



Teaching Game Design for a Reimagined World

Marcelo Viana Neto
University of California, Santa Cruz

GAME DEVELOPERS CONFERENCE

MARCH 18–22, 2019 | #GDC19

Session Overview

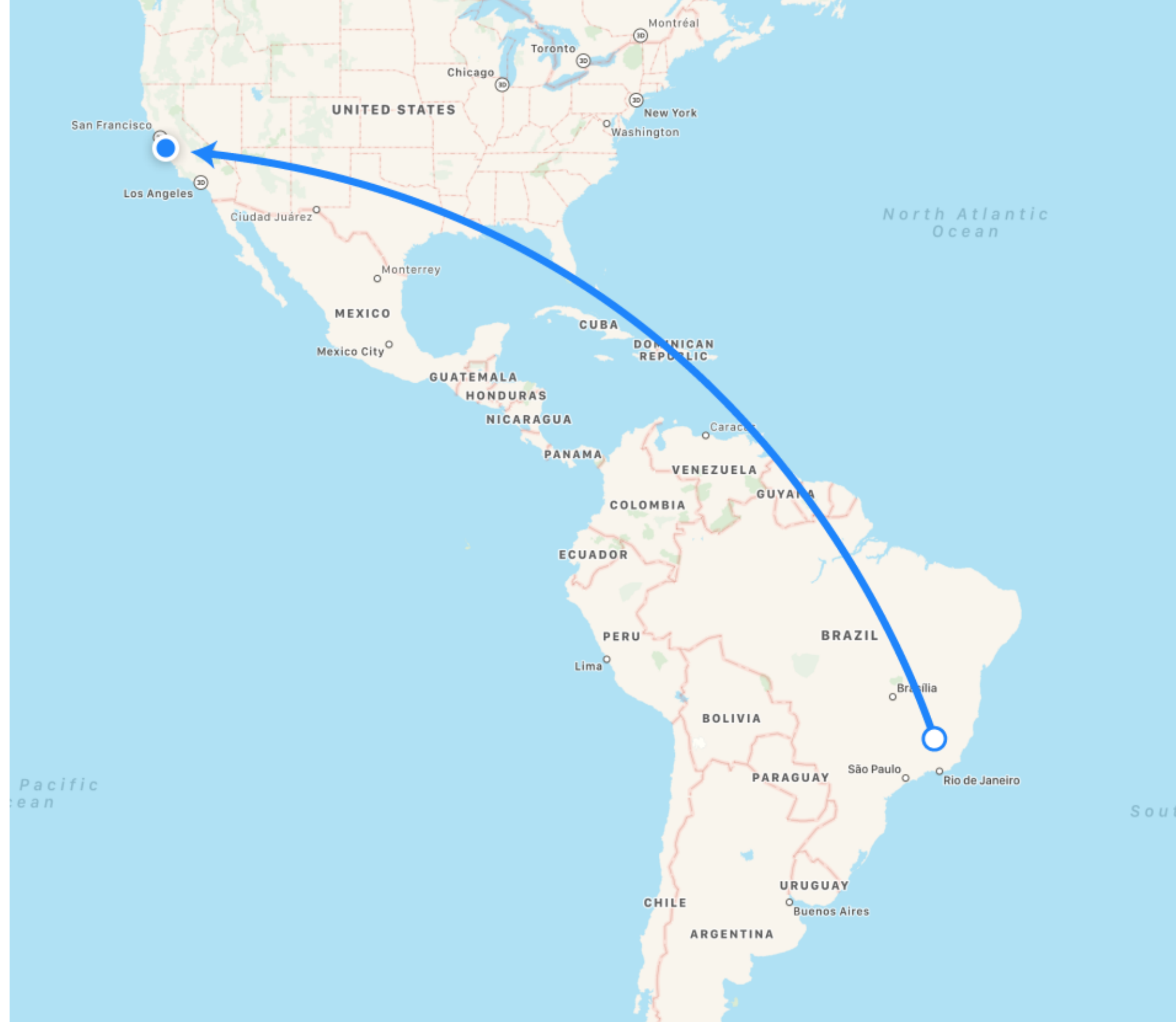
1. Brief bio
2. Course facts
3. Where the idea came from
4. Syllabus and methodology
5. Standout games
6. Results
7. Why this matters

Intros

Belo Horizonte, Brazil



2002



Background

1999–2010: Graphic Designer + Art Director

2010–Present: Game Designer + Artist

Currently: Visiting Assistant Professor at UCSC in the
Art & Design: Games and Playable Media program



Graphic Design + Game Design





Digital Sculpting





3D Art

Sin Sol/No Sun by micha cárdenas

Forest point cloud imagery by Abraham Avnisan

3D art by Marcelo Viana Neto

Additional 3D art and animation by Adrian Phillips

Character concept by Morgan Thomas

Sound by Wynne Greenwood





Speculative Futures: Games for a Different World

In-game screenshot from **Ecopolis** by Annabel Maokhamphiou, Jacob Levine, and Margaret Patrick

Course Description:

How do space exploration games play and look like without colonialism? What about sports games in a world free from gender normativity? First-person shooters in a world without war? In this studio course, students will play, discuss, and produce digital and analog games that imagine a world in which major social justice challenges have been overcome.

Basics:

- Upper-division elective in the Art & Design: Games and Playable Media program at UCSC
- Pre-reqs: foundational game design and history courses, but can be waived by instructor
- Fulfills a “media creation elective”
- 10-weeks (quarter system)

Who takes this course?

- 20-25 students per quarter
- Majority Games & Playable Media, some CS
- Mix of juniors and seniors with some sophomores
- Wide range of technical skills
- Majority underrepresented (POC, non-male, first-generation, etc.)

Learning Objectives:

- Deeper understanding of how games communicate/generate concepts.
- Better-situate games and game design within contemporary socio-political systems.
- Acquire competency in designing games that investigate pertinent questions of our present.
- Acquire broader game literacy and game design vocabulary.

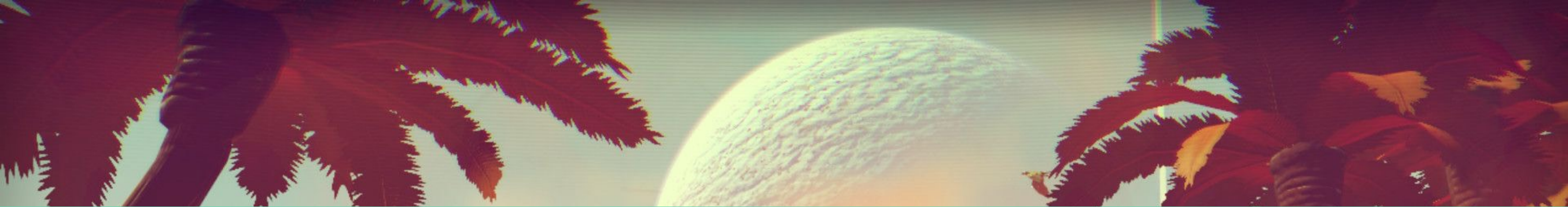


Origins



In-game screenshot from **Ecopolis** by Annabel Maokhamphiou, Jacob Levine, and Margaret Patrick

Our futures look bleak.



The case of **No Man's Sky**





**What you do in
No Man's Sky:**
exploration,
survival, combat,
and trading.



45%



MINING BEAM



Ammr ushistil

Exporter Tevikudadu
Current Gek standing: Customer

The pilot clicks its beak to indicate that it's open to trading.

It might also be open to discuss the sale of its starship.

Make an offer on the lifeform's starship

Sell items to the lifeform

Buy items from the lifeform

Go away, its mine!

Discovered by Happi

1,143,423ks

Arrive in 02:07:02

Go away, its mine!
Happi
1,143,424ks

150u

Ekinokaz S64

SHIELD

Photon Cannon

We can imagine **a quintillion different worlds** but we're still doing **the same stuff** in them.





Paraphrasing Fredric Jameson...

It is easier to imagine
the **end of the world**
than **a better world.**

Hypothesis:

What if we began
by imagining **a different,
better future** and then
designed games for it?



Course Overview

(how we did it)

3 Pillars:

Self-efficacy

Autonomy

Prefiguration

Self-efficacy:

To imagine a different future, students must believe in their **already existing** potential for creative imagination and work within a structure that breeds confidence.

Autonomy:

To believe in their vision, they must design it from **their own** passions, lived experiences, and aspirations.

Prefiguration:

To own it, they must live and work
as if it's already here.

CLASS VALUES

COLLABORATION

OPEN-MINDEDNESS

RESPECT

CONSTRUCTIVE CRIT

OWNERSHIP OF MISTAKES

WILLINGNESS TO MENTOR

OPEN/INCLUSIVE ENV.

" COMM

JOY / SERIOUS FUN

CHALLENGE EACH OTHER

RADICAL

TAKE RISKS

EXPERIMENTATION

AWARENESS/RESPECT BG

UTILIZE STR.

GRATITUDE

FLEXIBILITY

WORK/LIFE BAL.

CLASS VALUES

129-02
SPEC FUTURES
M

DON'T YOCK MY YUM
CONSTRUCTIVE CRITICISM
DBAD
ATTENTIVENESS
ASSUME GOOD FAITH
FUN / JOY
LOVE
ENCOURAGEMENT
WHOLESONENESS
RESPECT SKILLS
NO SLURS

SPEAK YOUR TRUTH
WE'RE ALL LEARNING
FOLLOW THROUGH
REASONABLE GOALS
ASK FOR HELP
OPEN COMMUNICATION
EMPATHY
LIFE BE LIKE THAT
F.I.S.H.

TAKING CARE OF OURSELVES
POSITIVITY
COMARADERIE
PATIENCE
NO GRUDGES
SERIOUS FUN

Course Structure

Research

~2 weeks

Prototype

~2 weeks

Production

~6 weeks

Course Structure

Research

Prototype

Production



Research in Spec Futures

Selection from course readings:

- On utopia/the future: Ursula K Le Guin, Mark Fisher, Thomas Moore
- “Do Artifacts Have Politics?” by Langdon Winner
- “Games as Speculative Design,” by Coulton, Burnett, Gradinar
- "Places to Intervene in a System,” by Donella Meadows

Individually-assigned readings

Self-assigned readings

“Strange” games library

Course Structure

Present

Research

Transition

Class exercises

Future

Research
Prototype
Production

Course Structure

Present

Research

Transition

Class exercises

Future

Research
Prototype
Production

Course Structure

Present

Research

Transition

Class exercises

Future

Research
Prototype
Production

Course Structure

Present

Research

Transition

Class exercises

Future

Research
Prototype
Production

Research Phase (present)

1) Definitions

2) Presentations

Research Phase (present)

1. Definitions

Class exercise to identify and define major economic and socio-political systems. Create shared Google doc to collect findings and future reference.

Goals:

- Create a shared vocabulary
- Class cohesion
- Develop self-efficacy

SYSTEMS / ISSUES

RACISM / WHITE SUPREMACY

NECROPOLITICS L

COLONIALISM WAR
POLITICS

NEOLIBERALISM |

HETERO_NORMATIVITY

GENDER BANALIZATION L

FOOD INJUSTICE

MENTAL HEALTH / ILLNESS |

COLORISM L

AUTOMATION |

FREEDOM OF SPEECH |

RELIGIOUS PREJUDICE

CAPITALISM |

AGEISM | UNDER-REPRESENTATION

CHRONONORMATIVITY L

MYSTICISM □

RESPECTABILITY POLITICS |

ABLEISM |

EDUCATION

PATRIARCHY

SYSTEMS / ISSUES

RACISM / WHITE SUPREMACY
NECROPOLITICS L

COLONIALISM WAR
POLITICS

NEOLIBERALISM |

HETERO_NORMATIVITY

GENDER BANALIZATION L

FOOD INJUSTICE

MENTAL HEALTH / ILLNESS |

COLORISM L

AUTOMATION |

FREEDOM OF SPEECH |

RELIGIOUS PREJUDICE

CAPITALISM |

AGEISM | UNDER-REPRESENTATION

CHRONONORMATIVITY L

MYSTICISM □

RESPECTABILITY POLITICS |

ABLEISM |

EDUCATION

PATRIARCHY

→ SOCIO-POLITICAL ECONOMIC SYSTEMS

CAPITALISM

SOCIALISM

AUTHORITARIANISM

FASCISM

ANARCHISM

NEOLIBERALISM

COMMUNISM

DEMOCRACY

• COLORISM

• ? NATIONALISM

CLASSISM

PATRIARCHY

• RACISM

SEXISM

AGISM

RACE & NATIONALITY

ABLEISM

• ETHNOCENTRISM

ANTHROPOCENTRISM

EDUCATIONISM

RELIGION

• IMPERIALISM
• COLONIALISM

GENDER & SEXUALITY

→ SOCIO-POLITICAL ECONOMIC SYSTEMS

CAPITALISM

SOCIALISM

AUTHORITARIANISM

FASCISM

ANARCHISM

NEOLIBERALISM

COMMUNISM

DEMOCRACY

• COLORISM

•? NATIONALISM

CLASSISM

PATRIARCHY

• RACISM

SEXISM

AGISM

RACE & NATIONALITY

ABLEISM

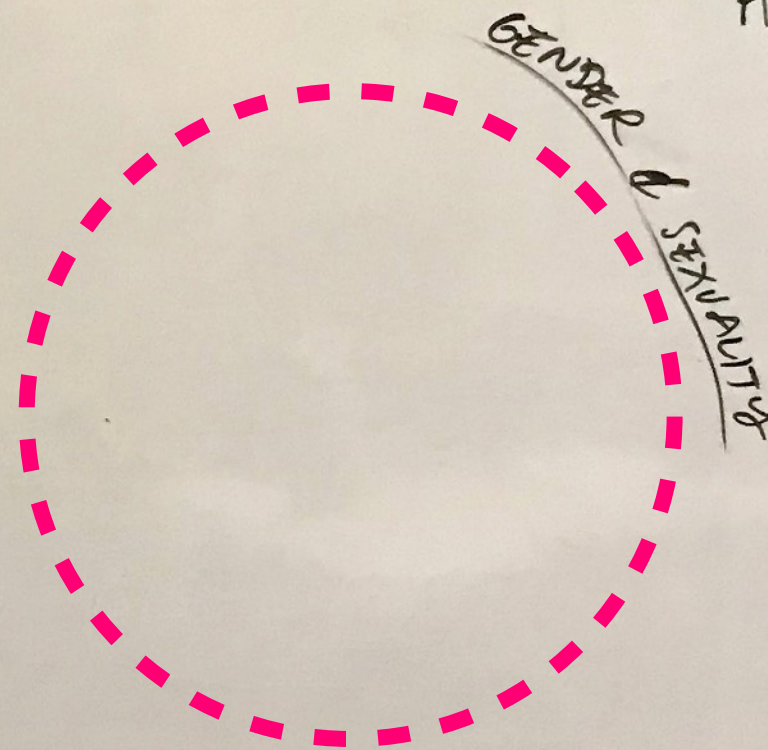
• ETHNOCENTRISM

ANTHROPOCENTRISM

EDUCATIONISM

RELIGION

• IMPERIALISM
• COLONIALISM



129-02 Working Definitions

Necropolitics

Socio-political views, motives, and abilities that decide who should live/die.

Racism

Preferred treatment of individuals based on the belief that one race is superior to another.

Colonialism

Idea that the human (maybe white) race is supposed to colonize others.

Neoliberalism

Socio-economic idea that sees competition as the defining characteristic of human behavior and citizens as consumers.

Heteronormativity

The assumption that heterosexuality is the norm and any difference is a deviation.

Gender

Uh...

Banalization

To make a potentially serious topic overused/overdone to the point of boredom.

Food Injustice

Food production not allocated effectively -> people starve/malnourished.

Discrimination based on Mental Health/Illness

Discrimination based on alterations in thinking/etc. compared to a typical response towards the stress.

Freedom of Speech

Freedom of individual or group to articulate their opinions/ideas without fear of condemnation or censorship, unless... it causes harm.

Religious Prejudice

Discrimination based on religious view.

Capitalism

Socio-economic system. The mass expression of ability to take at the consequence of another's loss.

Ageism

Preferred treatment of individuals based on age.

Chrononormativity

The idea that our paths are set to unfold as dictated by the modern cultural climate.

Mysticism

Ascribing godlike qualities to individuals and concepts.

Respectability Politics

Attempt of people within marginalized groups to push their own communities to conform to the norms of the groups in power.

Ableism

Discrimination based on the perception that disabled people are unnecessary or less than human.

Patriarchy

MENS > all

Research Phase (present)

2. Presentations

Students form groups around shared topics and create presentations for the rest of the class. They identify existing proposed alternatives and design a simple game about their topic.

Goals:

- Fill gaps in understanding
- Foster self-efficacy through peer-to-peer instruction
- Begin forming final project groups

GENDER

③ IDENTITY

PRONOUNS
SINGULAR THEY

PERFORMANCE
EXPRESSION

IDENTITY

terms
trans - nonbinary

PERFORMANCE

+
EXPRESSION
femme, masc, etc.

TRANS + NB

BIOLOGY

INTERSEX

BINARY
ROLES

BINARY ①

ROLES ②

CISGENDER

③

⑤ Cultural impact

PATRIARCHY

→ IMPACT ON CULTURE

④ DISCRIMINATION

MISOGYNY

→ #GAMERGATE, #COMICSGATE, ETC.

MRA

VIOLENCE

~~DISCRIMINATION~~
(PAY GAP)

TRANSPHOBIA

FEMINISM + WOMEN'S RIGHTS

TERFS : (TRANS MISOGYNY)

TERF - TRANS EXCLUSIONARY
RADICAL FEMINIST

INTER SECTIONS

RACE

SEXUALITY

GENDER UNDER CAPITALISM

RELIGION

GENDER DISCOURSE

⑤

· ONLY 2 (ASSHOLE)

· GENDER IS BAD, ELIMINATE

· GENDER IS GOOD, BE MORE INCLUSIVE THO

Terminology (beginning)
define:

Cis

Trans

Non-Binary

(issues)



Research Phase (present)

Sample Presentation Topics

- Patriarchy
- Racism
- Neoliberalism
- Ethnocentrism
- Anthropocentrism
- Classism
- Ableism

Course Structure

Present

Research

Transition

Class exercises

Future

Research
Prototype
Production

Boss Battle (transition)

In-class exercise.

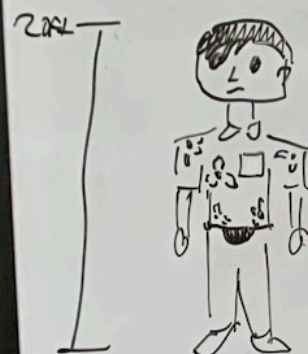
Design a classic video game boss battle using your research topic as inspiration and create a paper prototype.

Your boss should have minions that mirror your topic's allies or subordinate systems. The player(s) and their abilities should represent the possible counters to your topic.

Goals:

- Cathartic transition from present to future
- Begin group formation

Boss



50

Ability

- Cultural exploitation
 - plants damage markers on 3 random locations

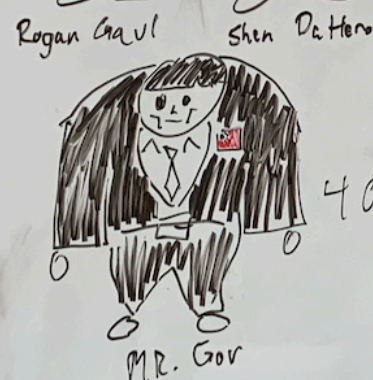
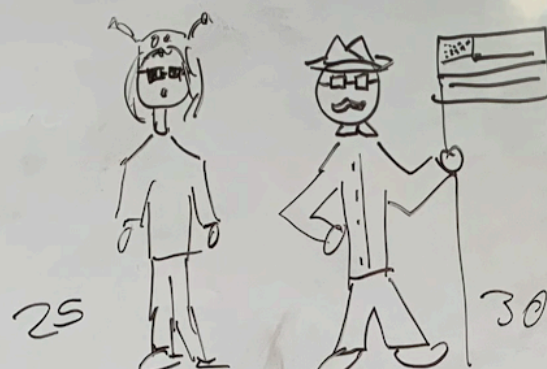
"Tourism"

- Deals 5 damage to all players

"SPEAK ENGLISH!"

- Players lose movement

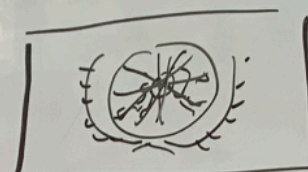
Minions



Ability

- Rogan: Cultural Ignorance
 - locks off space
- Shen: Manifest Destiny
 - Moves players out of space
- Gov: Gentrify society
 - Plants damage mark
 - Does 3 damage to any player currently on space

Player



United Cultures
(United Nations, But Bitter)

40 (min 4 players)

Abilities

Tolerance & Understanding:

- Opens up locked space(s)

Diversify:

- Remove damage marker

Economic Justice:

- Heals up to 10 hp

Decolonize:

- Damages Minion/Boss

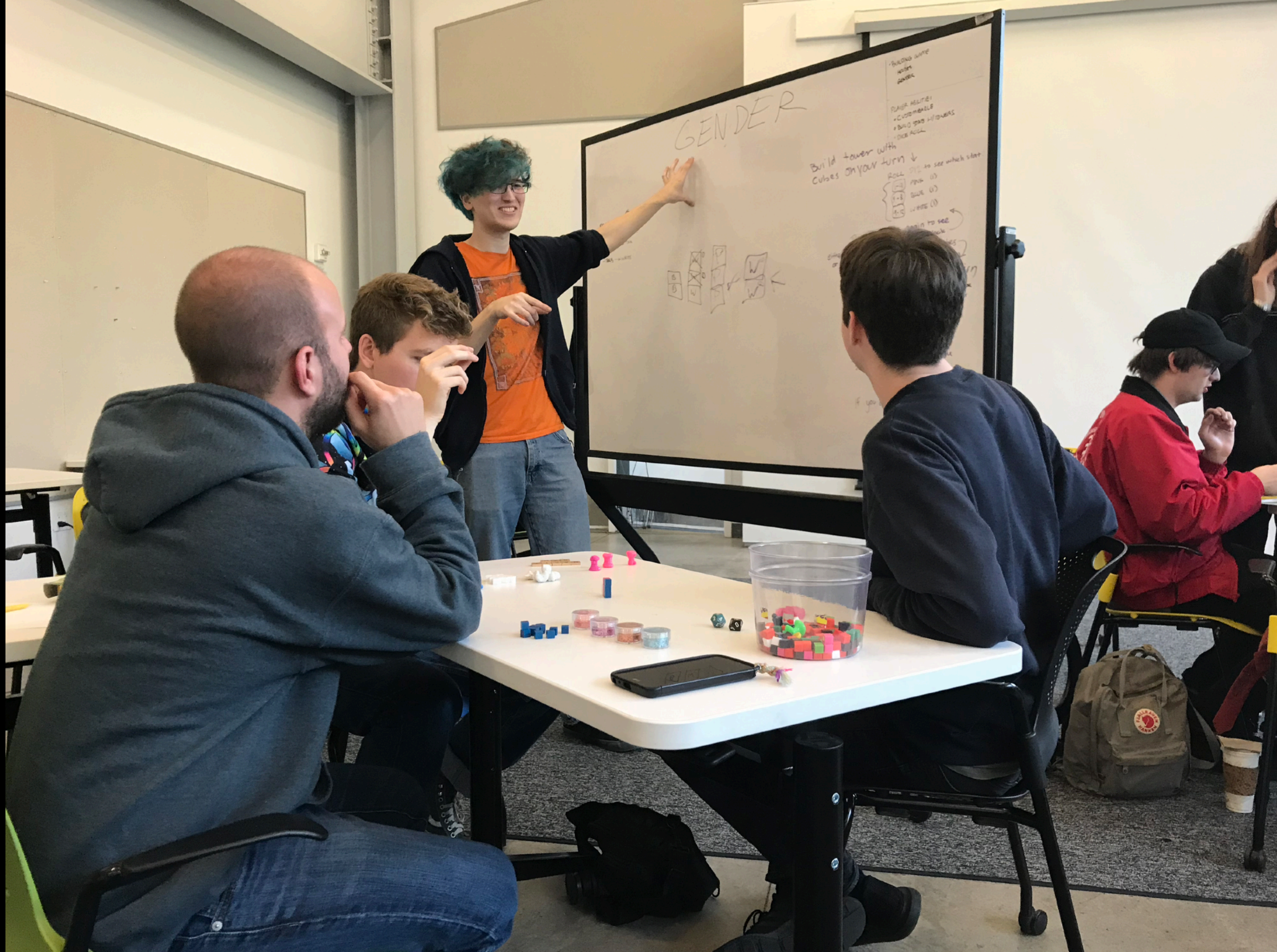
Turn order

- Minion movement
- Player movement
- Boss attack
- Minion attack
- Player attack

ETHNOCENTRISM







Course Structure

Present

Research

Transition

Class exercises

Future

Research
Prototype
Production

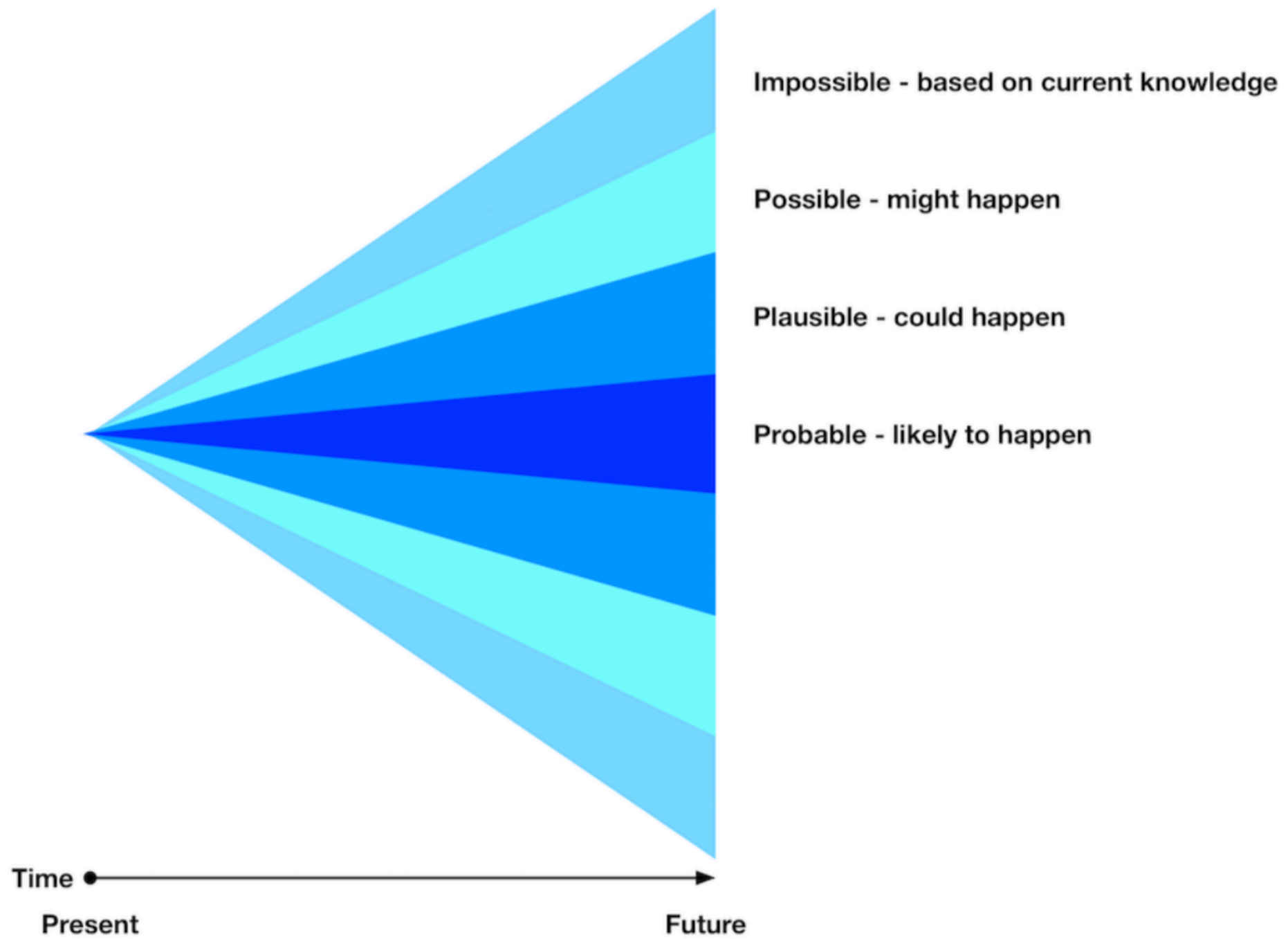
Final Project (future)

- 1) Future creation
- 2) Group formation
- 3) Game proposal
- 4) Group charter

Final Project (future)

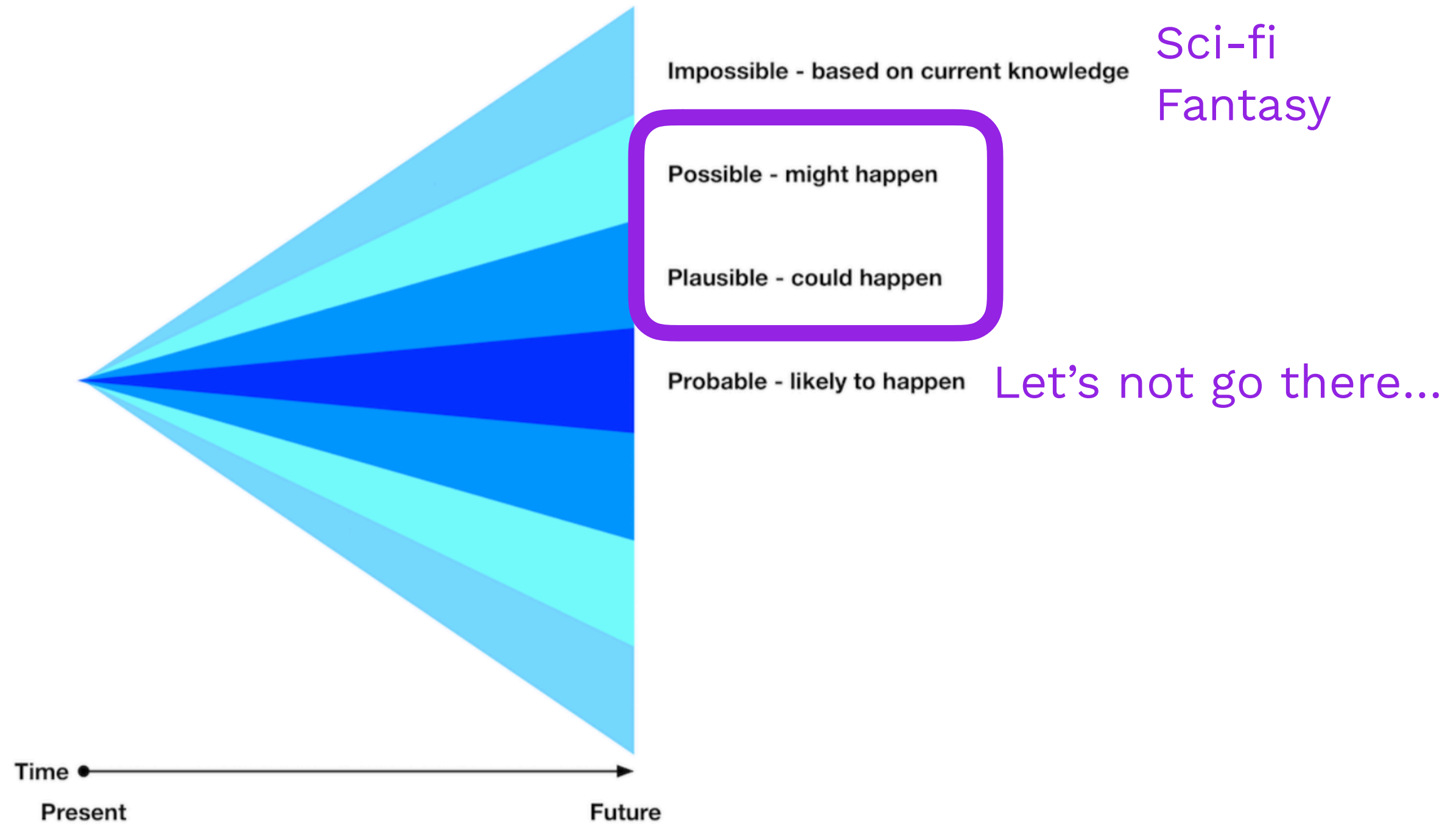
1. Your Future

- Students describe their desired future in which their chosen socio-political system(s) have been replaced or eradicated.
- They describe what Cities, Work, Relationships, Schools, Housing, Transportation, etc. would be like in this future.



Games as Speculative Design: Allowing Players to Consider Alternate Presents and Plausible Futures

Paul Coulton, Dan Burnett, Adrian Gradinar



Games as Speculative Design: Allowing Players to Consider Alternate Presents and Plausible Futures

Paul Coulton, Dan Burnett, Adrian Gradinar

Final Project (future)

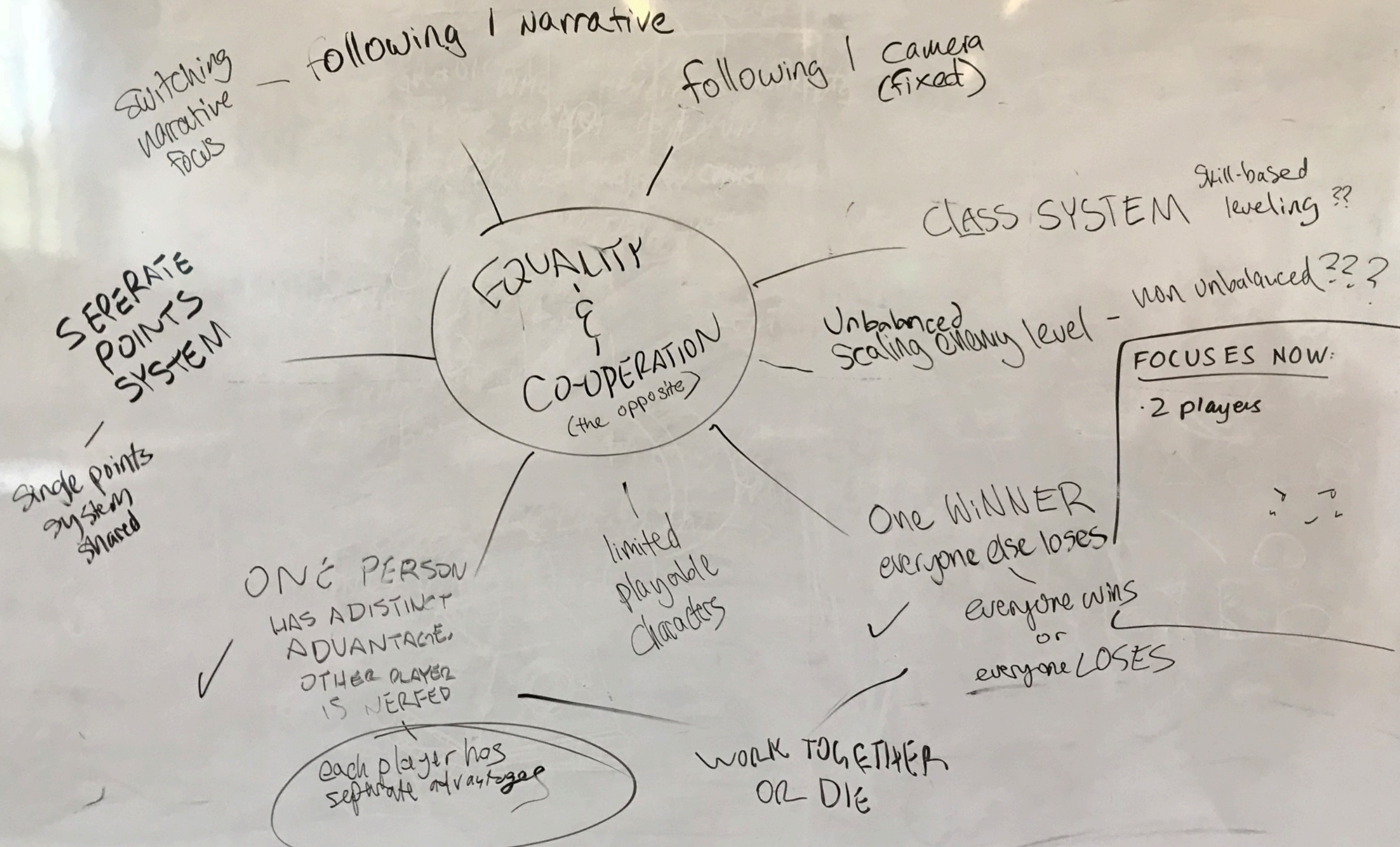
2. Group Formation

- We spend 2 whole class periods on this (sometimes more).
- First, we create a shared Google doc where students post research interests, game ideas, and skills they want to develop/learn.
- They design activities to learn more about each other.
- Form groups based on affinity and skillset matches.

Final Project (future)

3. Game Proposal

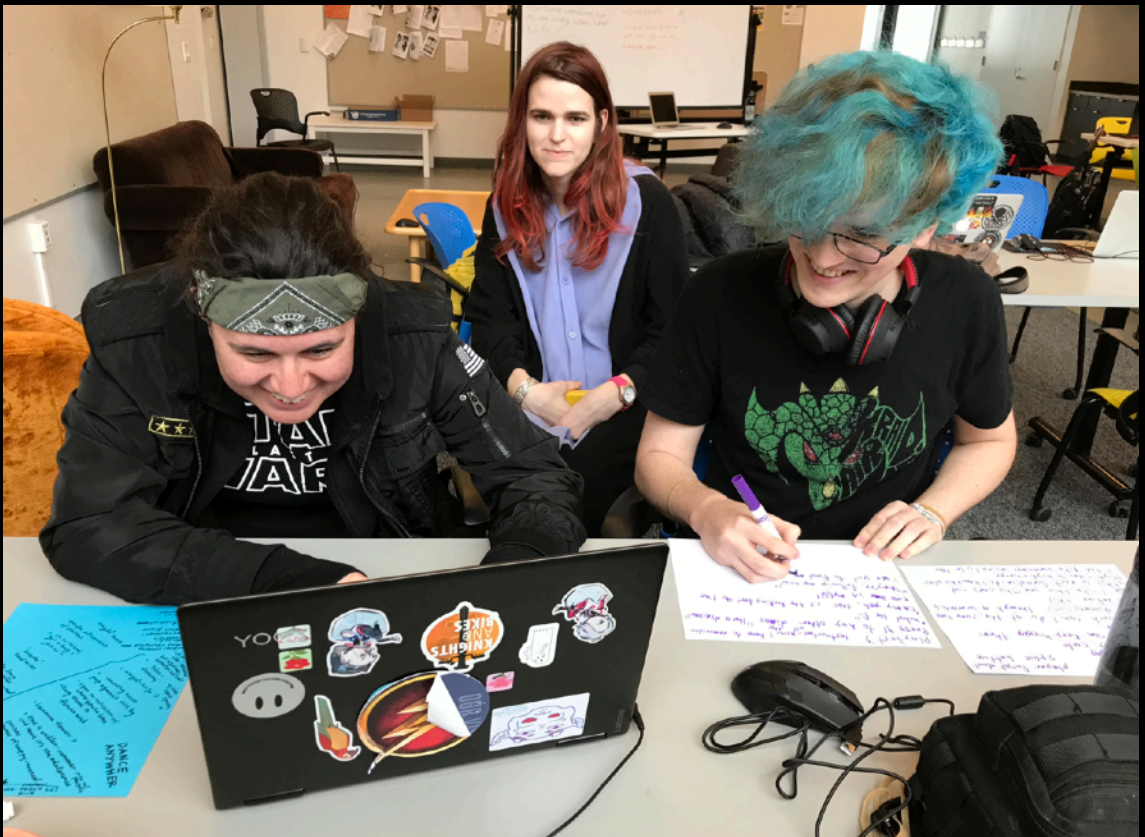
- Groups are formed.
- They create a shared vision of the future.
- Propose an idea for a game game, analog or digital, that belongs in this future.
- The game must, through its mechanics and audio-visual components, embody the ethos and socio-political structures of their future.



Final Project (future)

4. Group Charter

- Similar to the values exercise in class, they compile and turn in a list of group values.
- They derive from them:
 - hierarchical structure
 - decision-making methodology
 - policy for reconciling schedules and availability



5 weeks of studio time with weekly playtests later...



Explore



Dinner for Two, by Ari Liu and Athene Yip



The Parade, by Reshma Zachariah

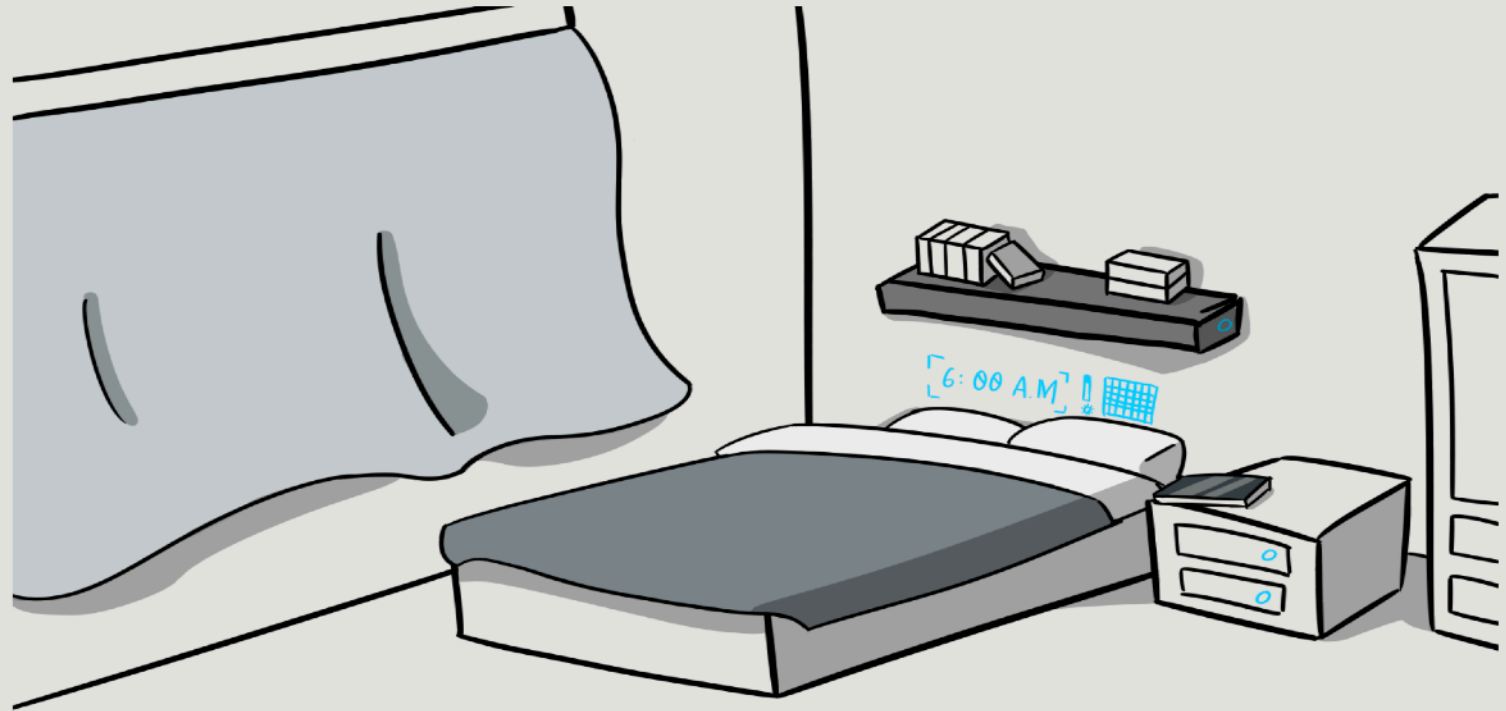
Just Another Day

Username: JADuser2

Password: ••••••

Login

By Ethan Chong and Derek Jean



Your alarm goes off, and your eyes creak open.
Looking around from within your bed, you decide

get out of bed: no risk

go back to sleep: medium risk

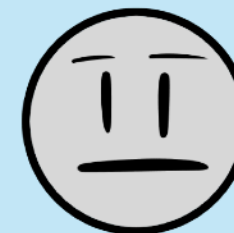
You see your co-worker struggling with his work next to you. You look around, and it doesn't look like anyone will be coming up to help them. You ponder a little before you...

Due to your low mood, some of these choices now have higher risk:

help them out: high risk

ask someone to help them: low risk

do your own work: no risk



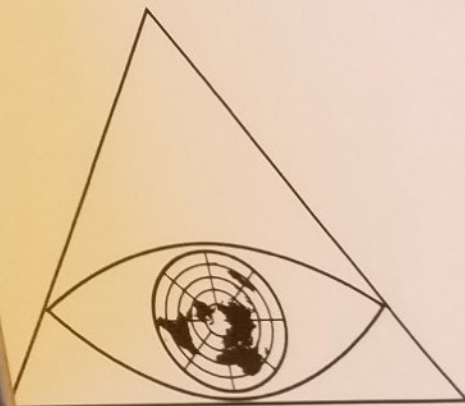
Just Another Day

by Ethan Chong and Derek Jean

GFYCotNWO

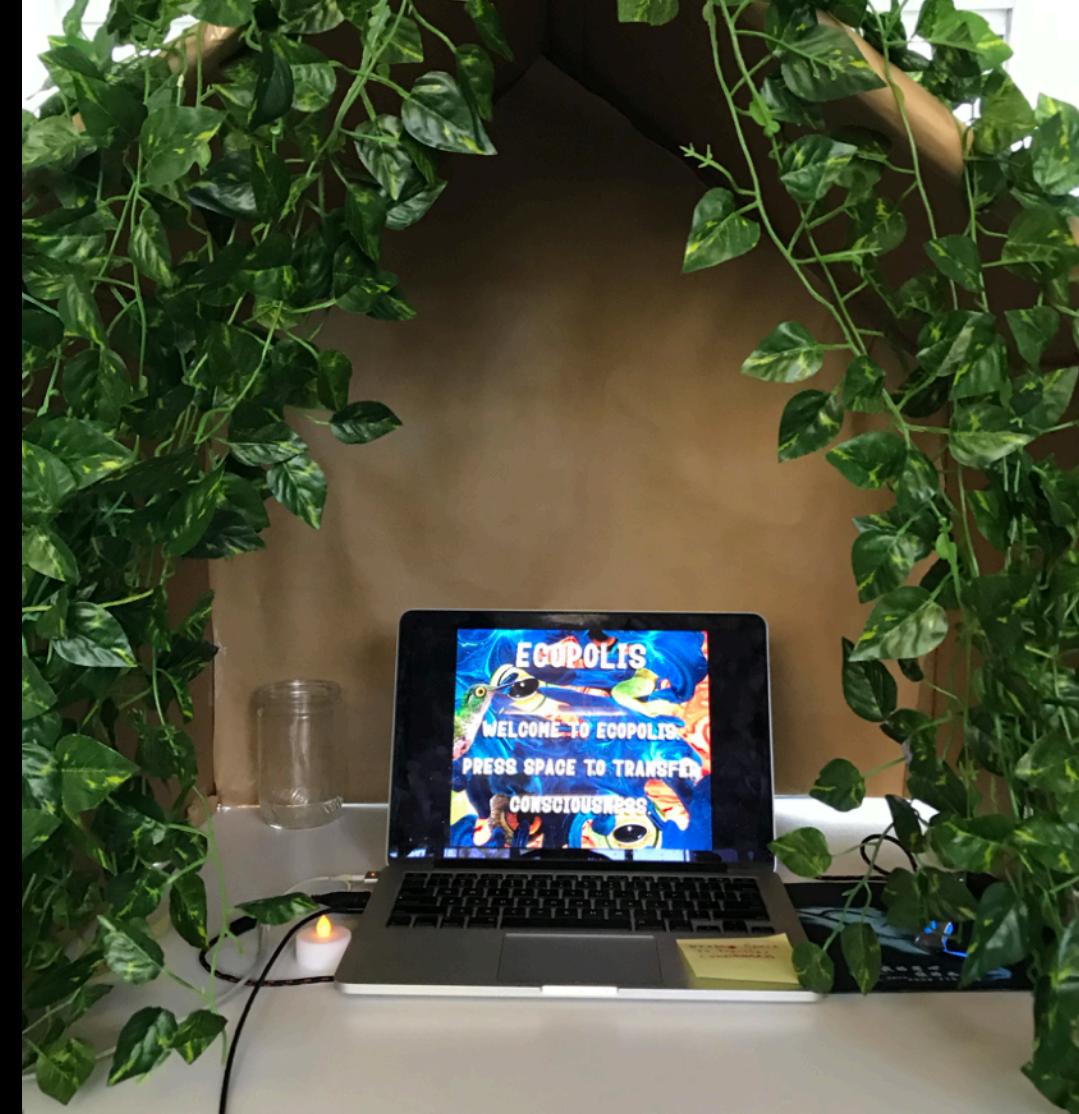


Games For
Young Citizens
of the
New World Order



Games For Young Citizens of the New World Order
by Austin Brägger, Daniel Wright, and Griffin Faye





Ecopolis

by Annabel Maokhamphiou, Jacob Levine, and Margaret Patrick



Case Studies

In-game screenshot from **Ecopolis** by Annabel Maokhamphiou, Jacob Levine, and Margaret Patrick

Just Be Happier.

by Roy Cramer

roycramer.com

Just Be Happier.

Research interests:

Mental health stigma

Holistic treatment and management of mental illness

Connection between mental health and neoliberalism

Just Be Happier.

Future outline:

Everyone gets a “mentor” throughout their life.

Jobs and school are designed to be a “community of thinkers” supported by each other.

Complete isolation is strongly discouraged.

For demanding, stressful professions, work can be done at a slower, more healthy pace.

Just Be Happier.

Social



Mental Health



Sleep



Hunger



Cash: \$100

Day 0: Tuesday 05:07
PM

Use the arrow keys to walk around. Right-click on orange objects.
Left click to select in the right-click menu.
"Call for Help" when you've survived long enough to enter LEVEL 2.

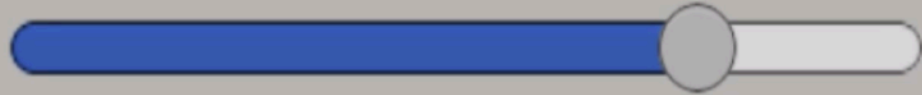


Press J to be happier.

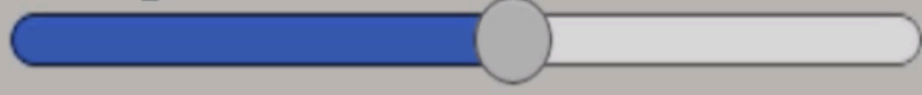
Social



Mental Health



Sleep



Hunger



Cash: \$95

Day 1: Tuesday 04:25
AM

Gonna get some groceries. Be right back.
I hate my job. Hate, hate, hate it.
I love parties.
What a nice nap.



Press J to be happier.

Social



Mental Health



Sleep



Hunger



Cash: \$-75

Day 4: Saturday 11:37 PM

I don't know if I can keep doing... this.
Just order something.
I don't feel like eating...
Wish I could sleep here forever.
I don't have the energy for this.
Wish I could sleep here forever.





Arrow keys to walk around. Try talking to others nearby! (Spacebar)



The grass smells nice. I love that feeling of sun down my back.
I'd like to try working the fields again sometime.

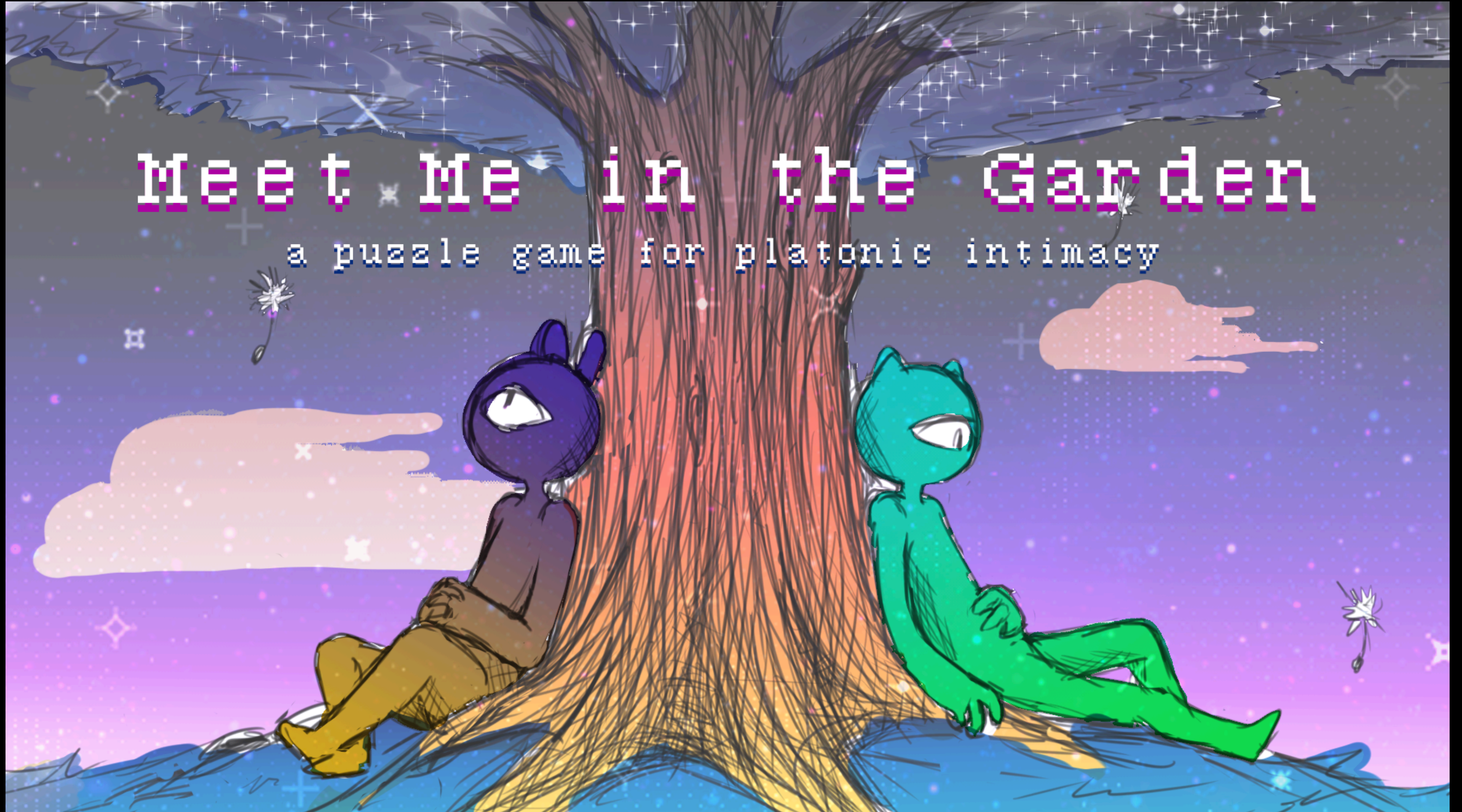
1. Why aren't you working right now?
2. The fields?



Oh I'd love to, but the waitlist is full right now.
Plus, we have enough food to keep everyone fed.
Hey, maybe I should grow some flowers!

Meet Me in the Garden

a puzzle game for platonic intimacy



yanieu.itch.io/meet-me-in-the-garden

The Team

Liam Dugard

@DugardLiam

Yani Fauzi

@fvuzi

Caleb Valdez

@kalbiV123

Reno Rivera

@rrehno

Emily Rodriguez

@emilymakesgames



Meet Me in the Garden

Research interests:

Patriarchy

Queerness

Feminism

Installation Art

Intrinsic motivation and cooperation

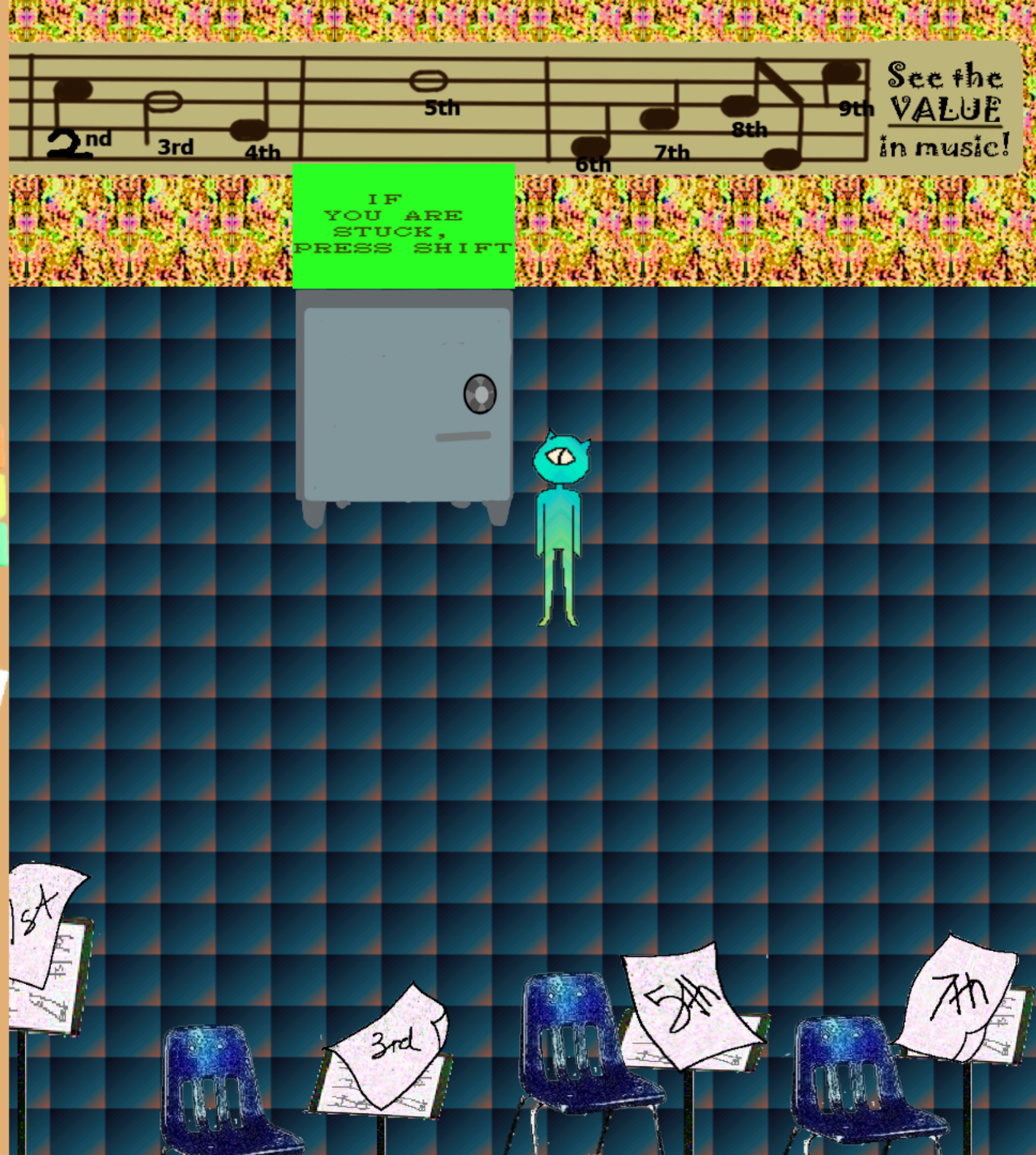
Meet Me in the Garden

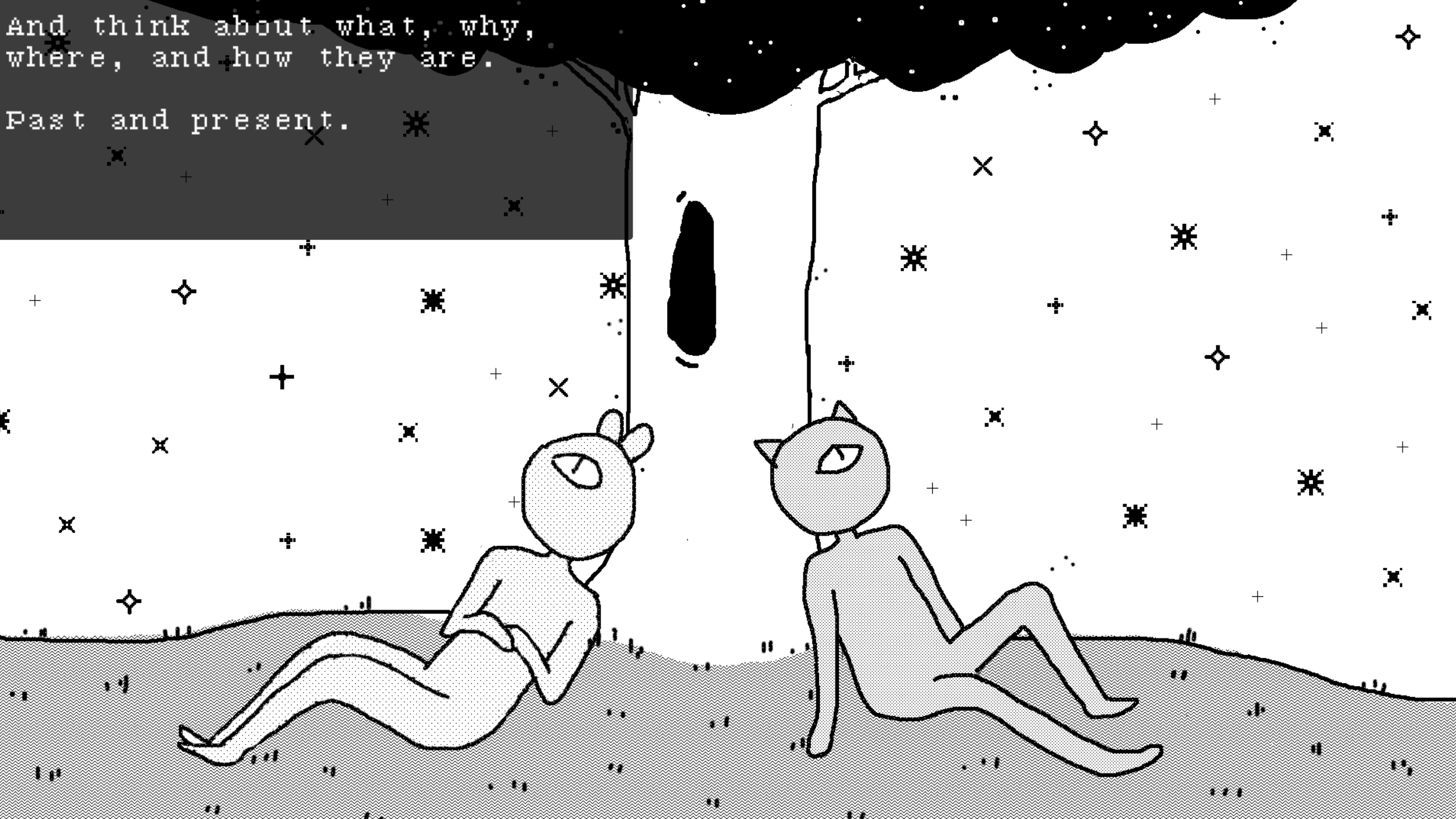
Future outline:

Non-hierarchal, egalitarian society where exploitation and appropriation is replaced by collaboration and shared creation, where people express what they want to express and are unafraid to form genuine relationships.

Unequal power dynamics no longer exist.

Everyone acknowledges everyone as an equal.





And think about what, why,
where, and how they are.

Past and present.







dinosaurily



by Joyce Lin and Fen Swanson

jellolin.itch.io/dinosaurily

dinosaurily

Research interests:

Queerness

Queer game design

Gender, Feminism, Patriarchy

dinosaurily

Future outline:

Fully-automated luxury gay space communism

No chrono- or gender-normativity

Platonic intimacy normalized

No death

Freedom, choice, cuteness

Find your comrades. Take care of one another. Grow





Results

The image is a screenshot from a game called Ecopolis. It depicts a savanna-like landscape with a bright orange sky and a green ground with orange-brown patches. Several giraffes are present: some are large and have their long necks extended upwards, while others are smaller and stand on the ground. The trees have thick, brown, spotted trunks and are topped with large, yellow, pom-pom-like clusters of foliage. The word 'Results' is written in a large, bold, blue font across the center of the image.

In-game screenshot from **Ecopolis** by Annabel Maokhamphiou, Jacob Levine, and Margaret Patrick

Advantages of starting with future-thinking:

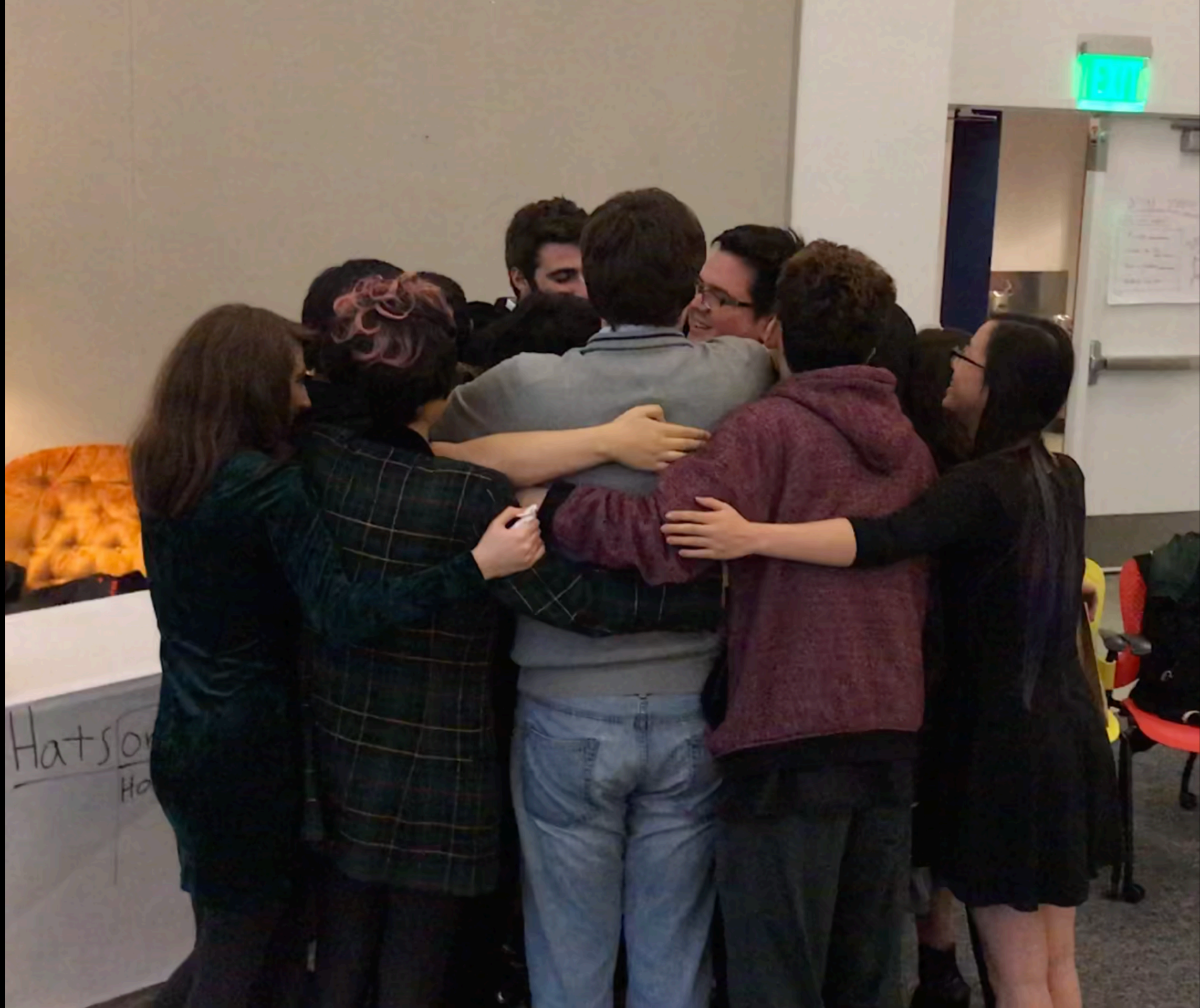
- It begins by asking students to imagine games that haven't been designed yet.
- The unfamiliar process breaks habitual design patterns opening up the possibility space for original mechanics and imagery.
- The futures provide built-in constraints to design from.
- Positions games as cultural artifacts from the onset.

Challenges:

- Individual attention and range of topics to support create a high demand on instructor time.
- Not enough time to properly cover research topics which resulted in some flawed analysis and under-developed futures.
- Unusual course structure and expectation of self-motivation and accountability made some students uneasy.
- The quarter system is... brutal, so scope of games had to be very limited with little polish time.

Successes:

- Broad range of gameplay experiences and highly imaginative artwork in a very short amount of time.
- Strong portfolio pieces for many students.
- Peer-to-peer learning was a very successful way to cover a wide variety of complex topics.
- High student self-motivation, positive classroom environment, long-lasting communities.



I asked students if they wanted to say
a few words about the course.

Here are some of their words.

“Looking back on it, what we made is an incredible portfolio piece because **it puts ourselves (our opinions, thoughts and ideas) to the forefront of our work.**”

—Reshma Zachariah

“This was a class where I felt my opinions mattered.

In other classes the personal touch is more of an afterthought and the main study is focused on understanding a technology or an ideology.

Even in most writing and art classes I’ve taken, the focus is more on how to most convincingly argue an idea, **instead of what ideas you actually have.”**

—Roy Cramer

“Encouraging us to be better to each other as if we were already living in those futures so that we create our own, better futures is 🤞

I feel like that really happened. Just that idea of making different games so that we can help create better futures is an idea that’s stuck with me, and **it’s what I want to do with my career.**”

—Joyce Lin

“This class was the best part of my college career. **It changed the way I think about the world and the way I interact with people everyday.** This class made me a better person, artist, and friend.”

—Emily Rodriguez

“It taught me to look past the f***ing bleak circumstances that we find ourselves in, but not to ignore them.

It taught me not to imagine an idyllic utopia, but to **embody** a real and actionable, a weird and queer, a colorful and unexpected, a loving and vulnerable, an intersectional and multidimensional future.

It taught me that such a future is possible at all!!”

—Caleb Valdez

Closing Remarks

Speculative game design!

- We need to broaden the kinds of futures we create in our games: beyond the dystopian wastelands, genocidal hackers, and warring space empires.
- Games have an underutilized potential as a speculative medium and can/do influence the political imagination.
- We can test/play the futures we create (sort of).
- Imaginative design is very likely to emerge from this process.

Better futures are possible.

- This approach involves games and the arts in imagining alternatives to existing systems.
- Helps us move beyond resistance towards inspiring alternative visions of the future to face the difficult challenges upon us.
- Speculative future thinking is on the rise (like the oceans...).

Trust your students.

- The prevailing narratives about young people as apathetic and narcissistic are false. They think about and want to tackle big societal issues.
- They want inspiring visions of the future, made by them, for them. Create spaces where that can happen.
- Current cultural landscape lags behind their ability to change, embrace, and reconfigure identities. Embrace it!

Thank you!

Marcelo Viana Neto

turistainc@gmail.com

mvn@ucsc.edu

Twitter/IG: @manyweare