

# FM319 LIVING DOUBLE LIVES: ART & VIRTUALITY

Seminar Leader: Caitlin Berrigan  
Pronouns: she/ her/ they/ their  
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Office Hours: After class and by appointment  
Course Times: Mon 14:00-17:15  
Location: Factory Seminar Room 6

## Course Description

“You know. I think we should put some mountains here. Otherwise, what are all the characters going to fall off of? And what about stairs? Yodellyheehoo.” – Laurie Anderson, lyrics from *Big Science*

Informed by philosophy and cognitive science, this studio course will engage with imaginative worldbuilding through students’ chosen media, drawing on introductory methods to integrate mixed reality with other artistic forms. We will focus on theoretical discourse around phenomenology and virtuality, while gaining new skills for creative practice. How does a writer such as Ursula K. Le Guin build an imaginative world through landscapes, seasons, tactile descriptions of costumes, gender relations, and political conflict? How do the social structures in her imaginative world reflect the worlds we know? What material and narrative means are used by an artist such as Cauleen Smith to invent alternate worlds and subjectivities that escape familiar forms of social violence? We will think through how we as visual artists use similar techniques of worldbuilding in installation, long-term documentary portraiture, or emerging media. Non-linearity, three-dimensional photographic capture, and augmented reality are not only the tools of games but are also increasingly the media and discourse of visual artists. We will learn the first steps for building worlds by creating original environments from spatial photographic capture known as photogrammetry, and how to combine augmented reality with artistic media. We will examine and discuss works by contemporary artists, alongside readings from science and technology studies, philosophy, and media theory. Open to writers, visual artists, filmmakers, and performers who would like to experiment with their practice. While no prior experience in augmented reality is required, this course will rely upon your curiosity for critical discourse and will build upon your experience with digital tools and camera capture.

## Key Assignments

All assigned readings are required and will be discussed in class. Due dates are noted in the syllabus. One book required for purchase / multi-week checkout: *The Left Hand of Darkness*, Ursula K. Le Guin. May be ordered in advance from [Otherland](#) bookstore or [Book Depository](#). Creative studio projects will form the bulk of your work:

Studio Assignment 1 // Texture & Object Library // Due Week 2 + All Semester  
Studio Assignment 2 // Building Blocks for a Virtual World // Due Week 3  
Studio Assignment 3 // Photogrammetry Models // Due Week 4  
Studio Assignment 4 // Setting up a scene in Unity // Due Week 5  
Studio Assignment 5 // Windows into Worldbuilding // Due Week 7/8  
Studio Assignment 6 // Final Project // Due Week 15

## Class Materials

*This syllabus is subject to change.* The most recent, updated syllabus, readings, and other class materials are available on the [Class Drive](#)

You must bring in a portable, external USB hard drive (min. 500 GB) to class each week. Keep your files organized on this drive. Do not save your class files to your personal computer, so you can easily change machines and work on your projects on different computers. Saturn, MediaMarkt, and Conrad are places where you can buy a drive if you do not already have one.

### Students are expected to:

- Turn off phones during class time.
- Initiate appointments with Professor or Arts Staff outside of class time.
- Always allocate extra time for work preparation and clean-up for independent production.
- Respond to emails from Professor in a timely manner.
- Inform Professor at the beginning of the semester if photos of student's identity, artwork, works in progress are NOT to be taken and / or used for Bard College Berlin.
- Remove all artworks, art materials, and / or any personal belongings before the end of the semester. Failure to remove works or return spaces clean and empty may result in final grade penalization. Donating unrequested artworks and / or art materials is not permitted and will still be considered student property, expected to be removed by your inspection deadline. Please contact Studio Arts Manager Joon Park for more information: [j.park@berlin.bard.edu](mailto:j.park@berlin.bard.edu)

### Academic Integrity

- Bard College Berlin maintains the staunchest regard for academic integrity and expects good academic practice from students in their studies.
- Students must show work that is their own work; plagiarism is not tolerated in any media. Plagiarism is presenting someone else's work as though it were your own: a sequence of words quoted without quotation marks from another writer or a paraphrased passage from another writer's work, or facts, ideas or images composed by someone else and unattributed.
- Students may not use one project for multiple courses taken at the same time without discussing how it can be done with both professors, nor can a student use work that was previously done for another class without the agreement of the professor in the current class.
- Instances in which students fail to meet the expected standards of academic integrity will be dealt with under the Code of Student Conduct, Section 14.3 (Academic Misconduct) in the Student Handbook.

### Attendance

- Attendance of all classes is expected.
- More than one absence (that is, absence from one three-hour session per week) in a semester will significantly affect the participation grade for the course.
- Students are expected to attend all off-campus classes punctually, from start to finish. In case of illness, Professor must be informed in advance.
- Tardiness after ten minutes will be considered an absence.
- Leaving early is not permitted. Please do not ask.

### Assessment

The evaluation of your class participation includes attendance, having read or watched the material to contribute to class discussions, speaking during class critiques and collaborating with others. It is equally important to show up, be present, and speak to the work of your colleagues as it is to deliver your own assignments for group critiques. Be generous and responsive in giving feedback on your colleagues' work. Be professional. Acknowledge and respond to all emails promptly and courteously. Studio assignments are due copied into the class folder before the start of class.

### Policy on Late Submission of Artworks / Presentations

Assignments (artworks, essays, performances, oral presentations) that are up to 24 hours late will be downgraded one full grade (Example: B+ becomes C+). Professor is not obliged to accept assignments that are more than 24 hours late. Where Professor agrees to accept a late assignment, it must be submitted within four weeks of the deadline and cannot receive a grade of higher than C. Thereafter, the student will receive a failing grade for the assignment.

### Accessibility

Academic accommodations are available for students with documented disabilities. Please contact [s.jung@berlin.bard.edu](mailto:s.jung@berlin.bard.edu) to initiate this process. It is the responsibility of students with neurodiversity, physical impairments or chronic health conditions that may affect attendance and progress to communicate privately with the registrar or your professor at the beginning of the semester or as soon as the condition arises, so that appropriate accommodations can be made.

## Grade Breakdown

40% Assignments & projects

30% Class participation (attendance + quality of engagement with others)

30% Final project

**A** Exceptional work, participation in class and display of critical thinking and risk taking. Everything is above and beyond

**A-** Excellent work, participation in class and display of critical thinking and risk taking

**B+** Above average, participation in class and good critical discussions.

**B** Above average work. Complete work and attempt to put in the extra effort to participate in class and think more critically.

**B-** Good work. Participation in class. Completion of all class requirements.

**C+** Average work with promise. Participation in class. Completion of prints.

**C** Average work. Limited participation in class.

**C-** Less than average work. Some participation in class.

**D** Below average work. Incomplete work. Little class participation.

**F** Excessive absences, not enough work completed.

“Remember, I’m going to mark you, it’s my great pleasure to reward real effort, it’s my great pleasure to punish stupidity, laziness and insincerity. / These marks won’t make much difference in your later life, but my reaction to you will, but the reactions of your classmates to what you do will. / Your classmates are your world, your future will be like this now, as you related to your present, you will relate to your future.” // *Paul Thek at Cooper Union, 1978-81*

## Schedule

Spring 2020 classes start on Monday, January 27 and run until Friday, May 15 with spring break planned from Monday, April 6 – Monday, April 13. Completion week is from May 11 - 15. Students are required to be on campus during completion week.

<https://berlin.bard.edu/for-students/academic-calendars/>

| Week        | Class Material  |
|-------------|---|
| 1<br>Jan 27 | <p><b>Introduction</b><br/>Annie Berman, Utopia 1.0 // Cao Fei, RMB City</p> <p>Studio Assignment 1 // Texture &amp; Object Library<br/>Begin taking photographs of compelling and useful textures (walls, stones, fabrics, plants) to use in a shared asset library. You will contribute to this throughout the semester and share with your peers. Take 10 images of interesting textures and upload to the Class Drive.</p> <p>// HOMEWORK //</p> <p>Readings // Due Week 2</p> <ul style="list-style-type: none"><li>- Caroline Jones, "The Mediated Sensorium," in <i>Sensorium: Embodied Experience, Technology, and Contemporary Art</i></li><li>- Sense and Non-sense, Maurice Merleau-Ponty: Translator's Introduction pp. ix – xvi; Cézanne's Doubt pp. 9 – 26; The Film and the New Psychology pp. 48 – 59</li><li>- The Phenomenology of Perception, Maurice Merleau-Ponty: Space pp. 253 - 265</li></ul> <p>// FYI related events (optional) //</p> <p><i>*until Jan 26 Cao Fei at <a href="#">Kulturforum</a></i><br/><i>Jan 28-Feb 01 Transmediale Symposium, Exhibition, Festival</i><br/><a href="https://2020.transmediale.de/program">https://2020.transmediale.de/program</a><br/><i>Jan 30<sup>th</sup> Transmediale Film &amp; Video Day at the HKW</i><br/><a href="https://2020.transmediale.de/content/streaming-life-film-video-day">https://2020.transmediale.de/content/streaming-life-film-video-day</a></p> |
| 2<br>Feb 3  | <p><b>Virtual / Augmented / Mixed: Defining Terms of Realities and Worldbuilding</b><br/>Discuss readings</p> <p>In-class Workshop: creating 3D assets and playing with textures<br/>Introduction to principles of 3D spatial navigation</p> <p>4pm Media Lab &amp; Equipment Overview with Janina</p> <p>*DUE Studio Assignment 1 // Texture &amp; Object Library<br/>First 10 selections of textures to be shared with the group</p> <p>// HOMEWORK //</p> <p>Studio Assignment 2 // Building Blocks for a Virtual World // Due Week 3</p>  |

Create five themed 3D models with textures of your own making. Where would you like to put them in Berlin? What is their relationship to that place? Take a photo of this site, and using the tools we have covered and Photoshop, create a 3D collage with your objects in that site.

Readings // Due Week 3

\*Bergson & Deleuze TBA by guest speaker

// FYI related events (optional) //

Feb 5 & 23, *Ultraworld*, Volksbühne

<https://www.volksbuehne.berlin/en/programm/8730/ultraworld>

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3 **Virtual Images Guest Speaker: Eva Wilson**

Feb 10 In-class Workshop: Capturing 3D models from the physical world using photographs & photogrammetry

\*DUE // Studio Assignment 2 // Building Blocks for a Virtual World

// HOMEWORK //

Studio Assignment 3 // Photogrammetry Models // Due Week 4

Capture and build two models using photogrammetry. One object that exists outside, and one interior object that may be lit in the studio. Choose objects you might like to have and share in your asset library. Try to play with scale.

Readings // Due Week 4

- Jakob von Uexküll, *A Foray Into the Worlds of Animals and Humans*  
Read Selected Chapters: pp. 1-34, Introduction by Dorian Sagan; pp. 44 – 85, Introduction – Form and Movement as Perception Marks; pp. 98 – 102, The Familiar Path; pp. 113 – 135, Search Image and Search Tone – Conclusion
- Trevor Paglen, “Invisible Images (Your Pictures Are Looking at You),” [New Inquiry](#), 2016

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4 **Phenomenology, Perception, Umwelt**

Discuss readings

Feb 17

Augmented Reality

Cyrus Peñarroyo // Kristin Lucas // Janet Cardiff & Georges Bures Miller

In-class Workshop: introduction to navigating Unity & creating image targets

\*DUE Studio Assignment 3 // Photogrammetry Models

// HOMEWORK //

Studio Assignment 4 // Setting up a scene in Unity // Due Week 5

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Go through the Unity tutorial on your own time. Set up your own scene and bring in your assets from the texture library, 3D models, and photogrammetry models.

Readings // Due Week 6

Ursula K. Le Guin, *The Left Hand of Darkness*

Reading Response Assignment // Due Week 6

As you read the novel, annotate how Le Guin builds a world. What are the categories of worldbuilding, and how does she construct them? Examples: clothing, weather, landscape, gender, family structure, geopolitical relations, etc. Take comprehensive notes of at least 4 different categories of aspects of this world with passages to support your observations. Build out an annotated table to share with the group. Write a 1-page written reflection on a compelling scene in which these worldbuilding elements are put into dramatic relief.

Studio Assignment 5 // Windows into Worldbuilding // Due Week 7/8

While reading the novel, take comprehensive notes of the environmental, sensory, social, and political elements that create the world Le Guin is building. Gather photos, textures, objects, collages, and drawings that will form the basis of your adaptation of the novel's environment. Choose a scene from the novel and build a small diorama of your environment. Print all elements on stiff paper, and save all your elements as digital files in a project folder. Your diorama should be a 4-sided cardboard or foamcore cube roughly 30-40cm, open at the top and the front. Make at least 4 target images within the diorama. Create digital assets for each target image that are prompted in augmented reality. Physical model due week 7, digital assets due week 8.

// FYI related events (optional) //

*Feb 20 – Mar 1 Berlinale annual international film festival*

<https://www.berlinale.de/en/home.html>

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5                    **Off-campus visit to Julia Stoscheck Collection**  
Feb 24            Meet at venue. Discussion with curators and private viewing of Nathalie Djurberg &  
                         Hans Berg augmented reality work  
<https://www.jsc.art/exhibitions/acute-art-at-jsc>

\*DUE Studio Assignment 4 // Setting up a scene in Unity

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6                    **What Makes a World?**  
Mar 2            Discuss novel // Discuss worldbuilding & fiction in art and architecture  
  
                         Mike Kelley // Cauleen Smith // Hieronymous Bosch // Jenn Liu

\*DUE Comprehensive annotations on worldbuilding & written reflection

\*DUE Which scene you will use for your diorama

// HOMEWORK //

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Readings // Due Week 8

- Planetary Utopias: Angela Davis and Gayatri Chakravorty Spivak in conversation with Nikita Dhawan (2018)
- Peter Galison, "The Future of Scenarios: State Science Fiction" 2014

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7            **Mixing Physical and Virtual**

Mar 9        \*DUE Studio Assignment 5 // Windows into Worldbuilding // physical model

In-class workshop: creating a collective augmented reality app with digital assets using your diorama scenes from *Left Hand of Darkness*. Add your digital assets to the scenes and build out the AR app for next week.

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8            // MIDTERM //

Mar 16      **Museum as a Contested Site of Worldbuilding**

Jenna Sutela // Hito Steyerl // Sondra Perry // Adam Khalil, Zack Khalil, Jackson Polys

In-class workshop: finalize testing & building out of AR app with dioramas

// HOMEWORK //

Readings // Due Week 10

- Hito Steyerl, "In Freefall: A Thought Experiment on Vertical Perspective," *e-flux* 2011
- Alexander Provan, "Unknown Makers," *Art in America*, 2016
- Nora Khan on Ian Cheng, *Emissaries Guide to Worlding*, 2018

Studio Assignment 6 // Final Project // Due Week 15

Your final project will be produced, due, and graded in stages. Note due dates for the stages in the syllabus. Final output is due on the last day of class. Building upon the tools we have learned thus far in photogrammetry, textured 3D models, and Unity, create a hybrid world with a strong conceptual focus. Consider decolonial notions of worlding, and speculative futures departing from within the present. Your final format may be a trailer video narrating us through this world, an augmented reality app demo, a site-responsive experience, or a built-out scene in Unity. What layers of meaning can be mixed, amplified, and activated through physical and virtual media?

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9            **Off-campus Studio Visit with Simon Speiser**

Meet on site. <http://www.simonspeiser.de>

Mar 23

\*DUE 2-paragraph final project proposal

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10          **Simulations & Scenarios**

Marina Zurkow // Ian Cheng // Ryan Kuo

Mar 30

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Discuss readings

In-class Workshop: Working with assets & creative use of Skybox in Unity

// HOMEWORK //

Readings // Due Week 13

- Janet Vertesi, "Seeing Like a Rover"
- James Hay, "The invention of air space, outer space, and cyberspace"

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11

Apr 6      // SPRING BREAK //

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12

Apr 13     // SPRING BREAK //

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13            **Remote Viewing, Outer & Inner Space**

Harun Farocki // Mars // medical & military applications of XR

Apr 20

In-class Workshop: Spatial navigation in Unity and screen capture

\*DUE FINAL PROJECT MID-REVIEW FOR GROUP FEEDBACK

Minimum 8 multimedia assets built out

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14

April 27    **Individual meetings & working together**

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15            **Final Day of Class // Critiques**

May 4        \*DUE // FINAL PROJECTS

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16            \*Reserved for contingency plans

May 11      Do not book your flight home or schedule a job. This is our reserved final exam reading day. If the class needs it, we will hold our final critiques on this date.

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### **Facility Guidelines:**

"The Factory" – Eichenstrasse 43

### The Factory Policy Agreement

- 1) "The Factory" at BCB (Eichenstrasse 43) has space and facilities available to BCB students with an academic purpose for using the building. Mandatory in-class orientations are required to



retain chip access to the Factory. Chip access to The Factory is from 7am to 10pm everyday during the semester. At 10pm students will be asked to leave the building by BCB security personnel.

- 2) Students agree to only use the common spaces that are available for their needs, and must respect private spaces that are off-limits. For requesting to reserve the dance / theater space and / or Seminar Room 6, please fill out the online [Factory Reservation Form](#). The Factory Staff will get back to you within two weekdays. (Monday - Friday).
- 3) No smoking is allowed anywhere inside the building. There are to be no projects using open flames (such as candles, torches, lanterns, fireworks, etc.) inside any part of the building.
- 4) Fire exits and lanes must be kept clear of any obstructions.
- 5) Spray painting and handling of any hazardous (chemical or combustible) material is not allowed inside the building. Contact the Studio Arts Manager concerning working with these materials. All work surfaces (indoor and outdoor) must be properly protected with a drop cloth or a packing paper provided by the workshop.
- 6) No sandals, flip-flops, or bare feet will be allowed inside the workshop and studio 6.
- 7) Students must make sure all lights are turned off and doors are closed when leaving the building. No windows or doors are to be left opened or cracked. All electrical items must be unplugged when not in use.
- 8) If BCB workshop tools must be borrowed for a purpose outside of the building, please contact The Studio Arts Manager (by appointment).
- 9) There are to be no architectural changes to studios or any areas inside or outside of the building without first speaking with the Studio Arts Manager.
- 10) During completion week, any space used by a student must be returned empty with clean walls and floors. All garbage must be bagged (or boxed) and properly disposed of. Final grades may be penalized and / or fines imposed if items are left (or renovations unfinished) by the inspection deadline.
- 11) Contact Studio Arts Manager directly with any questions: [j.park@berlin.bard.edu](mailto:j.park@berlin.bard.edu)

## AV Facilities – Eichenstrasse 43 (upstairs)

- 1) BCB's AV (Audio / Visual) facilities provide a limited quantity of AV equipment to support Admin, Faculty as well as those students enrolled in arts classes that require specific items. AV facilities do not include any black and white or color printing services for students.
- 2) The opening times may change every semester to adapt to specific course times. Once these times are established they will stay consistent throughout the semester, with possible exceptions. AV facilities are ONLY available during days when classes are held (closed during official BCB holidays).
- 3) All items checked out are due back during AV hours the following day, unless other arrangements have been made in advance directly with AV Staff.
- 4) Items to be reserved on a specific date should be requested at least one week in advance. Without reservation, availability is limited to a first-come, first-serve basis.
- 5) The AV Staff may exclude students from borrowing items at any time, if the student:
  - failed to return items in time
  - failed to return items in person (pick up and/or return by friends is not allowed)
  - returned items with missing pieces
  - returned items damaged or in poor shape
- 6) AV equipment will be given out only to those students responsible in organizing, picking up as well as returning their items IN PERSON. No exceptions.
- 7) All items returned late, regardless of patron's position at BCB, will be subject to a 1 Euro fine,

per day.

- 8) Any item returned without accessories (such as cables, SD card, batteries, tripod head, lens cap, etc) will be subject to a 1 Euro fine, per day (the same as late returns).
- 9) Any items missing will be subject to patron reimbursement for its value (or under special circumstances, replacement, at the discretion of AV Staff). Any items damaged or malfunctioning are expected to be reported to Staff upon check-in.
- 10) Please use the AV email to inquire about equipment or policy, as well as to reserve (av@berlin.bard.edu). Do not contact AV Staff through their personal emails.
- 11) We strongly suggest personally visiting the facilities to inquire and reserve before borrowing equipment!
- 12) AV equipment is limited at BCB. Whenever possible students are encouraged to use their own devices (computers, cameras) for production purposes.
- 13) Contact AV Staff directly with any questions: av@berlin.bard.edu

## MacLab and Photo Darkroom Facilities – Platanenstrasse 98 (downstairs)

\*\* Guidelines to be offered during orientations.