>
- Cheat sheet: <https://github.com/IrtizaNasar/CCI-Diploma22-CreativeCoding/raw/main/Creative%20Coding%20Cheat%20Sheet.pdf>
- Worksheet for building for the JavaScript example:
<http://resources.theanthillsocial.co.uk/experiments/infinite-regen/Worksheet.pdf>



Hour 1: Git

Using GIT

1. Create a repository on git.arts.ac.uk.
2. Setup an authentication token here: <https://git.arts.ac.uk/settings/tokens>
Follow instructions on the CCI Wiki here:
<https://wiki.cci.arts.ac.uk/books/creative-code/page/how-to-set-up-vs-code-with-gitartsacuk>
4. Clone the repository using GitHub desktop or the the commandline:

\$ git clone [link to repository]
5. Make changes to your local files.
6. Upload changes using VScode OR using the commandline:

\$ git add -A	# Add changes to staging area
\$ git commit -m "Commit message"	# Commit changes to local repository
\$ git push origin main	# Upload to remote repository

Hour 1: Infinite Regeneration

A JavaScript and HTML example incorporating randomness, mouse events, and a form element.

View online version of the worksheet for building this example:

<https://acidic-salamander-f97.notion.site/Infinite-Regeneration-d1578bf610944d8d9eda1cec05601b8c>

PDF version of the worksheet:

<http://resources.theanthillsocial.co.uk/experiments/infinite-regen/Worksheet.pdf>

```
<script>

let stayPut = true;
let time = 1;
let checkTime = "";

while(stayPut){
    checkTime = "hour "+time;
    if(checkTime=="hour 1"){
        console.log(checkTime);
    }else if(checkTime=="hour 2"){
        console.log(checkTime);
    }else if(checkTime=="hour 3"){
        console.log(checkTime+" -> Swap Rooms!!");
        stayPut = false;
    }
    time++;
}

</script>
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Hours 2 & 3 (lecturers swap rooms between hours)

Room One:

Refresher of theories and histories

Room Two:

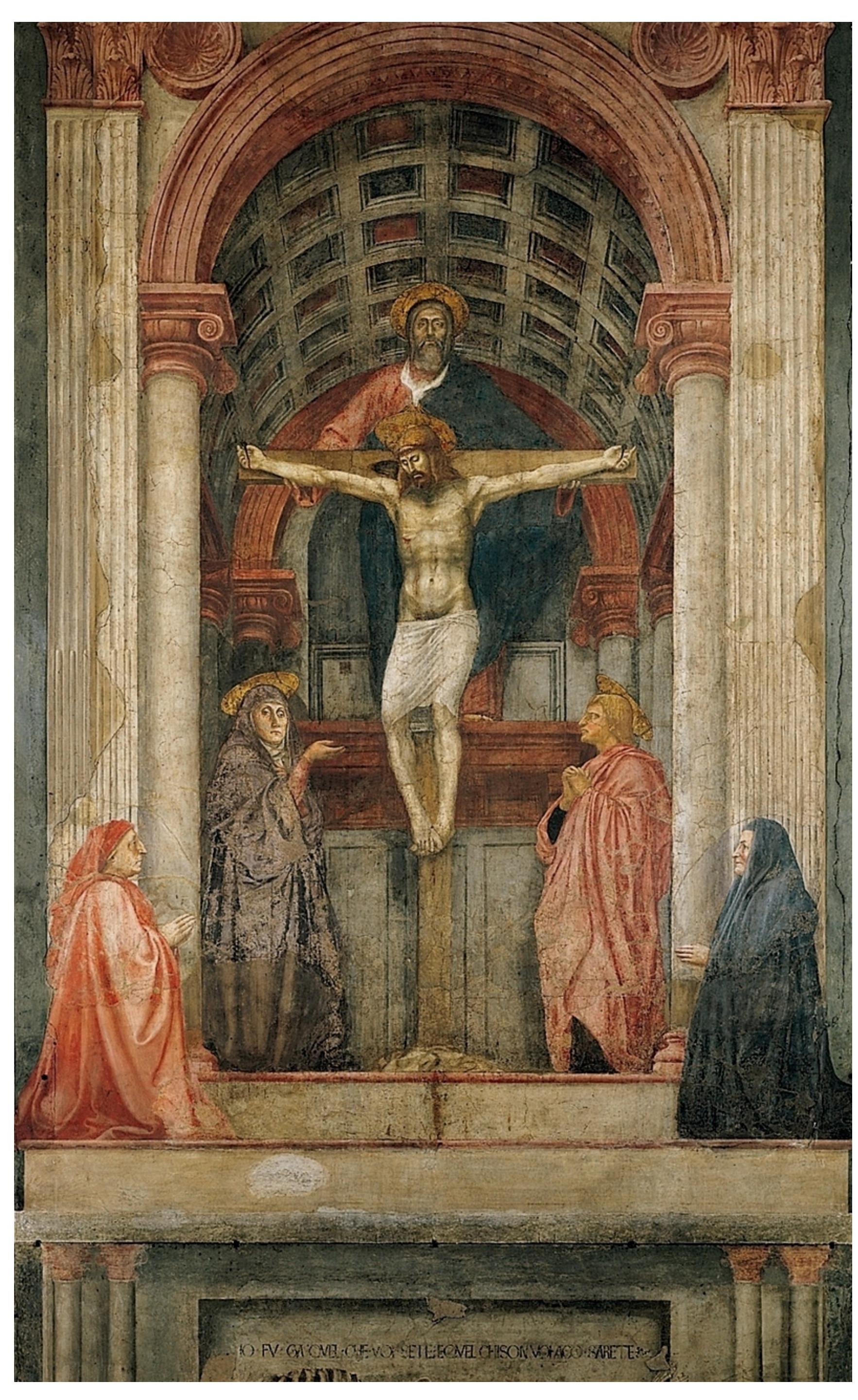
Introduced to the technical exercise and play with code.

Hour 2 & 3: p5.js

Nicola's code-along stuff

[include a challenge / exercise they can run with in hour 4 and take home]

p5*js

A Renaissance fresco by Masaccio, depicting the Holy Trinity. In the center, Jesus Christ is crucified on a cross. Above him, God the Father is shown within a mandorla. To the left, the Virgin Mary stands with her hands joined in prayer, looking up at the Christ figure. To the right, Saint John the Evangelist stands with his hands joined in prayer, also looking up. In the foreground, three figures representing donors are shown in profile, looking towards the central scene. The background features a perspective view of a building with columns and a vaulted ceiling.

Creative Coding & Creative Computing Frameworks

Week 5: Theories and Histories

Cosmologies, ontologies, ideologies

What is the truth of the world? How do we learn to perceive and describe its phenomena – the exterior ones that we see, hear, touch, taste, and the interior ones that we feel (but also often can't, or don't, consciously register).

Does the complexity of the world, and our experience of it, hide an underlying order or pattern by which we might be guided, or has science and ideology critique done away with such schemas, exposing them as instruments of superstition, or the institutional and operational power of the state, corporations and capital?

To what degree are we engulfed in mere randomness and noise? How can we – and do we want to – separate out the so-called 'signal' to which we ascribe meaning, or 'content'? Is randomness itself that signal?

In an era of crisis, what are our cosmologies?

Image: Masaccio, *The Holy Trinity with the Virgin and Saint John and donors* (1425-27)



Image: Paul Nash, *The Menin Road* (1919)

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Week 5: Theories and Histories

Precursors: Dada and Surrealism

To pursue the historical roots of ideas of randomness and noise, an obvious port of call would be Dada and Surrealism. Before post-modernism fixated on the problematics of constructing 'the author' and authorship, these movements had already performed a wide-ranging enquiry into how to expand the 'data' an author could annex to authorship.

In the wake of what they saw as a non-sensical war, they used techniques such as automatic writing, the exquisite corpse, and dream-work to enlarge the sphere that was brought to human creative 'expression'.

They did this to expand the definition of humanity beyond what the status-quo would allow; and to let the 'world' in, in all its unpredictability, so that the powers of what we have been calling the possible would be enlarged.

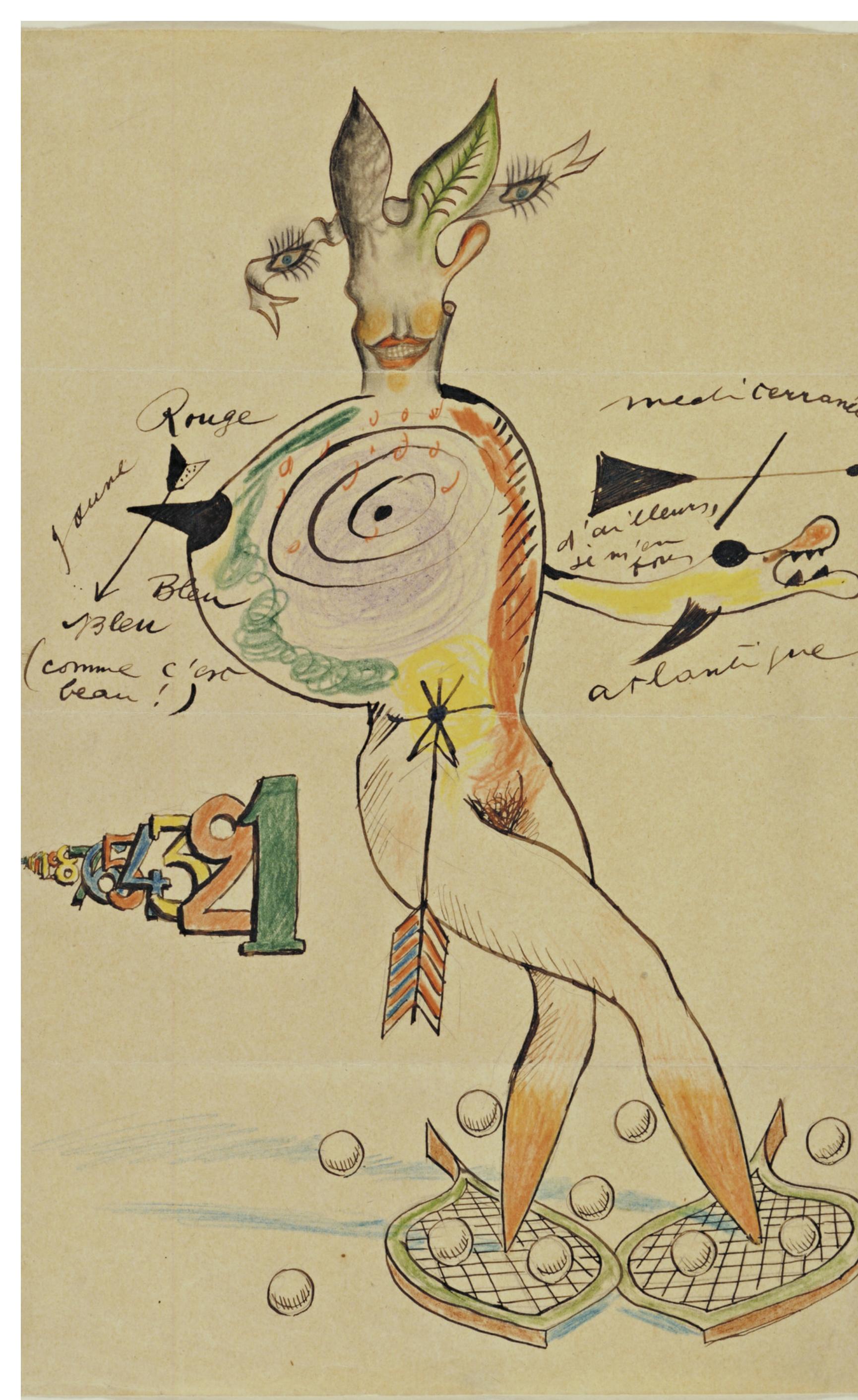




Image: André Breton's room, *The Menin Road* (1919)

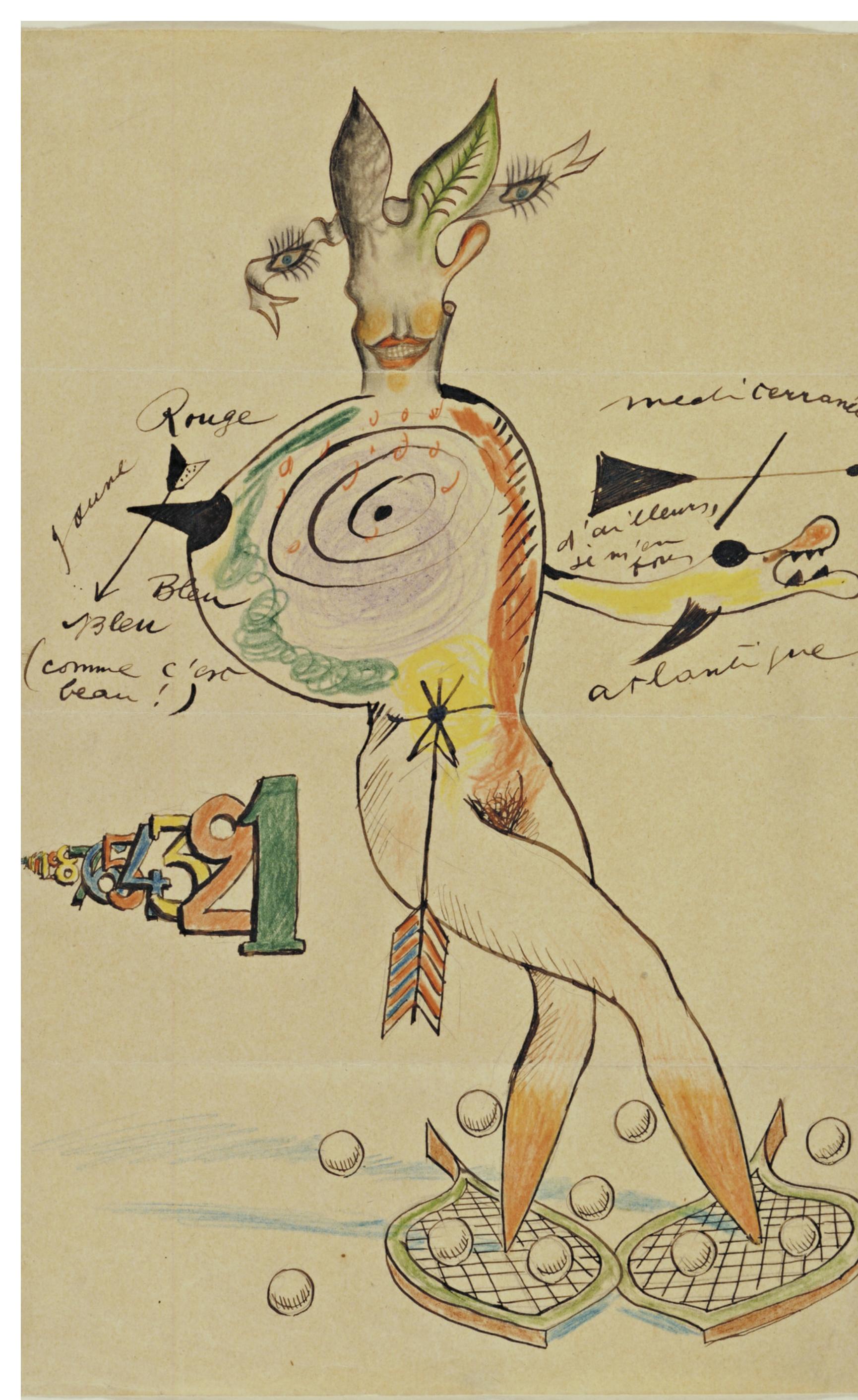
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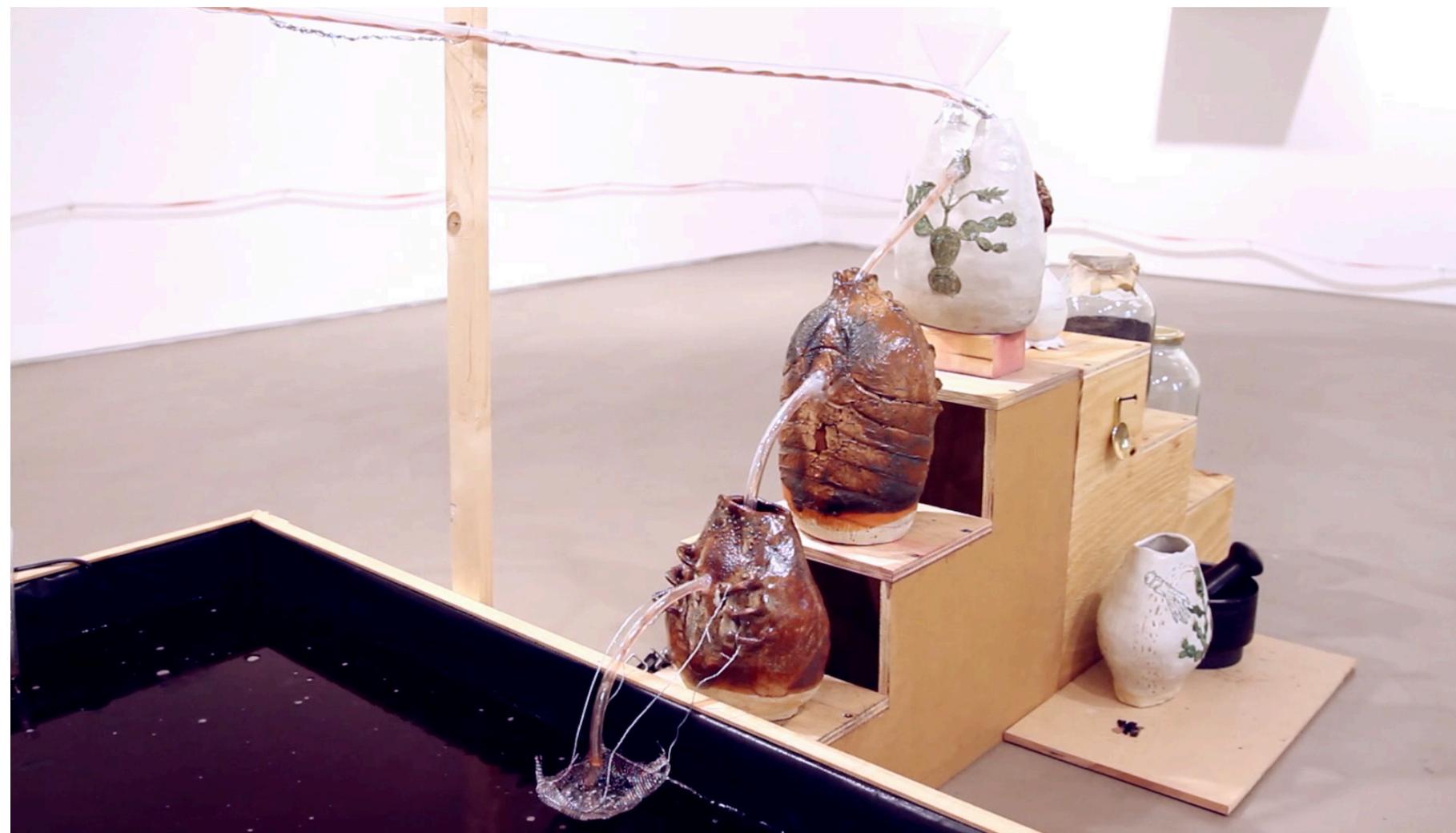
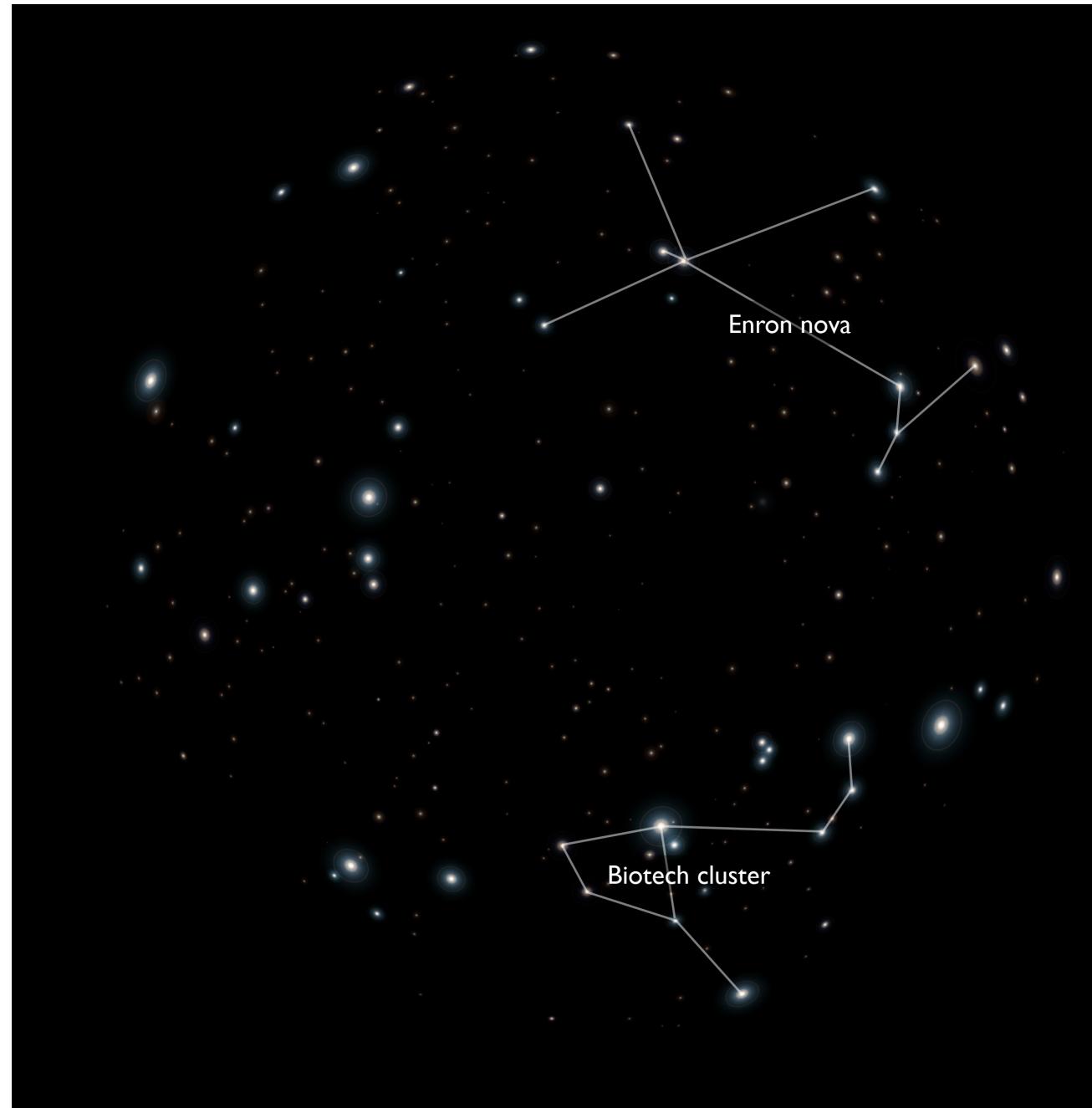
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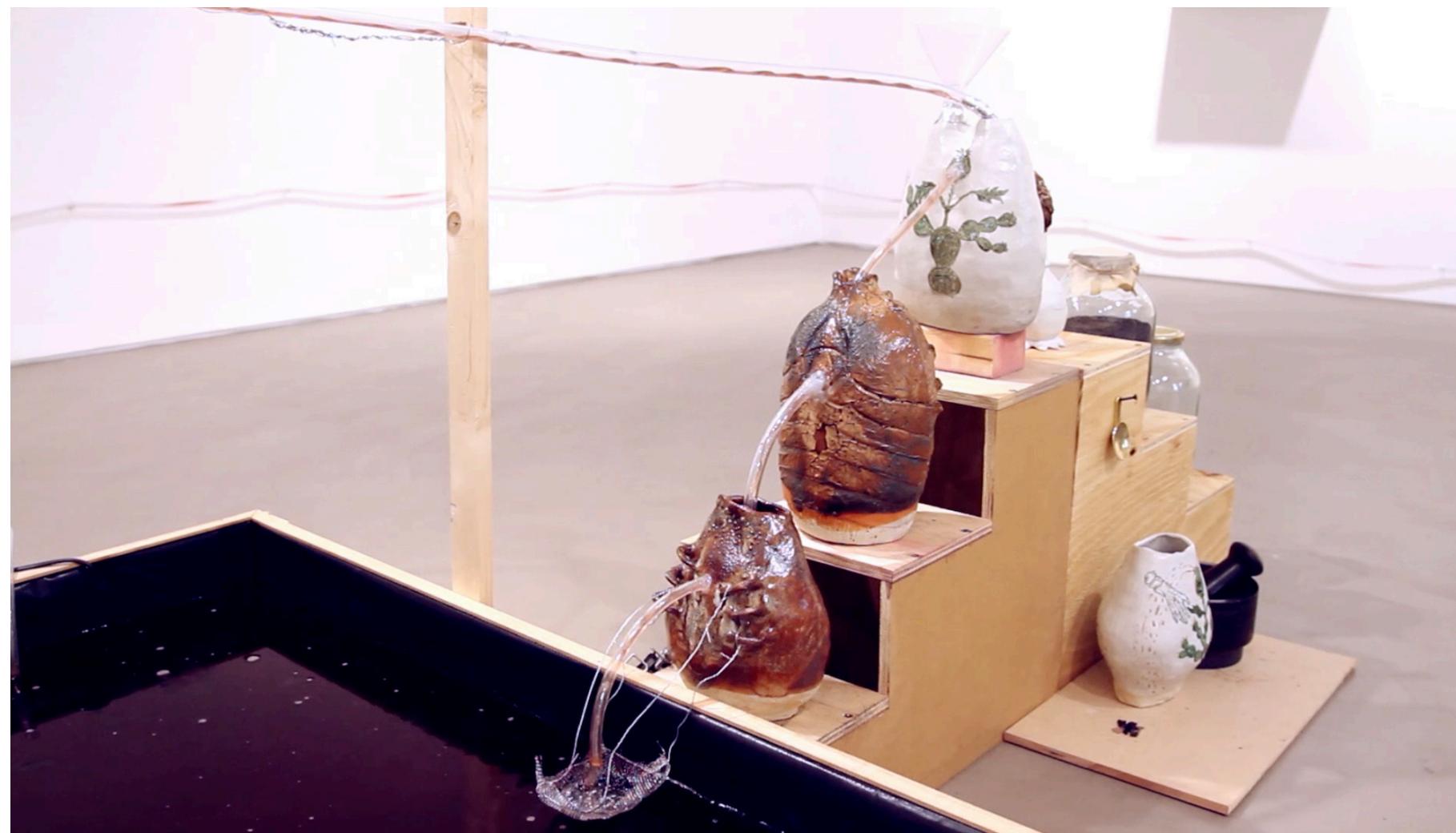
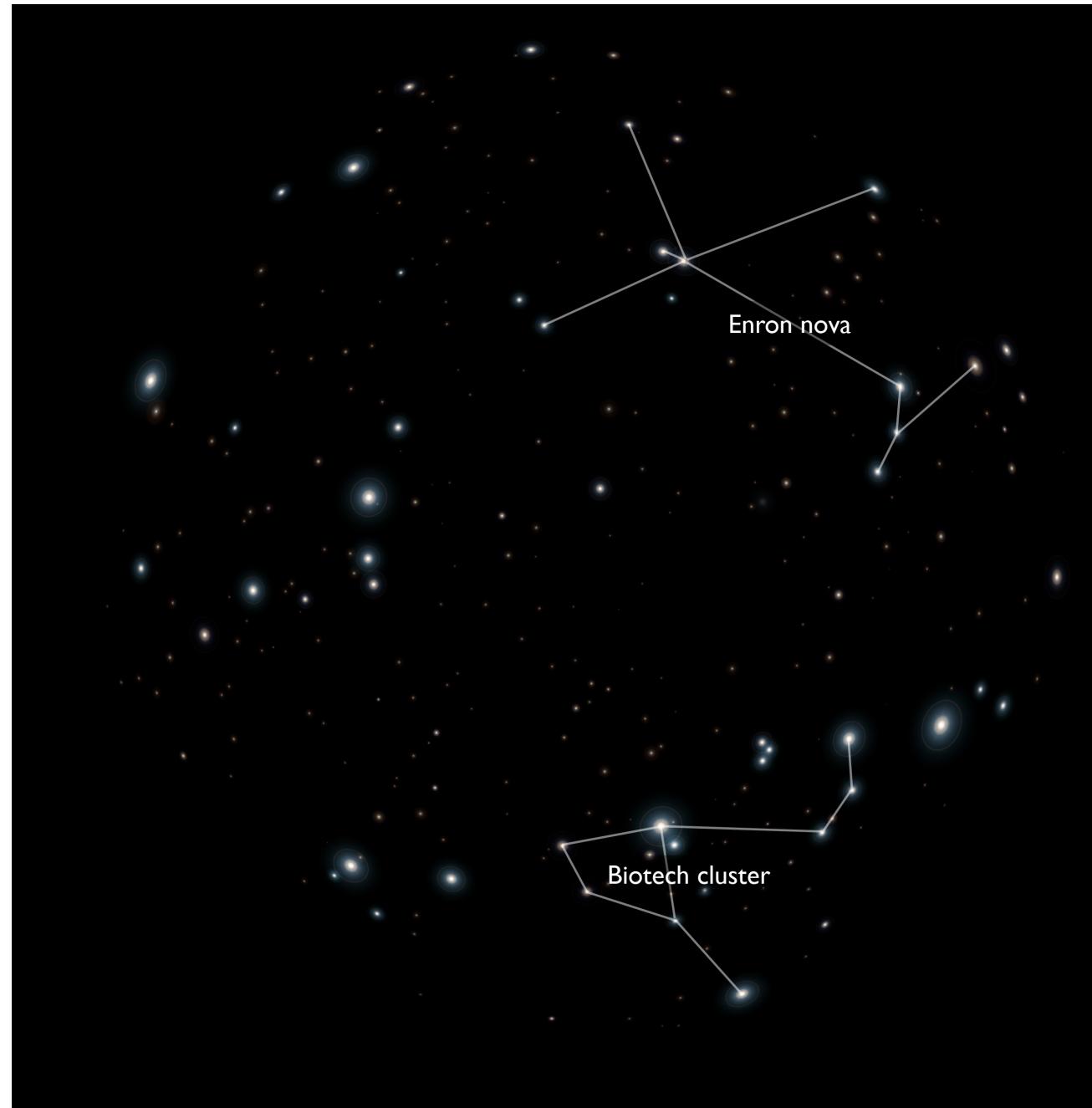
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Pauline's stuff



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Hour 4

Play with the exercise - lecturers will be around to help.

END