CTIN 501 Interactive Cinema
Units: 2
Spring 2015
Thursdays 10:00 am – 12:20 pm

Location: SCI L 114

Instructor: Andreas Kratky
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Office Hours: Thursday 1:00 – 3:00 pm
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Course Description
New technologies of image making, recording and sensing have transformed how films are made and what we consider cinematic. We see the combination of real and virtual space and a hybridization of cinematic and interactive experiences and abstract information visualization. New forms of authorial control in combination with radically different distribution channels challenge us to see beyond the established paradigms of cinema and interactive media and consider what our creative strategies and techniques will be for those new types of experiences.

We will consider how these new forms and technologies change the way we think about cinema and how we work as cinematic media makers. It contextualizes recent techniques of image-making in the history of filmmaking and discusses the work of a series of filmmakers who have ventured into new terrains of storytelling such as Chris Marker, Peter Greenaway and Michael Snow, as well as Chris Milk and others. The class will address areas such as virtual reality, generative and computational cinema, database, real-time, and crowd source cinema, alternate reality, spatial and location-based cinema, depth filmmaking, all the way to neuronal cinema.

The class will deliver brief and succinct introductions to these areas of filmmaking and interactive media and provide a hands-on experience with several of the relevant techniques. We will work on one small experimental project throughout the semester exploring aspects of cinema and interactivity. The class project will be conducted in groups or individually, supported by in-class workshops. One intermediate presentation and one final presentation will give occasion for discussion, criticism, and refinement. As part of the proposal of a semester project each student will give a short in-class presentation of individual research on a particular topic of interactive cinema.

Learning Objectives
• Get an overview over the different practices and the development of new forms of cinema and its convergence with interactive media.
• Develop an understanding of the fundamental structures and aesthetic principles of these forms of creative expression.
• Acquire the basic skill to conduct original experiments and investigation of new forms of cinema and interactive media.

Technological Proficiency and Hardware/Software Required
The class is an introduction and does not require specific pre-existing technology skills. Software will be either available on the SCA lab computers or can be installed as open source or free trial versions.

Required Readings and Supplementary Materials
Required readings are specified in the weekly breakdown of the class and are available for download on Blackboard. Readings are due at the day they are mentioned in the syllabus.

Description and Assessment of Assignments
Every student will do a brief individual research presentation on a particular topic of interactive cinema. During the semester students will work on one practical semester project, which will be presented at the end of the semester. The project can be realized individually or in a group.
Grading Breakdown
How will students be graded overall, including the assignments detailed above. Participation should be no more than 15%, unless justified for a higher amount. All must total 100%.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
<th>% of Grade</th>
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<tbody>
<tr>
<td>Discussion and peer critique</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Class exercises and research</td>
<td>20</td>
<td>20</td>
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<tr>
<td>Presentation</td>
<td>20</td>
<td>20</td>
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<tr>
<td>Semester project</td>
<td>50</td>
<td>50</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
<td>100</td>
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Assignment Submission Policy
The individual research presentation will be given in class. The semester project is due at the last meeting of class. At this occasion the project will be presented and discussed in class. At the end of the exam week a final version integrating the feedback of the in-class presentation can be submitted for grading.

Missing an Exam, Incompletes
The grading of this course is based mainly on the project completed and presented during the course of the class (see the grading section of this syllabus). There are no particular mid-term or final exams but the presentation of the project on the scheduled date plays the same role and is mandatory. The only acceptable excuses for missing a presentation or taking an incomplete in the course are personal illnesses or a family emergency. Students must inform the professor before the project presentation and present verifiable evidence in order for a make-up to be scheduled. Students who wish to take incompletes must also present documentation of the problem to the instructor before final grades are due.

Mid-term Conferences
In the middle of the semester the instructor will meet with every student individually. These conferences allow you to get a sense of your overall progress, areas for improvement and an estimated grade at mid-point in the semester. If you are in danger of failing, you will be alerted in writing and in a conference; we will outline together what steps must be taken in order for you to pass. It is the student's responsibility to be aware of USC's add/drop and withdrawal deadlines.
Course Schedule: A Weekly Breakdown

Part 1: Theoretical Context

1. Week: Jan 15, 2015: Introduction
   Overview over course structure and class project
   Lecture and discussion of paradigms of interactive cinema
   Screening of relevant examples

2. Week: Jan 22, 2015: Experiencing Time
   Lecture and discussion of temporal structures in cinema and interactive media.
   Screening of relevant examples
   Reading: Mary Ann Doane, The Representability of Time

3. Week: Jan 29, 2015: Experiencing Space
   Lecture and discussion of spatial structures in cinema and interactive media
   Screening of relevant examples
   Presentation of concepts for the class project
   Reading: Mark J.P. Wolf, Worlds within the World

   Lecture and discussion of processes as an experiential phenomenon
   Screening of relevant examples
   Reading: Gene Youngblood: The Aesthetic Machine

5. Week: Feb 12, 2015: Research Presentation and semester project proposal
   Student presentation and discussion of examples of interactive cinema

Part 2: Practical Foundations

6. Week: Feb 19, 2015: Realization of the Interactive Cinema project 1
   Overview over authoring environments and technologies for interactive cinema projects. Introduction to Unity 3D as a versatile and easily approachable authoring tool.

7. Week: Feb 26, 2015: Realization of the Interactive Cinema project 2
   In-class workshop: Introduction to depth filmmaking using the RGBD toolkit

8. Week: Mar 5, 2015: Realization of the Interactive Cinema project 3
   In-class workshop: Introduction to immersive experiences with the Oculus Rift

9. Week: Mar 12, 2015: Realization of the Interactive Cinema project 4
   In-class workshop: Introduction to augmented reality experiences using Vuforia
Springbreak

10. Week: Mar 26, 2015: Intermediate screening
   Work in progress presentation of the interactive cinema project and peer-review

Part 3: Explorations and Examples

11. Week: Apr 2, 2015: Database Cinema
    Lecture and discussion of concepts of database cinema
    Screening of relevant examples
    Continued in-class workshop

12. Week: Apr 9, 2015: Real-Time / Neuronal Cinema
    Lecture and discussion of concepts of real-time cinema
    Screening of relevant examples
    Continued in-class workshop

    Lecture and discussion of concepts of algorithmic and ambient cinema
    Screening of relevant examples
    Continued in-class workshop

    Lecture and discussion of concepts of collaborative and crowd-source cinema projects
    Screening of relevant examples
    Continued in-class workshop

15. Week: April 30, 2015: Final Screening
    Screening of the final versions of the interactive cinema project.
    Class round-up

IMPORTANT:
In addition to in-class contact hours, all courses must also meet a minimum standard for out-of-class time, which accounts for time students spend on homework, readings, writing, and other academic activities. For each unit of in-class contact time, the university expects two hours of out of class student work per week over a semester.
Statement on Academic Conduct and Support Systems

Academic Conduct
Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Section 11, Behavior Violating University Standards. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct/.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity http://equity.usc.edu/ or to the Department of Public Safety http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. The Center for Women and Men http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Support Systems
A number of USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the American Language Institute http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. The Office of Disability Services and Programs http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, USC Emergency Information http://emergency.usc.edu will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.