Syllabus: Visual Sample & Remix

Don't believe the hype, it's a sequel

Instructor: Dr. Maximilian Schich, Associate Professor

HUAS6375.001.15S - Imagery and Iconography

General information

The course meets in the *Spring 2015*, *Mondays 10:00am–12:45pm* in room *ATC 3.205*.
Coursebook: http://go.utdallas.edu/huas6375.001.15s
Course website: http://elearning.utdallas.edu

Instructor contact

Address: 800 West Campbell Rd., AT10 – 75080 Richardson/TX – USA – *Office:* ATC3.301 – *Lab:* ATC3.502
Phone: +1-972-883-4334 – *Web:* http://www.utdallas.edu/atec/schich/ – *Email:* maximilian.schich@utdallas.edu
Email note: ***The email subject line prefix "HUAS6375.S15" is required in all communication with the instructor!***
Office hours: Please meet me right after the course or make an appointment via email.

Mission

The ***Visual Sample & Remix*** course aims to answer the questions: ***What can we see?*** and ***Where does it come from?***

Visual material is everywhere and growing explosively, while our attention stays limited. As a consequence, the ability to critically observe, analyze, and understand visual material efficiently becomes ever more essential. Making sense of structure and evolution of form and meaning is crucial for success in art, art history, animation, design, games, marketing, science, and social media. Addressing this need, the Visual Sample and Remix course provides participants with a cognitive and practical toolkit that combines methods ranging from traditional art history to cutting-edge approaches from a variety of disciplines. We will look into materials ranging from ancient art and architecture, across movies, games, and consumer products, to Facebook, Twitter, and Pinteres

The ***Visual Sample and Remix*** mission feeds into the scope of ***Imagery and Iconography***, including the study of the visual image, its uses, and constructions of meaning; the nature of the visual image, the modes of interpretation of visual images, the relationship of image and text, and the ways in which the visual image is used to shape our imagination. The graduate version of the ***Visual Sample and Remix*** course builds on results of a previous undergrad course, moving deeper into conceptual and methodological territory. The undergrad course ***ATEC4370*** is not a prerequisite for ***HUAS6375***.

Requirements

This course is open to all graduate students, and does not require any previous technical knowledge. The practical tutorials and homework will be adjusted to fit student's backgrounds and interests, from *never done quantification and visualization* to *advanced data scientist*.

Grading policy

Percentages: Assignments 45% + Attendance & Participation 45% + Presentation 10%
Grading scale: A = 100 - 90 B = 89 - 80 C = 79 - 70 D = 69 - 60 F = 59 - 0

Assignments and course schedule

Typical course activities include a variety of qualitative, quantitative, and creative methods, iterating weekly and feeding into a common product that can be presented to a wider audience. ***Our goal in class is a productive multidisciplinary discussion of weekly results.***

Typical assignments include finding a number of images that are related to a sample image in terms of significant similarity, reuse, or remix. Participants will learn to document their search strategy, find and reference the original, describe relations, and visualize citation patterns and mechanisms. These assignments feed into extensive discussion of visual material in class, in addition to short selected readings. Depending on student skills, we will engage in basic to advanced data science and exploratory visualization.

Assignments and course schedule (continued)

The planned assignment sequence includes...

... collecting images and metadata for research;
... arranging ordered similarity fields;
... tracing the change of meaning in images;
... comparing image frequency to subjective importance;
... understanding audience dynamics;
... disambiguating truth, stereotype, and fantasy in images;
... mapping image co-similarity;
... inferring image dependence;
... understanding image diffusion dynamics (virality);
... disambiguating rights holders and image origin;
... remixing images;
... classifying large amounts of images;
... processing and visualizing image metadata;
... mapping large amounts of images; and
... arguing with images (from figure sequences to storyboards).

The *academic calendar*, *project assignments*, *readings*, and *presentation requirements* are discussed and defined together and will feed into the final course summary. Preliminary summaries as necessary for the completion of assignments are provided to students via email.

Course & instructor policies (aka the fine print)

Class policies

- ***All announcements will be sent via email.*** Students are responsible for reading each announcement in detail.
- All students will participate in the discussion. Observers are expected to participate in the discussion equally.
- Students need to read all the assigned readings or complete homework prior to the class discussion. ***Homework assignments need to be handed 24 hours before the respective class.*** The nature of an assignment including deliverables will be defined together and announced in class or sent out as an announcement.
- Students have the ***responsibility of backing up all their data, code, and preliminary work***. When writing code, it is highly encouraged to use a version control system, such as github, bitbucket, etc.
- Storage (regardless of the procedure): Maintain a ***digital library of examples*** (painting, sculpture, music, literature, computer art, interactive works, etc.) to be shared in class. Strictly adhere to academic and intellectual property procedures when quoting a work, or when presenting it as an example. Do not present the same work in two different classes.
- Please contact the instructor if you have a disability that requires some arrangements so that appropriate arrangments can be made.

UT Dallas Syllabus Policies and Procedures

- The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to http://go.utdallas.edu/syllabus-policies for these policies.
- The principles of academic honesty and ethics will be enforced. ***You should credit all your sources.*** Plagiarism (see UTD syllabus policies for definition) in final presentations, papers, or posters will not be tolerated.
- Excessive unexcused non-attendance (see UTD syllabus policies for definition) will lower your grade.

The descriptions and timelines contained in this syllabus are *subject to change* at the discretion of the instructor.

Instructor Bio

Dr. Maximilian Schich is an Associate Professor in *Arts and Technology* and a founding member of the *Edith O'Donnell Institute for Art History* at *UT Dallas*. He studied Art History, Classical Archaeology, and Psychology at *LMU-Munich* (M.A. 2001), *HU-Berlin* (PhD 2007), and *Max Planck* in Rome (PhD-fellow 2002-2004). Since 1996, Maximilian also was a project consultant for large-scale cultural graph data. From 2008 to 2012 he explored the *Ecology of Complex Networks in Art Research* with Albert-László Barabási at *Northeastern University* and Dirk Helbing at *ETH Zurich*. He received generous funding from the *Special Innovation Fund of the President of Max-Planck-Society* (2008) and a Research Grant from *German Research Foundation* (2009-2012). Maximilian has collaborated, presented, and published in prestigious venues in Archeology, Art History, Computer Science, Complexity, Sociology, Physics, and Visualization. He is an Editorial Advisor at *Leonardo Journal* (MIT-Press) and chairs a popular symposium series on *Arts, Humanities, and Complex Networks* (14.5% acceptance). Maximilian was invited to *SciFoo* twice (2009/2013). Maximilian Schich is the first author of *A Network Framework of Cultural History* in Science Magazine and a visualization *Charting Culture* which attracted over 900,000 views on the Nature Video channel (see www.cultsci.net).

Selected references =>

Selected references

The primary *Textbook* of this course is **Google Image Search.** Selected readings will be provided by the instructor.

Video teasers *i.e. fun to watch reasons why this course is interesting*

Kirby Ferguson (director): **Everything is a Remix** (New York, 2010-2014).
http://everythingisaremix.info/watch-the-series/

Tim Hwang: **What the Internet Has to Tell You About Social Media.** *IgniteNYC* presentation (New York: O'Reilly, 2009).
https://www.youtube.com/watch?v=sXAPLN8R-qM

Classic references

Aby M. Warburg: **Der Bilderatlas Mnemosyne.** in: Martin Warnke, Claudia Brink (eds.): Gesammelte Schriften II.1 (Berlin: Akademieverlag, 2000). [original project of 1927-29; for selected panels see http://warburg.library.cornell.edu/]

Fritz Saxl: **Continuity and Variation in the Meaning of Images.** in: Lectures vol. I (London: The Warburg Institute, 1957). [lecture held 1947]

Ernst Gombrich: **Art and Illusion: A Study in the Psychology of Pictorial Representations.** (Princeton: Princeton University Press, 1960). [in particular on truth and stereotype]

George Kubler: **The Shape of Time: Remarks on the History of Things** (Hartford: Yale University Press, 1962).

Eleanor Rosch & Carolyn B. Mervis: **Family Resemblances: Studies in the Internal Structure of Categories.** *Cognitive Psychology* 7,573-605 (1975)

Recent works of interest

Alex Mesoudi, Andrew Whiten, Kevin N. Laland: **Towards a unified science of cultural evolution.** *Behavioural and Brain Sciences* 29,329–383 (2006). http://lalandlab.st-andrews.ac.uk/documents/Mesoudi_Whiten_Laland_BBS_2006.pdf

Maximilian Schich, Sune Lehmann, Juyong Park: **Dissecting the Canon: Visual Subject Co-Popularity Networks in Art Research**, *ECCS2008 5th European Conference on Complex Systems,* Jerusalem, September 3, 2008.
http://www.jeruccs2008.org/node/114

Maximilian Schich: **Palladio's Imperial Roman Baths as a Central Node in the Complex Network of Visual Reception.** Lecture at the *Society of Architectural Historians 61st Annual Meeting*, Cincinnati, Ohio, April 23-27, 2008.
http://www.schich.info/pub/2008/SAH2008_Schich_slides.pdf [500 years of sample and remix]

Lev Manovich, J. Douglass, T. Zepel, X. Zeng: **Imageplot** (software). (San Diego: Software Studies Initiative, 2010).
http://lab.softwarestudies.com/p/imageplot.html [the basis of http://phototrails.net/ and http://selfiecity.net]

Eduardo Navas: **Remix Theory. The Aesthetics of Sampling** (New York: Springer, 2012).
http://link.springer.com/book/10.1007/978-3-7091-1263-2 [additional content at http://remixtheory.net]

Eduardo Navas, Owen Gallagher, xtine burrough (eds.): **The Routledge Companion to Remix Studies** (London: Routledge, 2014). http://www.routledge.com/books/details/9780415716253/ [an anthology]

Kim Albrecht, Marian Dörk, Boris Müller: **Culturegraphy.** *DL2014 International Workshop "The Search is Over"* (2014).
http://searchisover.org/papers/albrecht.pdf [movie references in IMDb; additional content at http://culturegraphy.com]

Justin Cheng, Lada Adamic, P. Alex Dow, Jon Michael Kleinberg, Jure Lescovec: **Can cascades be predicted?** *WWW'14 Proceedings of the 23rd international conference on World Wide Web* (2014).
http://dx.doi.org/10.1145/2566486.2567997 [viral spreading in Facebook]

Lilian Weng, Filippo Menczer, Yong-Yeol Ahn: **Predicting Successful Memes using Network and Community Structure.** *ICWSM14 Proceedings of the Eighth International AAAI Conference on Weblogs and Social Media* (2014).
http://www.aaai.org/ocs/index.php/ICWSM/ICWSM14/paper/viewFile/8081/8154 [viral spreading in Twitter]

Luam Totti, Felipe Costa, Sandra Aliva, Eduardo Valle, Wagner Meira Jr., Vírgilio Almeida: **The Impact of Visual Attributes on Online Image Diffusion.** *WebSci'14 Proceedings of the 2014 ACM conference on Web Science* (2014).
http://dx.doi.org/10.1145/2615569.2615700 [viral spreading in Pinterest]