

## Geography 221 Speculative World-Building: Games and Simulation

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**Seminars** Tue 9:30AM-12:30PM, 575 McCone

### Course description

*It's all in the game*

Omar Little, *The Wire*, Season 2 – Episode 6

This class is intended as an open-ended exploration of speculative world-building through the particular medium of board games. Speculation about the future is increasingly prominent in popular culture, and also in the more 'serious' realms of science, policy, business, and government. Serious speculation comes to the fore when understanding how the world works, how the world might work, or how things might work differently are considered matters of concern for decision-making in the present. More broadly, speculation dominates economic and political life in important ways.

Much speculation is computational, conducted through computer simulation models, but this class approaches the same topics via board games. This is partly to make the work of building simulations more approachable for a wider audience, but will also involve us in considering how serious or 'simulative' games *differ* from computer simulation models. We will also touch on the myriad ways games manifest in the world, whether in the gamification of everyday life on social media, in 'the great game' of global geopolitics, game theory in economics, or in Omar Little's characterization of the war on drugs as a 'game', a stance consistent with *The Wire*'s critique of late capitalist urbanism as a destructive game we are all doomed to play, like it or not.

In pursuit of these aims, we will engage four interwoven strands of activity:

- **Readings** on speculative futurity, games, play, game theory, wargaming, serious games, the history of games, and the philosophy of simulation.
- **An exploration of games as systems of interlocking mechanisms.** This will involve looking at a specific games chosen for how they exemplify particular key mechanisms in modern board games.
- **An exploration of how game mechanisms are deployed in a series of games that share a common theme,** specifically, urbanisms of various kinds.

- **Group-based project work on designing a game**, or (perhaps more realistically) modding an existing game. This will account for the bulk of the assessment in the course (see 'Assessment' section below).

## Overview of semester

The following calendar is subject to change as semester unfolds.

#	Date	Readings	Games and game mechanics
1	Jan 16	Introductions; course overview	Ice-breaker games ( <i>Monopoly</i> , <i>Love Letter</i> , <i>Coup</i> )
2	Jan 23	Games and gaming; the 'magic circle'; games as systems	Set collection ( <i>Ticket to Ride</i> , <i>Zooloretto</i> ); Trading ( <i>Settlers of Catan</i> ); Exploration/tile placement ( <i>Hunters and Gatherers</i> )
3	Jan 30	Social interaction; game theory	Social deduction games ( <i>Love Letter</i> , <i>Coup</i> , <i>Spyfall</i> ); Push your luck ( <i>Incan Gold</i> ); Auctions ( <i>Modern Art</i> , <i>Monopoly</i> )
4	Feb 6	Serious games; radical play	Area control ( <i>Chinatown</i> , <i>Fifth Avenue, Manhattan</i> ); Share-holding ( <i>Imperial 2030</i> ) Worker placement ( <i>Stone Age</i> ); Deck building ( <i>Trains, London</i> ); Economic engine building ( <i>Container</i> )
5	Feb 13	Wargames; conflict not competition	Cooperative games ( <i>Pandemic</i> , <i>Bloc by Bloc</i> ); Traitors ( <i>Dead of Winter</i> ); Asymmetry ( <i>A Distant Plain</i> )
6	Feb 20	Narrative and theme in games: guest lecturer, Jeff Martin	<i>Fiasco</i> rulebook; ...and then, we held hands; <i>Spyfall</i>
7	Feb 27	Speculative futurity; philosophy of games and simulation	Discussion of planned student projects
8	Mar 6	Urban development games: <i>Chinatown</i> , <i>Fifth Avenue</i> , <i>London</i> , <i>Manhattan</i> , <i>Monopoly</i> , <i>Suburbia</i> , <i>Urban Sprawl</i>	
9	Mar 13	Guest spot with two local game designers, Teale Fristoe and Alfred Twu	
10	Mar 20	Discussion/workshopping of game design projects	
11	Mar 27	Spring break	
12	Apr 3	Discussion/workshopping of game design projects	

13	Apr 10	No class (American Association of Geographers meeting)
14	Apr 17	Discussion/workshopping of game design projects
15	Apr 24	Discussion/workshopping of game design projects
	May 1	Reading week – <b>PROJECT PRESENTATIONS</b>
	May 8	Finals week

## A note on the class format

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The class will transition from a more traditional seminar format (somewhat reading intensive albeit with games) to a workshop format in the second half of semester where students will be working on, discussing, providing feedback, play-testing, etc. the various projects under development by their peers.

Note that it is difficult to keep the reading coverage each week in line with the exploration of example games, given the need for the latter to cover a range of game mechanics as students consider design ideas. It will all come together as a whole... not week by week.

On top of the scheduled seminar time slot, it is expected that students will need to organize additional time especially early in the semester to meet to play games. This is not explicitly timetabled so as to avoid the class becoming 'unschedulable' on CalCentral. The instructor will aim to attend some or all of the 'game sessions' organized by students outside of the timetabled seminar time slot. Students should think of these sessions as akin to the reading they have to do in preparation for more typical seminar classes, but which due to the interactive nature of games have to be collectively organized. If needed I can help with finding and booking rooms as needed. An alternative would be the boardgame cafe 'Victory Point Cafe' on Shattuck a block or so north of Hearst.

## Week by week details

In this section details of each week's materials are provided. Each week has readings and games, and the following comments should be noted. Elements that remain to be finally pinned down are **highlighted**.

## Readings

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Source we will repeatedly return to are

Elias GS, R Garfield, KR Gutschera and E Zimmerman. 2012. *Characteristics of Games*. Cambridge, MA: The MIT Press.

Engelstein G. 2017 (out soon). *GameTek: The Math and Science of Gaming* (self-published Kickstarter project)

Tekinbaş KS and E Zimmerman. 2003. *Rules of Play: Game Design Fundamentals*. Cambridge, Mass: The MIT Press.

Readings will be made available on bCourses as PDFs.

## Games

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### The games themselves

In the sections below, I provide 'bibliographic' details for games partly to give designers credit they deserve, partly to make the point that games are 'written' just as much as books are, and especially in the context of a class such as this, deserve to be taken seriously! Publisher and place of publication get pretty fuzzy so are omitted.

We will try to play the games each week in class time and/or in additional self-organized game sessions. I have a single copy of all the games we consider, and students can come to my office to inspect these.

Game rulebooks will be made available on bCourses and should be reviewed ahead of class.

### Ludology podcast

There are also many useful Internet resources about games and game design, in particular, the *Ludology* podcast at [ludology.libsyn.com](http://ludology.libsyn.com) is recommended. It can be a bit 'inside-baseball' at times, and leans heavily male geek, but nevertheless (i) offers many moments of insight, and (ii) they are improving... see (or rather listen to): Ludology 130 'All Of Us', June 2016 at [ludology.libsyn.com/ludology-episode-130-all-of-us](http://ludology.libsyn.com/ludology-episode-130-all-of-us). This is also the source for 'Gametek' which has been 'bookified' as Engelstein (2017) noted above. I am at time of writing unsure of what this book will actually look like, so references are not yet included to potentially relevant material therein.

### Review and rules overviews online

Also useful for learning games (rulebooks can be rather dry) are video reviews and games overviews. The most thorough videos run very long and you still have to read the rules anyway, but the Dice Tower reviews ([www.dicetower.com/](http://www.dicetower.com/)), Shut Up and Sit Down ([shutupandsitdown.com/](http://shutupandsitdown.com/)), and No Pun Included ([nopunincluded.com/](http://nopunincluded.com/)) are usually concise and provide a good primer before reading the actual rules (bonus: the second and third of these are also very entertaining).

## Week 1: Introductions; course overview

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Introductions; aims of course; ice-breaker session discussing *Monopoly* (since everyone knows it) and playing *Love Letter* and *Coup* (which are easily learned, and involve bluffing, etc.)

## Week 2: Games and gaming; the 'magic circle'; games as systems

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### Readings

Elias *et al*, Chapter 2. 'Multiplayer games'

Tekinbas & Zimmerman, Chapters 7 and 9. 'Defining games' and 'The magic circle'.

Caillois R. 1961. 'The definition of play' and 'The classification of games', Chapters 1 and 2, pp. 3-36 in *Man, Play, and Games*. University of Illinois Press.

Sutton-Smith B. 2001. 'Play and ambiguity', Chapter 1, pp. 1-17 in *The Ambiguity of Play*. Cambridge: Harvard University Press.

[Supplementary concerning /game mechanics: Järvinen AS. 2009. *Games without Frontiers*. VDM Verlag Dr. Müller. Available [online](#), and on bCourses]

### Games (starting to explore game mechanics with some classic 'gateway' games)

Moon AR. 2004. *Ticket to Ride*. [set collection]

Schacht M. 2007. *Zooloretto*. [set collection]

Bauza A. 2011. *7 Wonders*. [set collection, card drafting]

Teuber K. 1995. *Settlers of Catan*. [trading]

Wrede K-J. 2002. *Carcassonne: Hunters and Gatherers*. [tile placement]

## Week 3: Social interaction; game theory

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### Readings

Tekinbas & Zimmerman, Chapters 18 and 19, 'Games as cybernetic systems' and 'Games as game theory systems'.

Amadae SM. 2016. 'Prisoner's dilemma', Chapter 2, pp. 24-64 in *Prisoners of Reason: Game Theory and Neoliberal Political Economy*. New York, NY: Cambridge University Press.

Erickson P. 2015. 'The game theory phenomenon', Chapter 1, pp. 1-25 in *The World the Game Theorists Made*. Chicago: University of Chicago Press.

Ludology 35 'The Social Milieu' [ludology.libsyn.com/ludology-episode-35-the-social-milieu](http://ludology.libsyn.com/ludology-episode-35-the-social-milieu)

### Games

- Faidutti B and AR Moon. 2006. *Incan Gold*. [push your luck]
- Kanai S. 2012. *Love Letter*. [social deduction]
- Knizia R. 1992. *Modern Art*. [auction]
- Magie EJ. 1933. *Monopoly*. [auction; there is an interesting story behind *Monopoly*'s authorship, see Pilon M, 2016 *The Monopolists: Obsession, Fury, and the Scandal Behind the World's Favorite Board Game* Bloomsbury USA, New York.]
- Tahta R. 2012. *Coup*. [social deduction]
- Ushan A. 2014. *Spyfall*. [social deduction]

### Week 4: Serious games; radical play

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#### Readings

- Coleman JS. 1969. Games as vehicles for social theory. *American Behavioral Scientist* **12**(6) 2–6.
- Flanagan M. 2013. 'Board games', Chapter 3, pp. 63-116 in *Critical Play: Radical Game Design*. Cambridge MA: The MIT Press.
- Light JS. 2008. Taking games seriously. *Technology and Culture* **49**(2) 347-375.

### Games

- Brunnhofer B. 2008. *Stone Age*. [worker placement]
- Cole W. 2016. *An Infamous Traffic* [economic engine, historical critique]
- Delonge F-B and T Ewert. 2007. *Container*. [economic engine]
- Eckhart D. 2007. *Tammany Hall*. [area control]
- Gerdts M. 2009. *Imperial 2030*. [shareholding]
- Hach H. 2017. *Photosynthesis*. [area control]
- Hayashi H. 2012. *Trains*. [deck building]

## Week 5: Wargames: conflict not competition

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### Readings

Selection TBD from Hilgers, P. von. 2012. *War Games: A History of War on Paper*. Cambridge, Mass: The MIT Press.

Peterson J. 2016. A game out of all proportions: how a hobby miniaturized war. In Harrigan P and MG Kirschenbaum eds. 2016. *Zones of Control: Perspectives on Wargaming*. Cambridge, The MIT Press, pp. 3-32.

Further selection(s) TBD from Harrigan P and MG Kirschenbaum eds. 2016. *Zones of Control: Perspectives on Wargaming*. Cambridge, The MIT Press.

Sabin P. 2014. 'Accuracy vs simplicity', Chapter 2, pp. 19-30 in *Simulating War: Studying Conflict through Simulation Games* Reprint edition. London: Bloomsbury Academic.

### Games

Jensen C. 2006. *Combat Commander Europe*. [card-driven hex and counter wargame]

Leacock M. 2008. *Pandemic*. [cooperative]

Lee R and T Simons. 2016. *Bloc by Bloc: The Insurrection Game*. [cooperative]

Gilmour J and I Vega. 2014. *Dead of Winter: A Crossroads Game*. [coop with traitor]

Ruhnke V and B Train. 2013. *A Distant Plain*. [asymmetric wargame]

## Week 6: Narrative and theme in games

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This week class will be led by **Jeff Martin**, a graduate student in the Geography program who regularly leads role-playing game (RPG) sessions. While RPGs are too big a topic for this class (we have to draw lines somewhere) a key idea of the class is to consider how games as simulations or models can tell stories. Central to that concern are (i) the more open-ended environment of RPGs and (ii) the widely varying roles played by participants in RPGs (contrasted with the symmetries of more conventional games).

### Readings

Selection(s) TBD from: Peterson J. 2012. *Playing at the World*. San Diego: Unreason Press.

### Games

Chirchop D and Y Massa. 2015. ... *and then, we held hands*.

Morningstar J. 2009. *Fiasco*.

Ushan A. 2014. *Spyfall*. (see Week 3)

## Week 7: Speculative futurity; philosophy of games and simulation

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### Readings

Frase, P. 2016. *Four Futures: Life After Capitalism*. London & New York: Verso.

Selection TBD from Harding, S and D Rosenberg eds. 2005. *Histories of the Future*. Durham: Duke University Press Books. [Most likely the game design in that book by Anna Tsing.]

Selection TBD from Jameson, F. 2007. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. London: Verso.

Selection from TBD Weisberg, M. 2013. *Simulation and Similarity: Using Models to Understand the World*. Oxford: Oxford University Press.

Selection from TBD Winsberg, E. 2010. *Science in the Age of Computer Simulation*. Chicago, IL: University Of Chicago Press.

### Games

No games this week (no existing games anyway). Instead discussion will focus on the intended game design projects planned by members of the class.

## Week 8:

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No readings this week, only games, all focused on the same theme (more or less) of urban development.

### Games

Alspach T. 2012. *Suburbia*.

Eckhart D. 2007. *Tammany Hall*.

Hartwig K. 1999. *Chinatown*.

Jensen C. 2011. *Urban Sprawl*.

Magie EJ. 1933. *Monopoly*.

Manz W. 2004. *Fifth Avenue*.

Seyfarth A. 1994. *Manhattan*.

Wallace M. 2010. *London*.

## Week 9: Meet the designers

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This week two local game designers, **Teale Fristoe** and **Alfred Twu** have agreed to lead class discussion. In preparation, two podcasts to listen to, and a game by each designer to look at (plus rulebooks of others).

### Readings

Ludology 10 'Complexity' [ludology.libsyn.com/episode-10-complexity](http://ludology.libsyn.com/episode-10-complexity) [this features boardgame hobby legend Scott Nicholson a professor at Wilfrid Laurier in Canada]

Ludology 22 'Games vs. Simulations' [ludology.libsyn.com/episode-22-games-vs-simulations](http://ludology.libsyn.com/episode-22-games-vs-simulations) [must admit to finding this designer irritating – listen to as much of it as you can stand!]

### Games

Fristoe T. 2015. *Birds of a Feather*.

Twu A. 2015. *Bay Area Regional Planner*.

And, rulebooks from

Fristoe T. 2013. *Corporate America* (about to be reprinted)

Twu A. 2014. *California Water Crisis*.

## Weeks 10 to 15: Workshopping game designs

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The main 'deliverable' for assessment in this class is a game design (or modification of an existing design). Students will probably be working in groups on these (a game design is a lot of work), and so we will use seminar time to workshop designs for much of the second half of semester.

## Reading week

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Game design project presentations.

## Assessment

### Overview

Overall assessment will be based on a game design or perhaps more realistically game modding project most likely carried out in groups. The initial intention is to allow groups

to emerge organically from shared interest, compatible timetables, etc. It might become necessary to force the issue by week 4 (February 6) so that no one ends up stranded.

### **Timeline**

- **By week 4** (February 6), you should know who is in your group, and be in conversation about what your project will consist of.
- **By week 6** (February 20) your group should have sent me a brief outline / proposal / prospectus for your project. This will give me time to review it and provide some feedback before we discuss the projects in class the following week.
- **In reading week** we will schedule a session (probably the same time and place as class) where students will present their projects. We can do this with Powerpoint if you really want to, but it may be more productive to think of it as teaching your game, or presenting it to the group. If the game is not 'finished' (which is rather likely) then discussion should focus on the thinking behind the game.
- **At the end of final week** (May 11) submit a write up / materials of your project. Theses are likely to look somewhat different than conventional term papers or even project reports. I would suggest something like 'design notes', and also suggest that it will make sense to keep notes as you work through the process through the semester.

### **Allocation of credit**

The allocation of overall credit in the class will be as follows:

- 20% Participation in class (including the week when you lead discussion)
- 10% Game project proposal
- 25% Presentation of project (in week 15)
- 45% Game design, associated materials and project report / paper

But please understand that I am mostly concerned with wholehearted participation in the class, and don't consider that assignment of grades at graduate level should be seen as something to get stressed about. If I think you are not contributing as you should/could then I will let you know, and we should discuss matters.

Since these are likely group projects, appropriate checks will be put in place to ensure equivalency of contribution and effort in joint projects, recognizing that different students may have greater aptitude for different aspects of projects (implementation, evaluation, conceptualization, etc.) A short self-reflection / peer evaluation report will be included to cross-check this process.

### **Final remarks**

I have almost no idea how to assess a game design.

Perhaps even more so than term papers what constitutes a 'good' design or a 'bad' design is highly subjective, and in the limited time available in this class, it is unlikely that anyone will produce a great game.

A game design, as a unit of work is probably more like a novel than a research paper, so what we are aiming for is something with promise, that demonstrates an intention to take on board the ideas in the class and deploy them in an interesting way to explore some topic of interest.

If a playable game is the result, so much the better; if not, then I am more interested in the journey than the destination and will evaluate your (collective) efforts appropriately.

Wardrip-Fruin, N. 2012. *Expressive Processing: Digital Fictions, Computer Games, and Software Studies*. Cambridge, Mass.; London: The MIT Press.

Woods, S. 2012. *Eurogames: The Design, Culture and Play of Modern European Board Games*. Jefferson, NC: McFarland.

Sharon Ghamari-Tabrizi. 2000. Simulating the Unthinkable: Gaming Future War in the 1950s and 1960s. *Social Studies of Science* 30 (2) 163-223.

Allan G. Feldt. 1966. Operational Gaming in Planning Education *Journal of the American Institute of Planners* 32(1) 17-23.

Goffman, E. 1961. *Encounters: two studies in the sociology of interaction*. Bobbs-Merrill.

Coleman, J. S. 1966. Introduction: in defense of games. *American Behavioral Scientist* 10 (2):3-4.

Coleman, J. S. 1969. Games as vehicles for social theory. *American Behavioral Scientist* 12 (6):2-6.