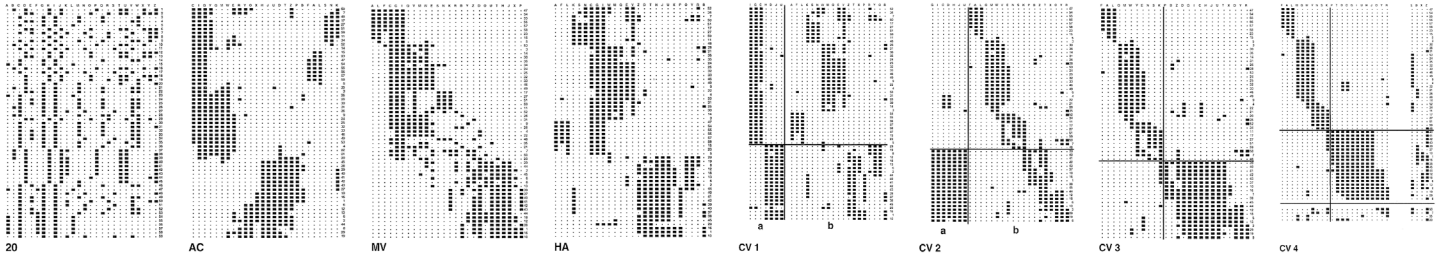


Syllabus: Using Info Design to Think

Instructor: Dr. Maximilian Schich, Associate Professor
ATEC6353.001.15F - Visualization Research



General information

The course meets in the *Fall 2015, Wednesdays 4:00pm-6:45pm* in room *ATC 2.101*.

Coursebook: <http://go.utdallas.edu/atec6353.001.15f>

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 "ATEC6353" is required in all communication with the instructor!*
Office hours: Please meet me right after the course or make an appointment via email.

Mission

Using Info Design to Think introduces information design and visualization as a cognitive feedback process, learning how to read, do, re-read, and re-do visualizations, in order to reach an optimum of insight from given sets of data. Understanding and doing information design is now an essential part of our literacy and skill-set, from academia to industry, from broad-audience newspapers to computer games. Wherever we look, we are confronted with ever-increasing amounts of data that cannot be understood without more or less sophisticated aesthetic representations. Addressing this situation, participants both look at and discuss striking examples of information design, and also do and discuss their own visualizations in weekly assignments. *The key learning objective is both theoretical and practical visual literacy.* The course mission feeds into the scope of *Visualization Research*.

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*. We will use an inverted classroom approach.

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

Our goal is a productive multidisciplinary conversation working towards a common goal. Typical assignments in this course are weekly visualization exercises. In the first half of the semester the instructor will provide datasets that will function as a common starting point. Weekly assignments iterate and cumulate into a set of semester-long visualization projects, feeding into a common product. Project suggestions to make progress in a given area of enthusiasm are welcome.

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.

Figure: Algorithmic and manual matrix permutations helping to understand the characteristics of Merovingian artifacts (taken from Bertin 1967/2001).

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 8 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 arrangements 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 is an art historian using a multidisciplinary approach to understand the nature of culture by integrating qualitative inquiry and observation, with methods of computation, natural science, and information design. Recent high-impact work in *Science and Nature* introduces *A Network Framework of Cultural History* (see www.cultsci.net). Dr. Schich is an editorial advisor at *Leonardo Journal*, and an editorial board member at the *International Journal of Digital Art History* and *Palgrave Communications* (More info see www.schich.info).