

"Building to Scale: Shaping Digital Coursework with Tools and Partnerships"

John Krygier | Geology & Geography | Environmental Studies | Ohio Wesleyan University

"...the focus has broadened from thinking of the digital as a presentational medium—from digitization—to thinking *with* the digital as a pedagogical method."



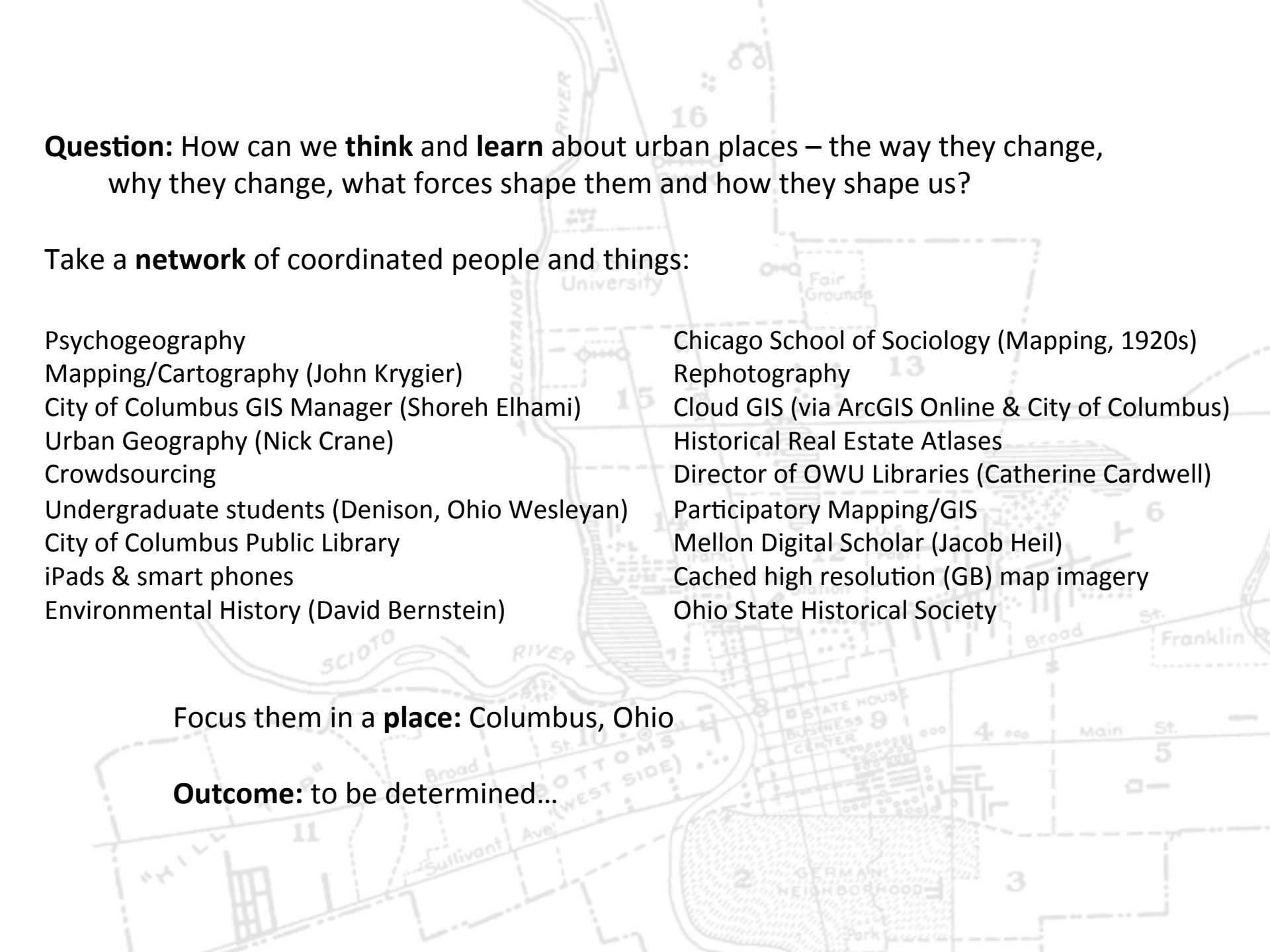
Baist's Atlas of Columbus, 1920 (Fort Hayes)

Pedagogical Context: undergraduate courses & theoretical and pedagogical goals

- David Bernstein: Denison, Urban Environmental History
- Nick Crane: OWU, Urban Geography
- John Krygier: OWU, Geography/Mapping/GIS

Geographical Context: Columbus, Ohio as an urban experiential classroom

Digital materials: Baist's Atlases of Columbus (1899, 1910, 1920)



Question: How can we **think** and **learn** about urban places – the way they change, why they change, what forces shape them and how they shape us?

Take a **network** of coordinated people and things:

Psychogeography	Chicago School of Sociology (Mapping, 1920s)
Mapping/Cartography (John Krygier)	Rephotography
City of Columbus GIS Manager (Shoreh Elhami)	Cloud GIS (via ArcGIS Online & City of Columbus)
Urban Geography (Nick Crane)	Historical Real Estate Atlases
Crowdsourcing	Director of OWU Libraries (Catherine Cardwell)
Undergraduate students (Denison, Ohio Wesleyan)	Participatory Mapping/GIS
City of Columbus Public Library	Mellon Digital Scholar (Jacob Heil)
iPads & smart phones	Cached high resolution (GB) map imagery
Environmental History (David Bernstein)	Ohio State Historical Society

Focus them in a **place**: Columbus, Ohio

Outcome: to be determined...

Super Organized Plan

1. Technical challenge: app based historical maps, images and documents for exploration & discovery in urban places (web and in field) tied to intellectual goals of urban courses. (Summer & Fall 2014)
 1. Historical built environment: Baist's real estate atlases (1899, 1910, 1920)
 2. Historical social environment:
 1. Blanchard panoramic photographs (1922)
 2. McKenzie Columbus social mapping (1921)
 3. US Census population, race (1930)
 4. Columbus Memory: harvested photographs (various dates)
 5. Redlining maps (1936)
 3. Current built environment (map and satellite imagery)
 4. Current social environment
 1. Columbus Historical Districts
 2. Columbus Census Data (2010)
2. Pedagogical challenge I: Integration in courses (Spring 2015)
 1. Goals of two courses
 2. Use of materials in class setting
 1. Exploration and discovery tied to course goals
 1. Tie to specific neighborhoods (Arena District, Bronzeville, etc.)
 2. Tie to specific transects (transportation - roads, railroads, etc.)
 3. Leave open to random discovery
 2. Scholarly component tied to course goals
 1. Understand primary sources: mosaic flaws, critical map use; perspective of Chicago School sociology, etc.
 2. Find and understand secondary sources
 3. Interpretation, documentation and additional research
 3. Crowdsourcing: students & faculty add relevant materials to apps
 3. Use of materials in field
 1. Experience of current urban landscape in comparison to historical materials (map, images) and completed classroom research on particular locations: Crowdsourcing
 1. Field documentation of experience: annotate the maps digitally
 2. Field acquisition of new photographs, rephotography of old photos, interviews, other materials: geocoded and added to app.
 4. Interpretation and integration of 2. Class Use and 3. Field Use above
 5. Final student project report linked to app
 6. Further expansion of data and information in apps
3. Pedagogical challenge II: Psychogeographic methods for Exploration & Discovery. (Future)
 1. Explore in the field first using psychogeography methods: "engaged discomfort" leading to intellectual questions
 2. App: will guide you through urban environment in a way that engages users (students, others). Document "moments of engagement" to explore in more detail
 1. Navigate through current landscape using 1899/1900/1920 maps; document experience (what changed and what hasn't)
 2. Navigate along significant historical transects: US40, Broad Street, Interurban lines, etc. and document experience.
 3. Navigate along a route randomly generated by app and document experience
 3. Return to classroom and explore the issues and questions raised by the field experience; annotate with additional research tied to course content
4. Pedagogical challenge III: Extension of apps and functions to broader community of users (Future)
 1. Use in a way similar to students (explore, document)
 2. Add historical materials, interpretations, stories, etc. to apps.
 3. Community members engage with students through app and in field: collaboration

Technical Challenge & Collaboration: from musty old atlas to web app

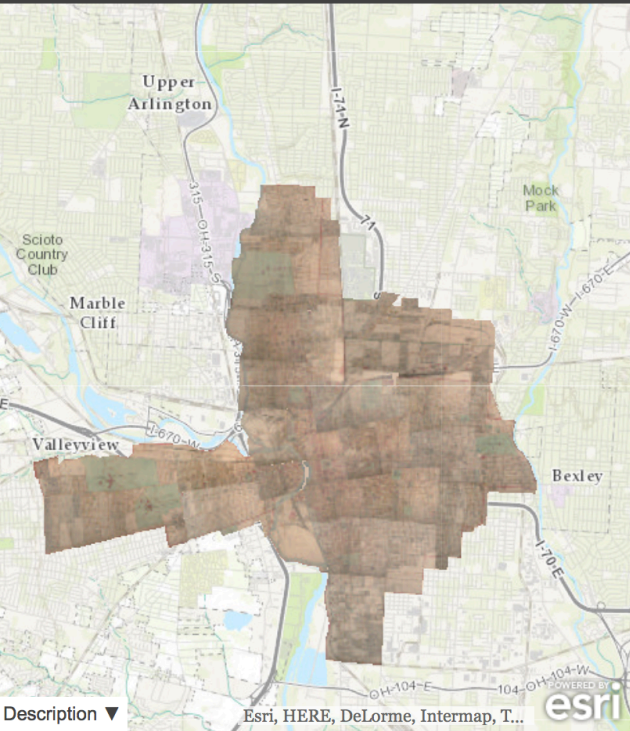
- coordinate **access** to Baist's Atlases: Ohio Historical Society, Columbus Public Library
- **scanning** by State Historical Society (to TIFF)
- **georectification** (add map coordinates and stretch old maps to current geography): Will Ruzek (OWU student)
- help **focusing, organizing, facilitating**: Jacob Heil (Five Colleges of Ohio) & Catherine Cardwell (Director, OWU Libraries)
- **tile** together Atlas plates into continuous coverage: Shoreh Elhami and Ting Feng (City of Columbus)
- document and fix (if possible) **flaws** along atlas plate edges: Feng (City of Columbus)
- **cache** tiled map files (for quick access, zoom in/out): Elhami (City of Columbus)
- design **web map apps** for student access to Baist's maps (and other data): Bernstein (Denison), Crane & Krygier (OWU)
- **create apps** based on available ArcGIS Online Templates: Ting (City of Columbus)
- integrate **other data** (maps, panoramic photographs, data): Feng (City of Columbus)
- allow for **crowdsourcing** (photos, rephotography, text, etc.): Feng (City of Columbus)
- **fret/whine** about apps not doing everything we want: faculty
- **field testing** of apps (future)
- Hope for **more Mellon money** to pay for custom programming given limitations of available app templates (future)

City of Columbus Historic Maps (1899, 1910, 1920)

The G. William Baist Company of Philadelphia, Pennsylvania, published three large atlases of Columbus in 1899, 1910, and 1920. The maps from Baist's Atlases below were scanned from three of the few remaining copies of these Atlases, in the collections of the Columbus Public Library and Ohio State Historical Society. Baist's Atlases of Columbus provide a significant source of information to assess historical urban change.

SYNCHRONIZE MAPS: ☒ Scale ☐ Location

City of Columbus Historic Maps; 1899 Baist's Real Estate Atlas Maps

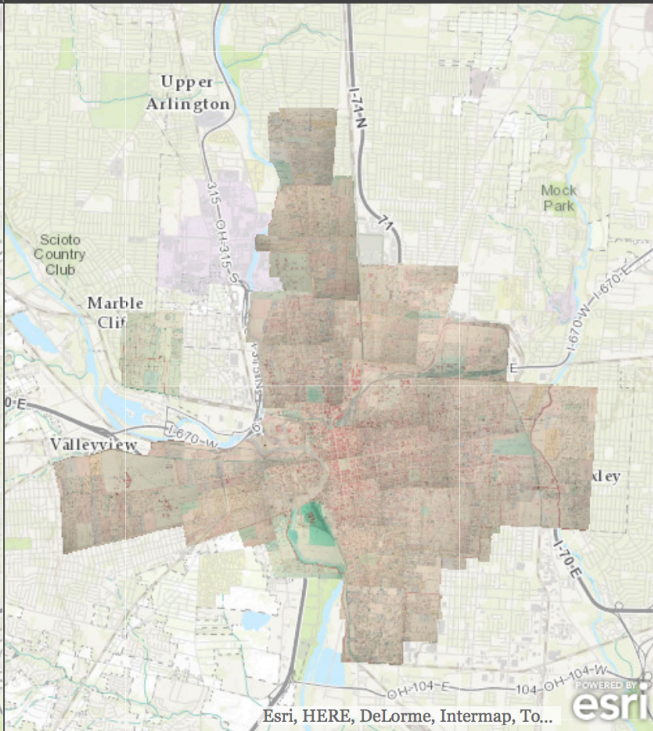


Description ▼

City of Columbus Historic Maps; 1899 Baist's Real Estate Atlas Maps

The G. William Baist Company of Philadelphia, Pennsylvania, published three large atlases of Columbus in 1899, 1910, and 1920. These atlases and their maps were created for utilitarian purposes: Baist's maps were for real estate title searches and include detailed building, subdivision, infrastructure and street data. They were beautifully designed and colored, and produced for dozens of U.S. cities, but in small quantities. Most were heavily used, annotated, and worn out. Few survive in good condition. The

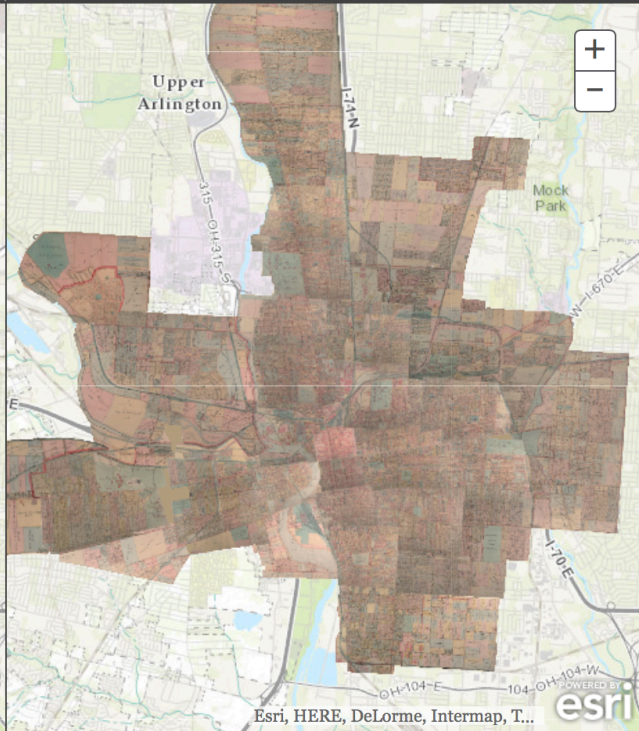
City of Columbus Historic Maps: 1910 Baist's Real Estate Atlas Maps



City of Columbus Historic Maps: 1910 Baist's Real Estate Atlas Maps

The G. William Baist Company of Philadelphia, Pennsylvania, published three large atlases of Columbus in 1899, 1910, and 1920. These atlases and their maps were created for utilitarian purposes: Baist's maps were for real estate title searches and include detailed building, subdivision, infrastructure and street data. They were beautifully designed and colored, and produced for dozens of U.S. cities, but in small quantities. Most were heavily used, annotated, and worn out. Few survive in good condition. The maps from Baist's Atlases below were scanned from three of the few remaining copies of

City of Columbus Historic Maps: 1920 Baist's Real Estate Atlas Maps



City of Columbus Historic Maps: 1920 Baist's Real Estate Atlas Maps

The G. William Baist Company of Philadelphia, Pennsylvania, published three large atlases of Columbus in 1899, 1910, and 1920. These atlases and their maps were created for utilitarian purposes: Baist's maps were for real estate title searches and include detailed building, subdivision, infrastructure and street data. They were beautifully designed and colored, and produced for dozens of U.S. cities, but in small quantities. Most were heavily used, annotated, and worn out. Few survive in good condition. The maps from Baist's Atlases below were scanned from three of the few

City of Columbus Historic Maps (1899, 1910, 1920)

The G. William Baist Company of Philadelphia, Pennsylvania, published three large atlases of Columbus in 1899, 1910, and 1920. The maps from Baist's Atlases below were scanned from three of the few remaining copies of these Atlases, in the collections of the Columbus Public Library and Ohio State Historical Society. Baist's Atlases of Columbus provide a significant source of information to assess historical urban change.

SYNCHRONIZE MAPS: Scale Location

City of Columbus Historic Maps; 1899 Baist's Real Estate Atlas Maps



City of Columbus Historic Maps; 1899 Baist's Real Estate Atlas Maps

The G. William Baist Company of Philadelphia, Pennsylvania, published three large atlases of Columbus in 1899, 1910, and 1920. These atlases and their maps were created for utilitarian purposes: Baist's maps were for real estate title searches and include detailed building, subdivision, infrastructure and street data. They were beautifully designed and colored, and produced for dozens of U.S. cities, but in small quantities. Most were heavily used, annotated, and worn out. Few survive in good condition. The

City of Columbus Historic Maps: 1910 Baist's Real Estate Atlas Maps



City of Columbus Historic Maps: 1910 Baist's Real Estate Atlas Maps

The G. William Baist Company of Philadelphia, Pennsylvania, published three large atlases of Columbus in 1899, 1910, and 1920. These atlases and their maps were created for utilitarian purposes: Baist's maps were for real estate title searches and include detailed building, subdivision, infrastructure and street data. They were beautifully designed and colored, and produced for dozens of U.S. cities, but in small quantities. Most were heavily used, annotated, and worn out. Few survive in good condition. The maps from Baist's Atlases below were scanned from three of the few remaining copies of

City of Columbus Historic Maps: 1920 Baist's Real Estate Atlas Maps



City of Columbus Historic Maps: 1920 Baist's Real Estate Atlas Maps

The G. William Baist Company of Philadelphia, Pennsylvania, published three large atlases of Columbus in 1899, 1910, and 1920. These atlases and their maps were created for utilitarian purposes: Baist's maps were for real estate title searches and include detailed building, subdivision, infrastructure and street data. They were beautifully designed and colored, and produced for dozens of U.S. cities, but in small quantities. Most were heavily used, annotated, and worn out. Few survive in good condition. The maps from Baist's Atlases below were scanned from three of the few

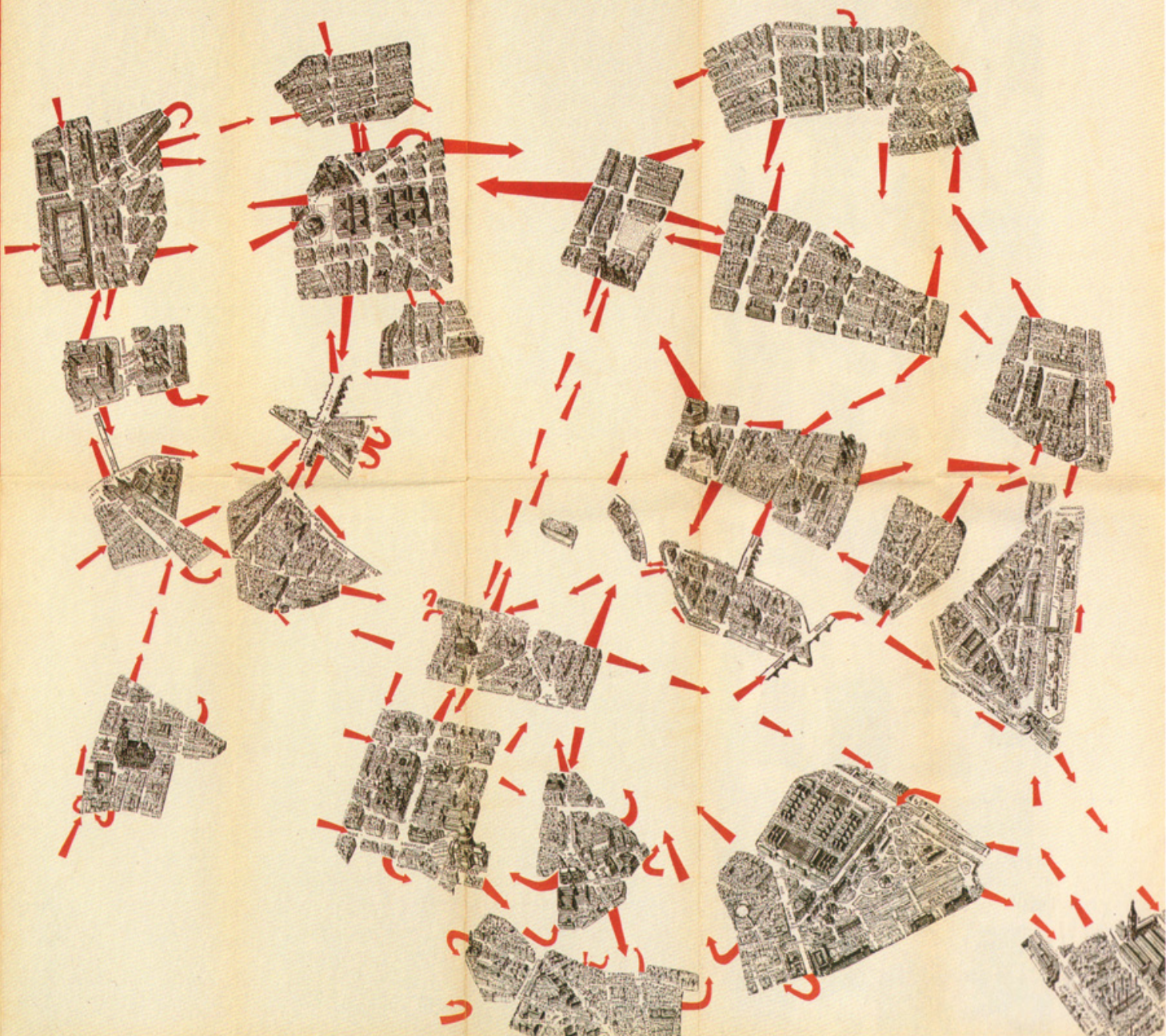
GUIDE
PSYCHOGEOGRAPHIQUE
DE PARIS

ÉDITÉ PAR LE BAUHAUS IMAGINISTE
PRINTED IN DENMARK BY
PERMILD & ROSENGREEN

DISCOURS SUR LES PASSIONS DE L'AMOUR

penthes psychogeographiques de la d rive et localisation
d'unit es d'ambiance

par G.-E. DEBORD



Guide Psychogéographique de OWU



Psychogeography: “the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals.”

Dérive: “A mode of **experimental behavior** linked to the **condition of urban society**: a technique of **transient passage through varied ambiances**.”

“The production of psychogeographic maps, or even the introduction of alterations such as more or less arbitrarily transposing maps of two different regions, can contribute to ... complete insubordination of habitual influences. **A friend recently told me that he had just wandered through the Harz region of Germany while blindly following the directions of a map of London.**” Debord, *Introduction to a Critique of Urban Geography*.

Question (again): How can we **think** about urban places – the way they change, why they change, what forces shape them and how they shape us?

Partial answer: Lets insubordinate habitual influences by making students wander through Columbus blindly following the directions of a map made in 1899.

- applied psychogeography for exploring and raising questions and ultimately understanding cities
- useful for Urban Environmental History and Urban Geography
- useful for real people who want to explore cities
- situated in experience, engagement, exploration
- situated in a cool intellectual context
- requiring a network of collaborators and interwoven digital technologies



Sources

Mapping Weird Stuff

<http://mappingweirdstuff.wordpress.com>

Columbus Historical Map Apps

<http://columbus.maps.arcgis.com/home/group.html?owner=admincoc&title=Historic%20Maps&q=&focus=all>

Denis Wood. "Lynch Debord"

http://krygier.owu.edu/krygier_html/geog_222/geog_222_lo/Lynch_Debord_Carto.45.3.003.pdf