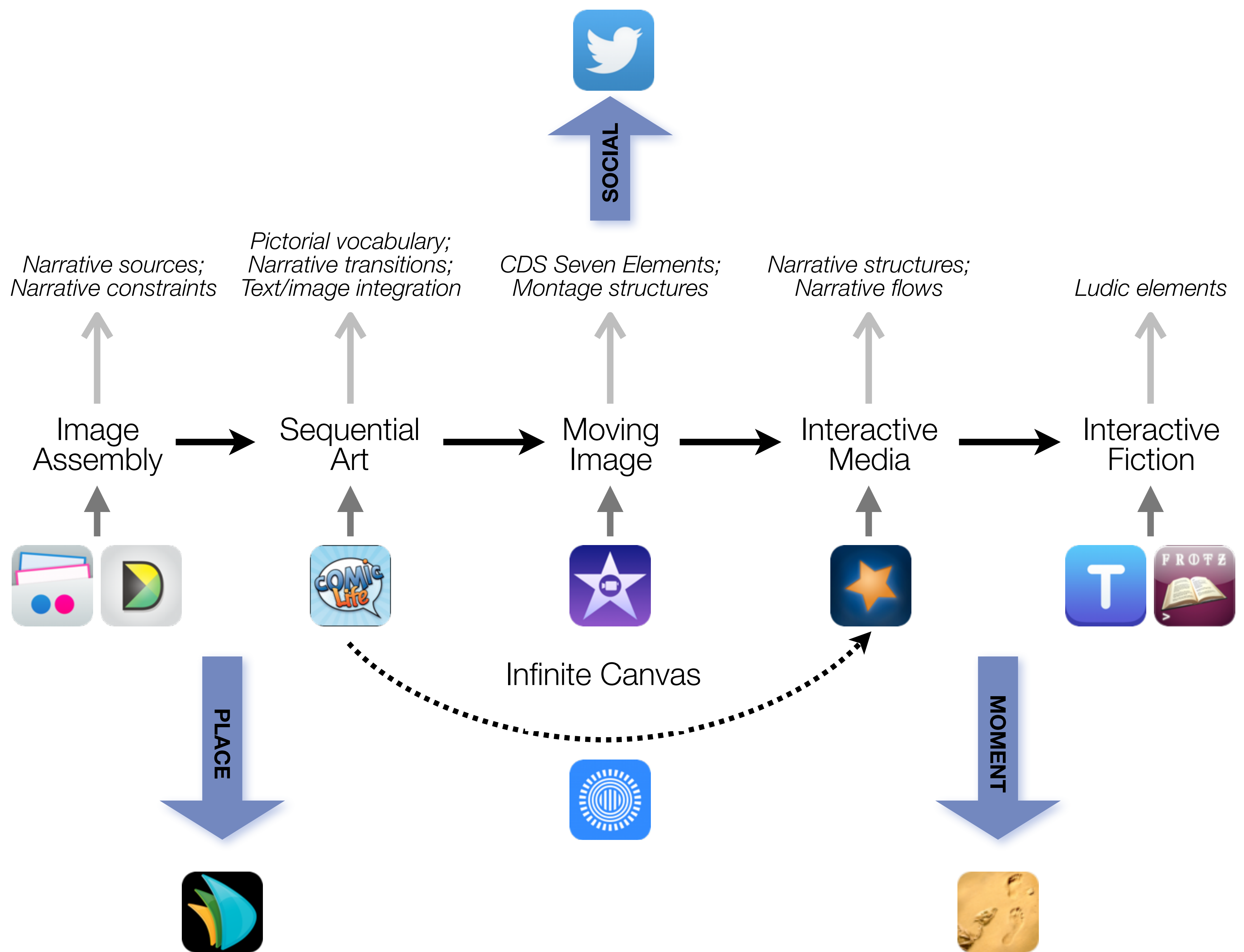


Narratives in Space and Time: Digital Storytelling on Maps and Timelines

Ruben R. Puentedura, Ph.D.

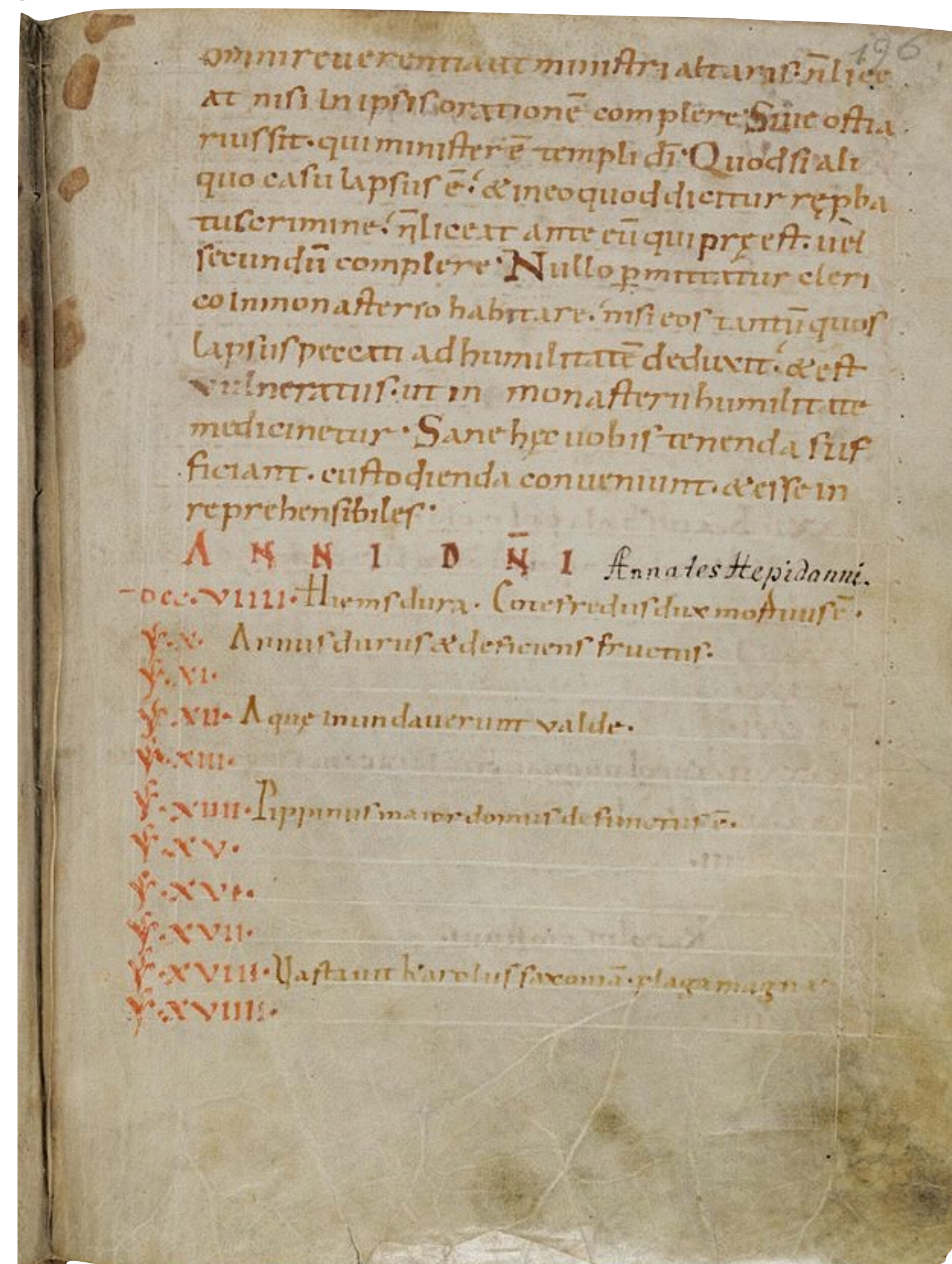


Simonides: the Method of Loci

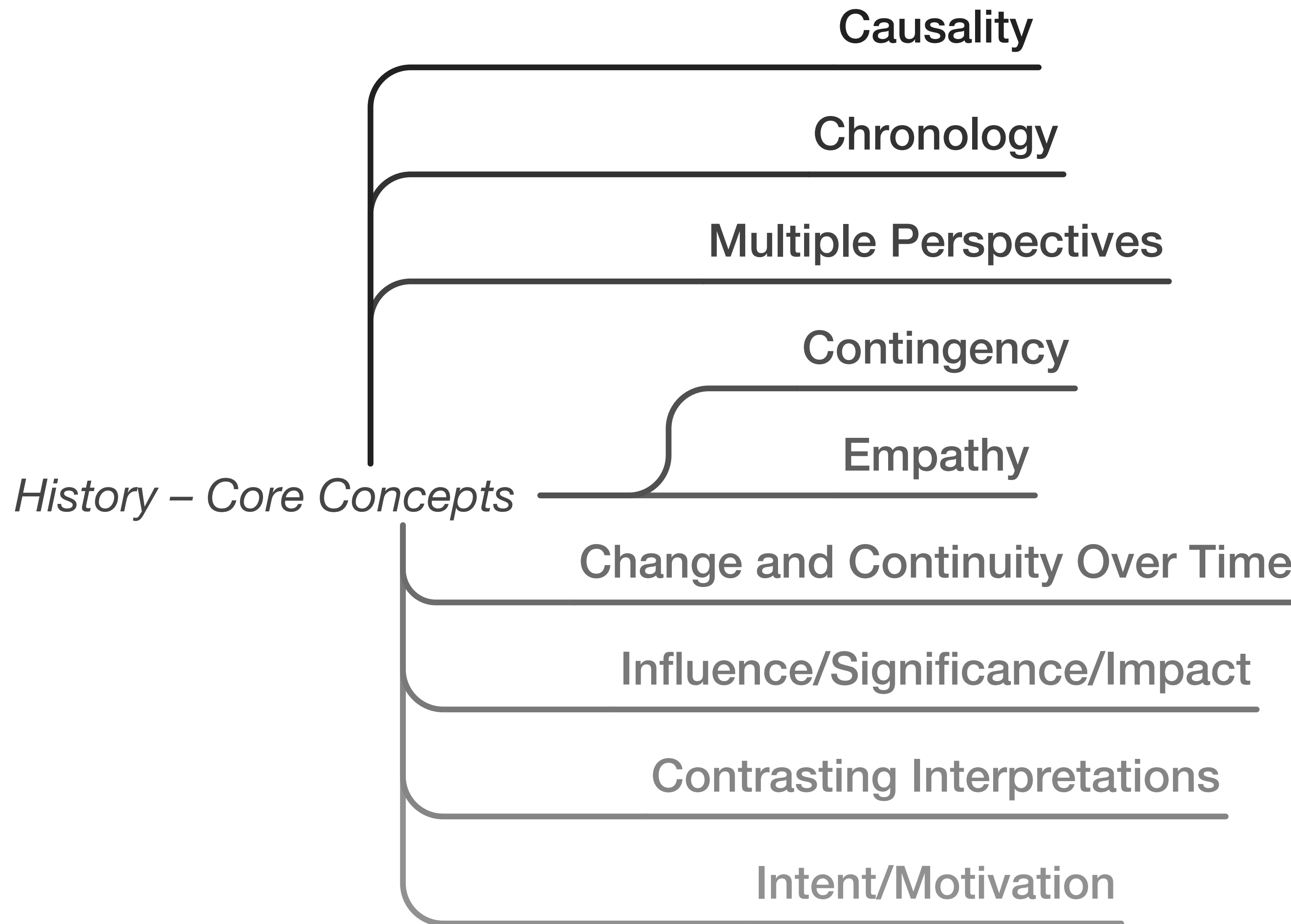


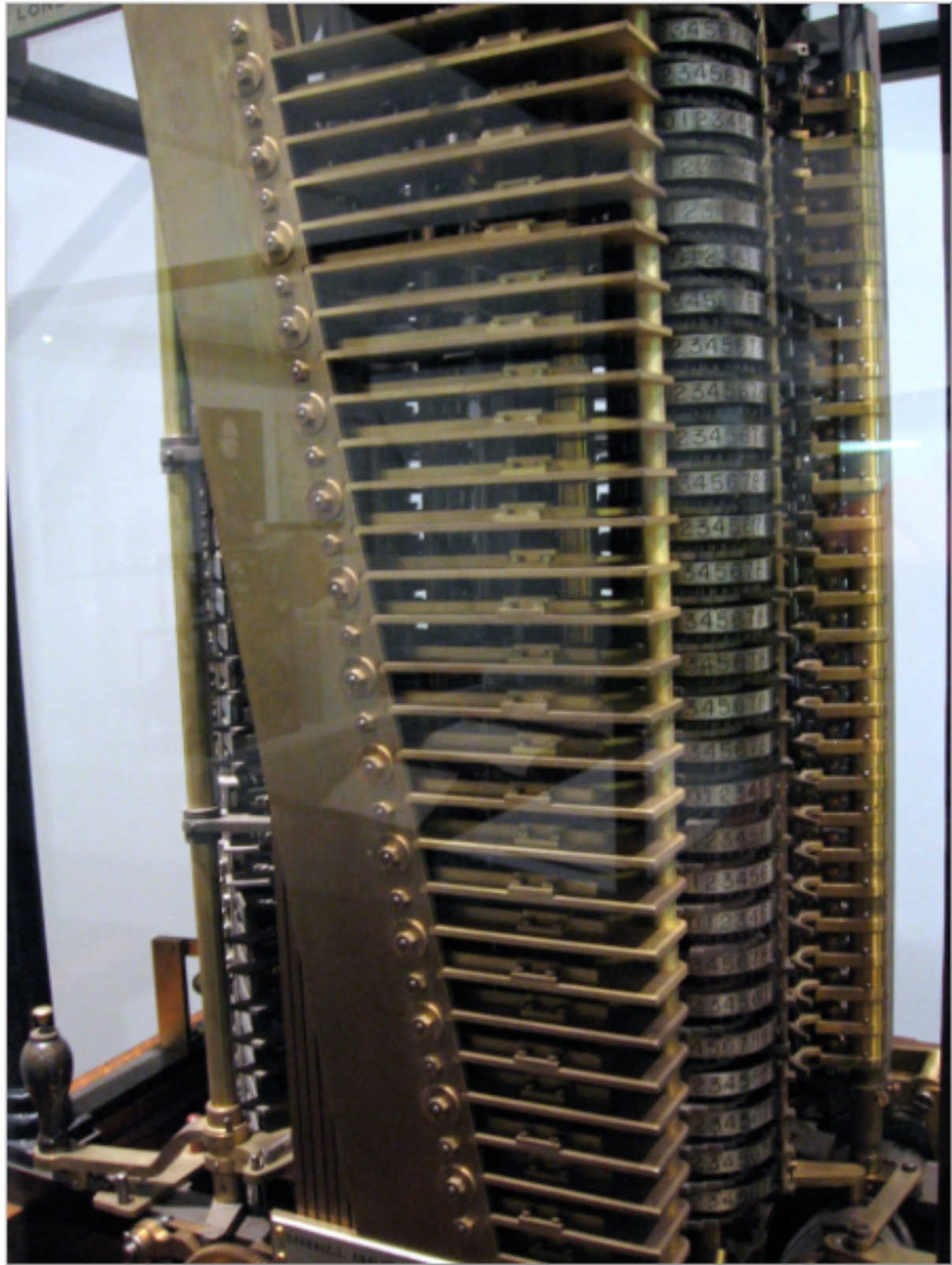
Building a Language for Time

Annales Sangallenses Maiores



- 709. Hard winter. Duke Gottfried died.
- 710. Hard year and deficient in crops.
- 711.
- 712. Flood everywhere.
- 713.
- 714. Pippin, mayor of the palace died.
- 715.
- 716.
- 717.
- 718. Charles devastated the Saxon with great destruction.
- 719.





◀
1820
Thomas
Arithometer

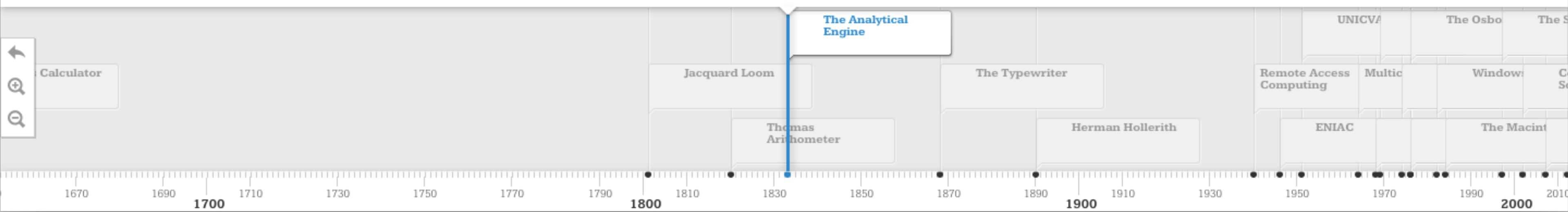
1833
The Analytical Engine

Charles Babbage designed but was never able to produce a working model but it is significant in that it relied upon punched cards for data and programs and would employ a language similar to modern assembly language complete with loops and conditional branching (for the nerds out there).

▶
1868
The Typewriter

By [Marcin Wichary](#) via Wikimedia Commons

This modern model of the Analytical Engine is housed at the Science Museum in London.



MOST **PANEL-TO-PANEL** TRANSITIONS IN COMICS CAN BE PLACED IN ONE OF SEVERAL DISTINCT CATEGORIES. THE FIRST CATEGORY-- WHICH WE'LL CALL **MOMENT-TO-MOMENT**--REQUIRES VERY LITTLE CLOSURE.

1.

NEXT ARE THOSE TRANSITIONS FEATURING A SINGLE **SUBJECT** IN DISTINCT **ACTION-TO-ACTION** PROGRESSIONS.

2.

THE NEXT TYPE TAKES US FROM **SUBJECT-TO-SUBJECT** WHILE STAYING WITHIN A SCENE OR IDEA. NOTE THE DEGREE OF **READER INVOLVEMENT** NECESSARY TO RENDER THESE TRANSITIONS **MEANINGFUL**.

3.

DEDUCTIVE REASONING IS OFTEN REQUIRED IN READING COMICS SUCH AS IN THESE **SCENE-TO-SCENE** TRANSITIONS, WHICH TRANSPORT US ACROSS **SIGNIFICANT DISTANCES OF TIME AND SPACE**.

4.

A **FIFTH** TYPE OF TRANSITION, WHICH WE'LL CALL **ASPECT-TO-ASPECT**, BYPASSES **TIME** FOR THE MOST PART AND SETS A **WANDERING EYE** ON DIFFERENT **ASPECTS** OF A PLACE, IDEA OR MOOD.

5.

AND FINALLY, THERE'S THE **NON-SEQUITUR**, WHICH OFFERS NO LOGICAL RELATIONSHIP BETWEEN PANELS **WHATSOEVER!**

6.

Four Basic Forms of Montage

- Organic Montage
 - Montage follows the interplay between the dramatic moments of the story/stories.
- Dialectical Montage
 - Montage follows a rhythm set by the logical components of a thesis.
- Montage by Quantity of Movement
 - Montage follows the dynamics of the action inside the frame.
- Montage by Quantity of Light
 - Montage follows the physical and symbolic interplay of light/dark inside the frame.

Organic Montage:

Once Upon A Time In The West

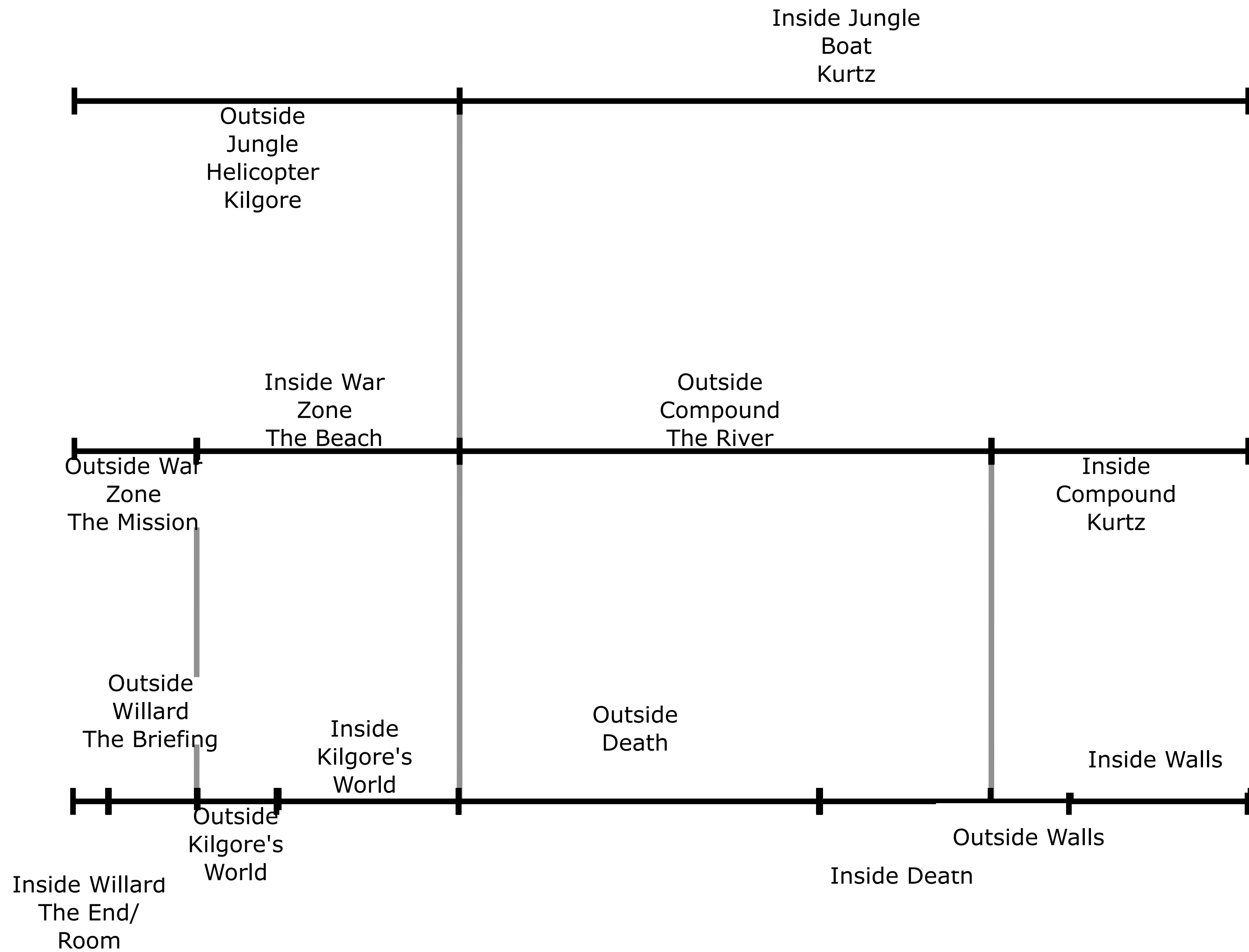


Dialectical Montage: *Apocalypse Now Redux*

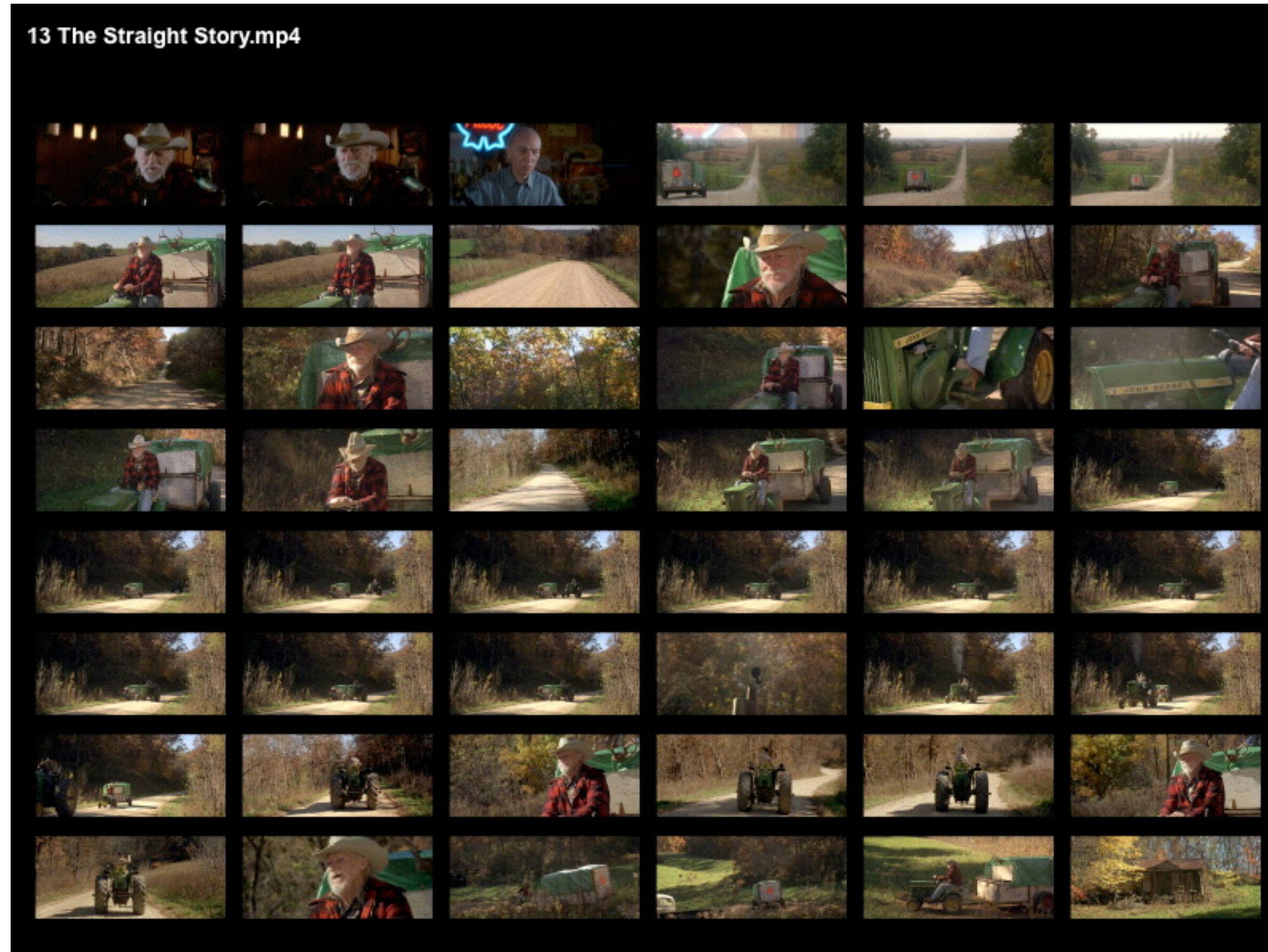


Apocalypse Now Redux. Dir. Coppola, Francis Ford. 1979. DVD. Paramount Home Video, 2001.

Apocalypse Now Redux - Partial Plot Diagram



Montage by Quantity of Movement: *The Straight Story*



Montage by Quantity of Light:

Pi



Building a Language for Space

Location

Position in space

Condition

*Mix of natural & artificial
features that give
meaning to a location*

Links

*Connections between
places*

Formal Region

*Group of places with
similar conditions*

Functional Region

*Group of places linked
together by a flow*

Spatial Thinking Skills

Comparison

How are places similar or different?

Aura

What is this place's influence on nearby places?

Region

What nearby places are similar to this one?

Transition

How do things change between two places?

Hierarchy

What larger area is this area inside? What smaller areas are inside it?

Analogy

What places have similar conditions?

Pattern

What distinctive arrangements can you see on a map?

Association

Are these patterns similar?

StoryMap JS

CreateGigapixelAdvancedExamplesHelp

NORTHWESTERN UNIVERSITY

knight lab

Map OverviewBack To Beginning ↶

ates of
ca

New Vienna

Leesburg

Greenfield

Hillsboro

Lynchburg

Frankfort

Bainbrid

Waverly

Pike

President of the
the United
political crisis.
nent, and

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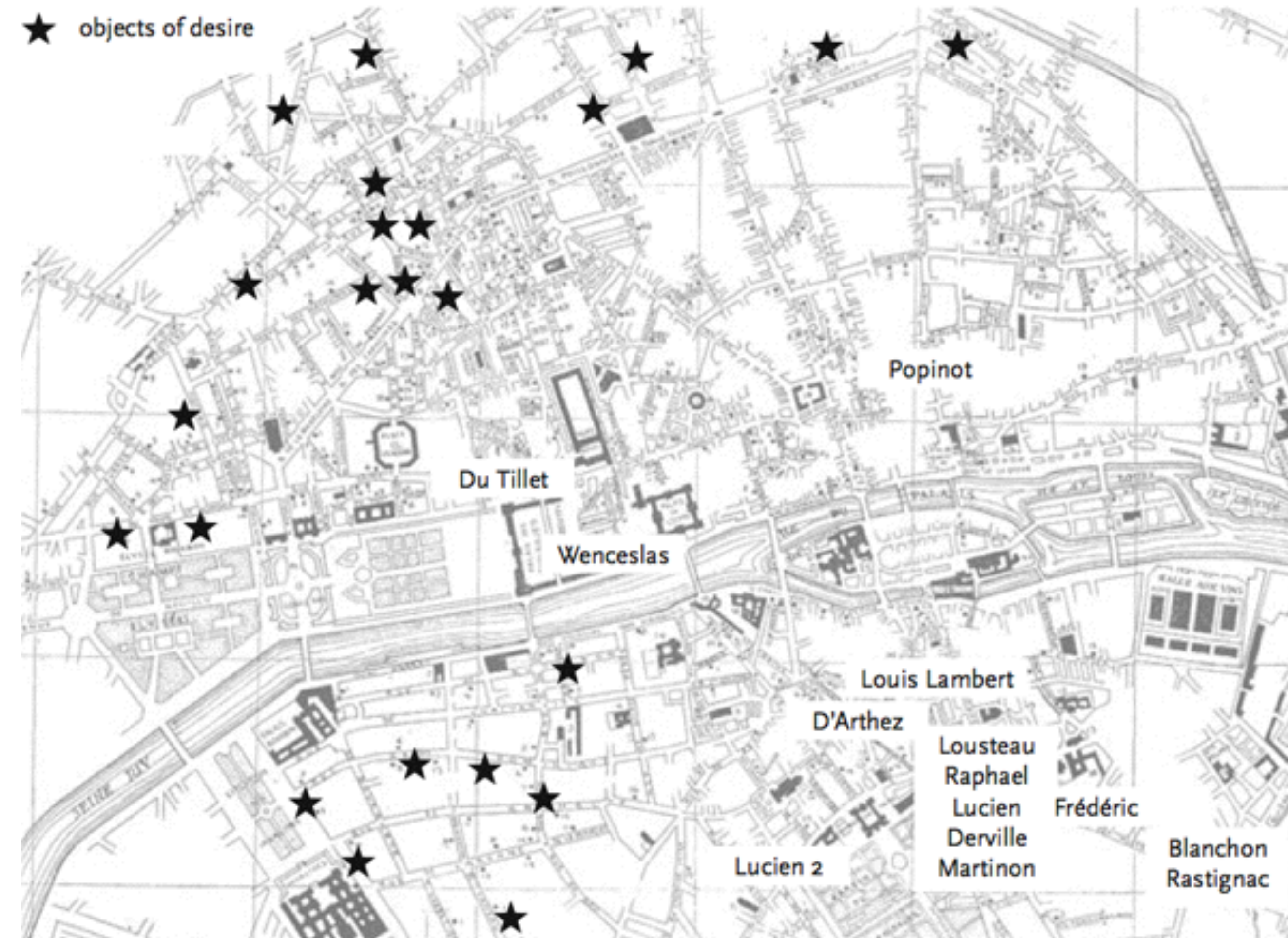
41st & 42nd Congress newly elected

examiner

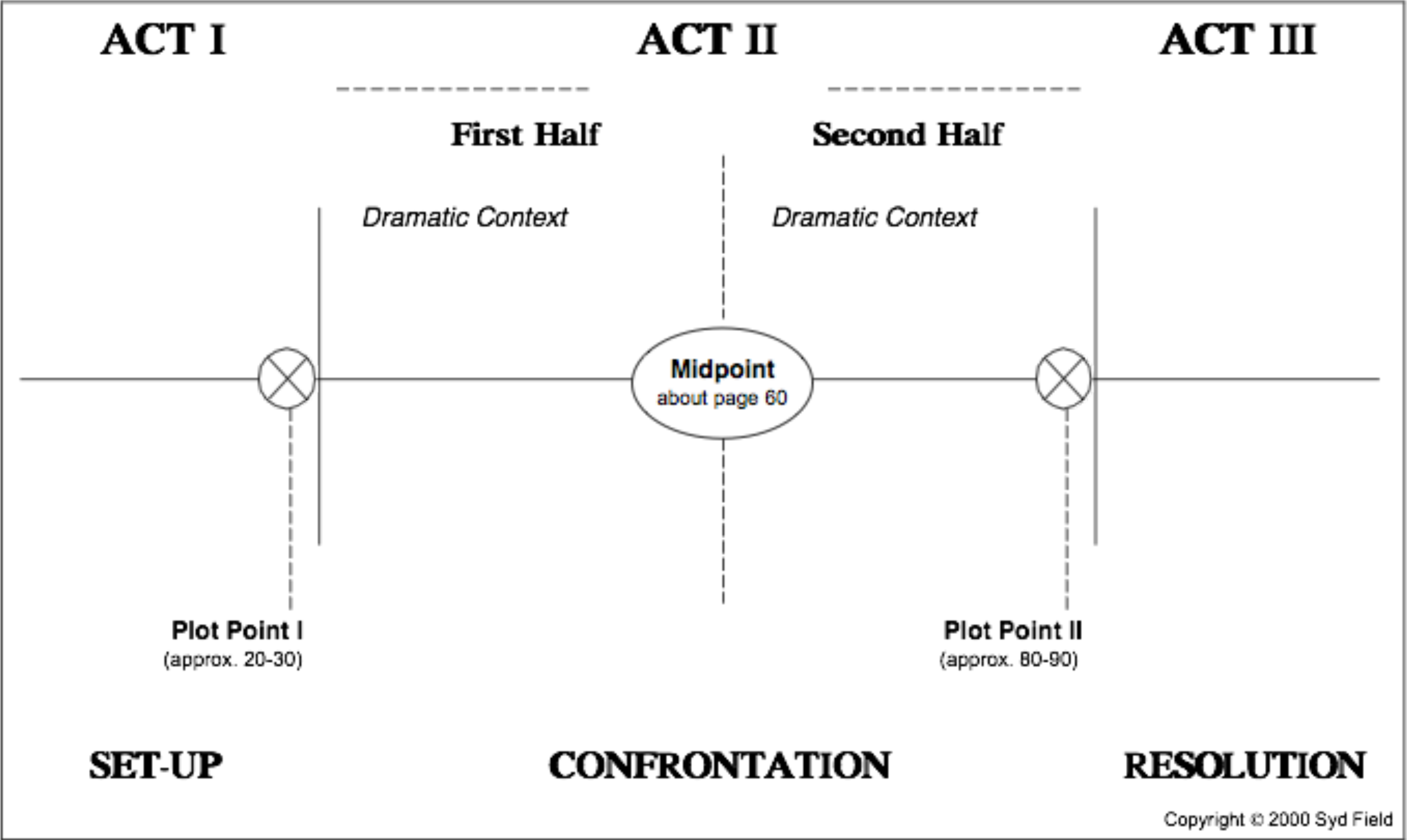
1870: FINALLY COUNTING EVERYONE

This census was the first to record the names and other personal information of all African-Americans, including those who were formerly enslaved. In researching your African-American ancestors, moving backward from the present, the 1870 federal census may be the last census in which you are able to identify these ancestors by name. The 1870 census often even serves as a powerful tool in identifying former slave owners, a necessary step for anyone desiring to reclaim the heritage of their enslaved ancestors.

FIGURE 10: *Protagonists of Parisian novels, and objects of their desire*



The Basic Screenplay Paradigm (Field)



The Hero's Journey (Campbell)

- Three parts to the journey:
 - **The Departure:** the hero is called to adventure
 - Someone is in need of aid, and the hero is called upon to help
 - **The Initiation:** the hero undertakes a journey (physical or spiritual) to reach the goal that will secure the needed aid
 - The hero undergoes a process of change
 - **The Return:** the hero accomplishes their task, and aid is rendered
 - The hero receives some reward

The Detailed Journey

- **The Departure:**
 - The Call to Adventure
 - Refusal of the Call
 - Supernatural Aid
 - The Crossing of the First Threshold
 - Belly of The Whale
- **The Initiation:**
 - The Road of Trials
 - The Meeting with the Giver of Life
 - Encounter with Temptation
 - Atonement with the Giver of Laws
 - Apotheosis
 - The Ultimate Boon
- **The Return:**
 - Refusal of the Return
 - The Magic Flight
 - Rescue from Without
 - The Crossing of the Return Threshold
 - Master of the Two Worlds
 - Freedom to Live

Character Roles (Propp)

- **Main Characters:**
 - Protagonist (Hero)
 - Antagonist (Villain)
 - Dispatcher
 - Donor
 - Helper
 - Person Sought-For
 - False Protagonist (False Hero)
- **Supporting Characters:**
 - Family Members
 - Connectors

Character Functions

Introduction		
#	Function	Example
1	Absentation	A member of the family absents him/herself.
2	Interdiction	An interdiction is given to the hero.
3	Violation	The interdiction is violated.
4	Reconnaissance	A villain makes an attempt to get information.
5	Delivery	The villain gets information about the victim.
6	Trickery	The villain tries to deceive the victim.
7	Complicity	The victim is deceived.

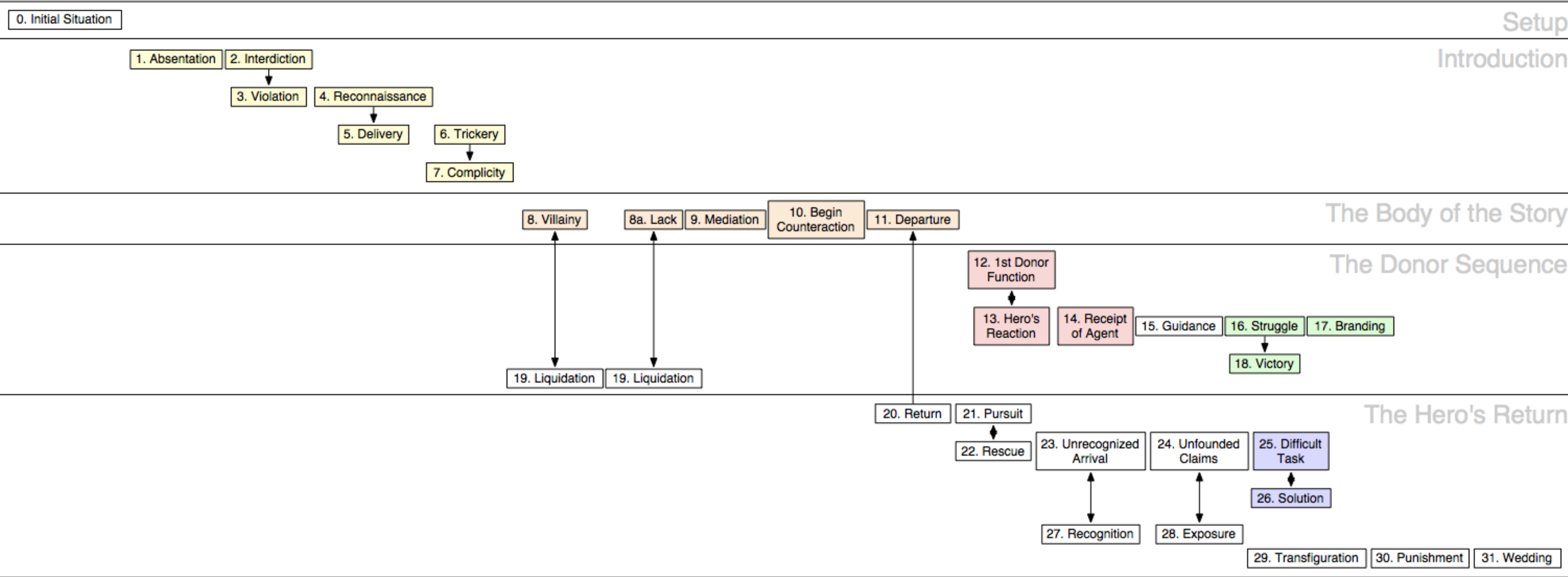
The Donor Sequence		
#	Function	Example
12	1st Donor Function	The hero is tested by a donor of a magical agent.
13	Hero's Reaction	The hero reacts to the agent or donor.
14	Receipt of Agent	The hero acquires the use of the magical agent.
15	Guidance	The hero is led to the object of search.
16	Struggle	The hero and villain join in combat.
17	Branding	The hero is branded.
18	Victory	The hero defeats the villain.
19	Liquidation	The initial misfortune or lack is liquidated.

The Body of the Story		
#	Function	Example
8	Villainy	The villain causes harm to a family member. - OR
8a	Lack	A family member lacks or desires something.
9	Mediation	A misfortune is made known, the hero is dispatched.
10	Begin Counteraction	The hero (seeker) agrees to counteraction.
11	Departure	The hero leaves home.

The Hero's Return		
#	Function	Example
20	Return	The hero returns.
21	Pursuit	The hero is pursued.
22	Rescue	The hero is rescued from pursuit.
23	Unrecognized Arrival	The hero, unrecognized, arrives home or elsewhere.
24	Unfounded Claims	A false hero presents unfounded claims.
25	Difficult Task	A difficult task is proposed to the hero.
26	Solution	The task is resolved.
27	Recognition	The hero is recognized.
28	Exposure	The false hero or villain is exposed.
29	Transfiguration	The hero is given a new appearance.
30	Punishment	The villain is punished.
31	Wedding	The hero is married and ascends the throne.

Notes:

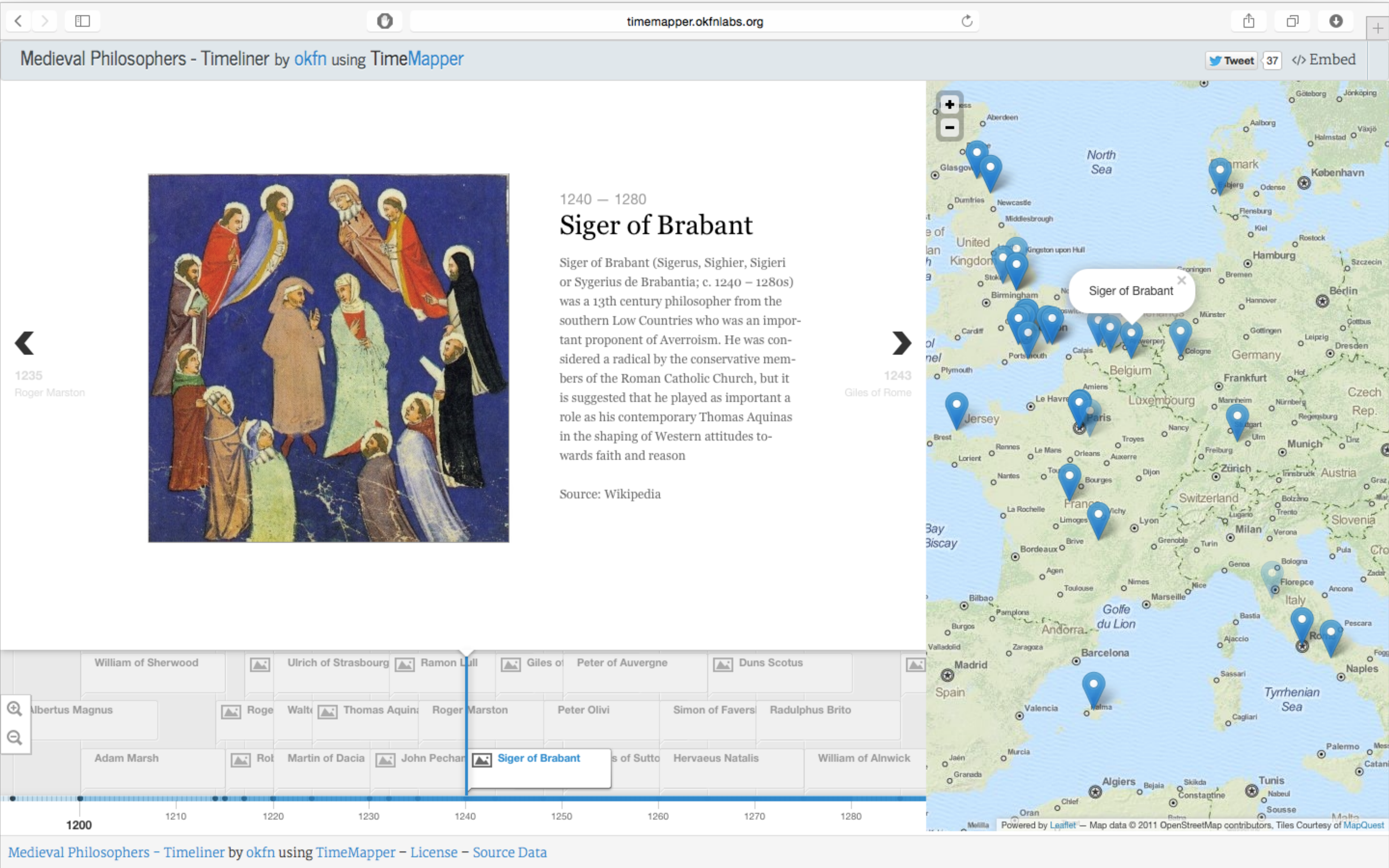
- 12–14 can also occur as a block prior to the 8–11 block;
- 23–24 and 25–26 can also occur prior to 19;
- 17 can occur between 25 and 26.
- Moves can end on functions other than 31 (e.g., 14, 19, 20, 22).



Moves and Other Elements

- A **move** is defined as any development from *Villainy* or *Lack* until a terminal function (which may be *Wedding*, or any allowable prior function).
- Relationships between moves:
 - Moves can follow each other sequentially;
 - One move can be embedded within another (e.g., the first part of move 1 is followed by move 2, which is then followed by the second part of move 1);
 - One move can split into two separate moves, which are then resolved sequentially;
 - Two moves can have a common ending.
- Other elements:
 - Connectives
 - Motivations
 - Branching items
 - Function results: positive, negative, negative with punishment
 - Treblings

Telling Stories of Time in Space



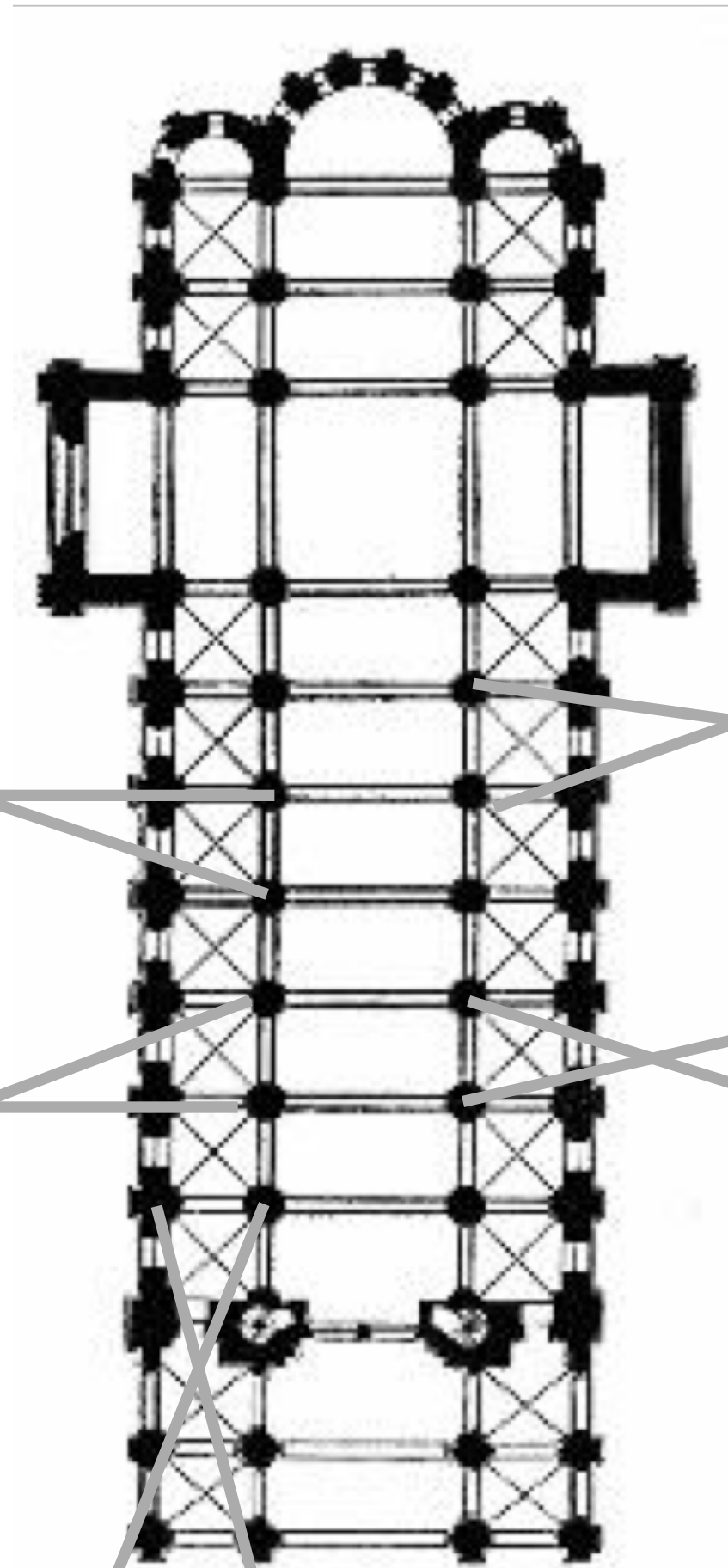
Cathédrale St-Lazare (Autun)



Gislebertus - *Last Judgement*



Nonlinear Narrative Geometries: “Look Behind You”



Daniel in the Lions' Den

Christ Appears to Mary Magdalen

Liberation of Saint Peter

The Prisoners in the Furnace

Sacrifice of Isaac

Nativity of the Infant Jesus

Samson Destroying the Temple

Noah's Ark

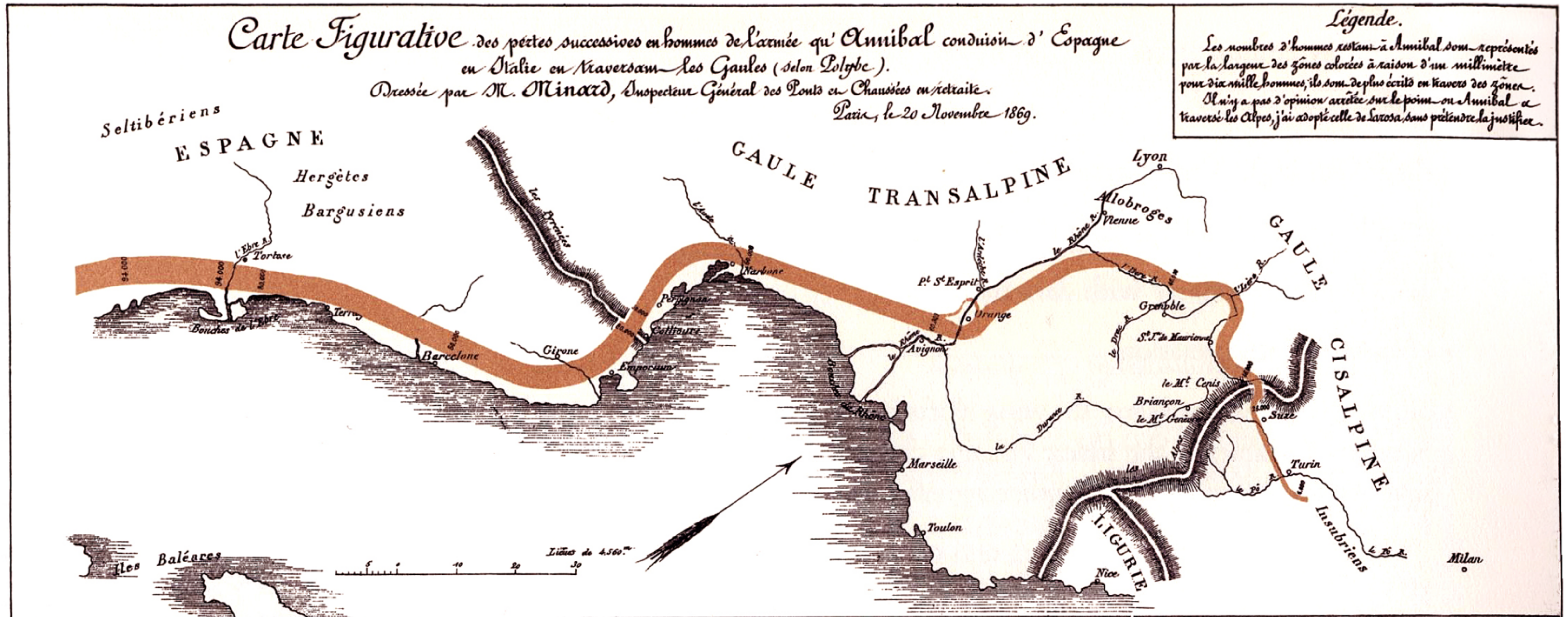
Fall of Simon the Magician

Ascension of Simon the Magician

Daniel/Christ Appears Prisoners/St. Peter



Charles Minard: *Hannibal's Army*



Robert Smithson – *Spiral Jetty*

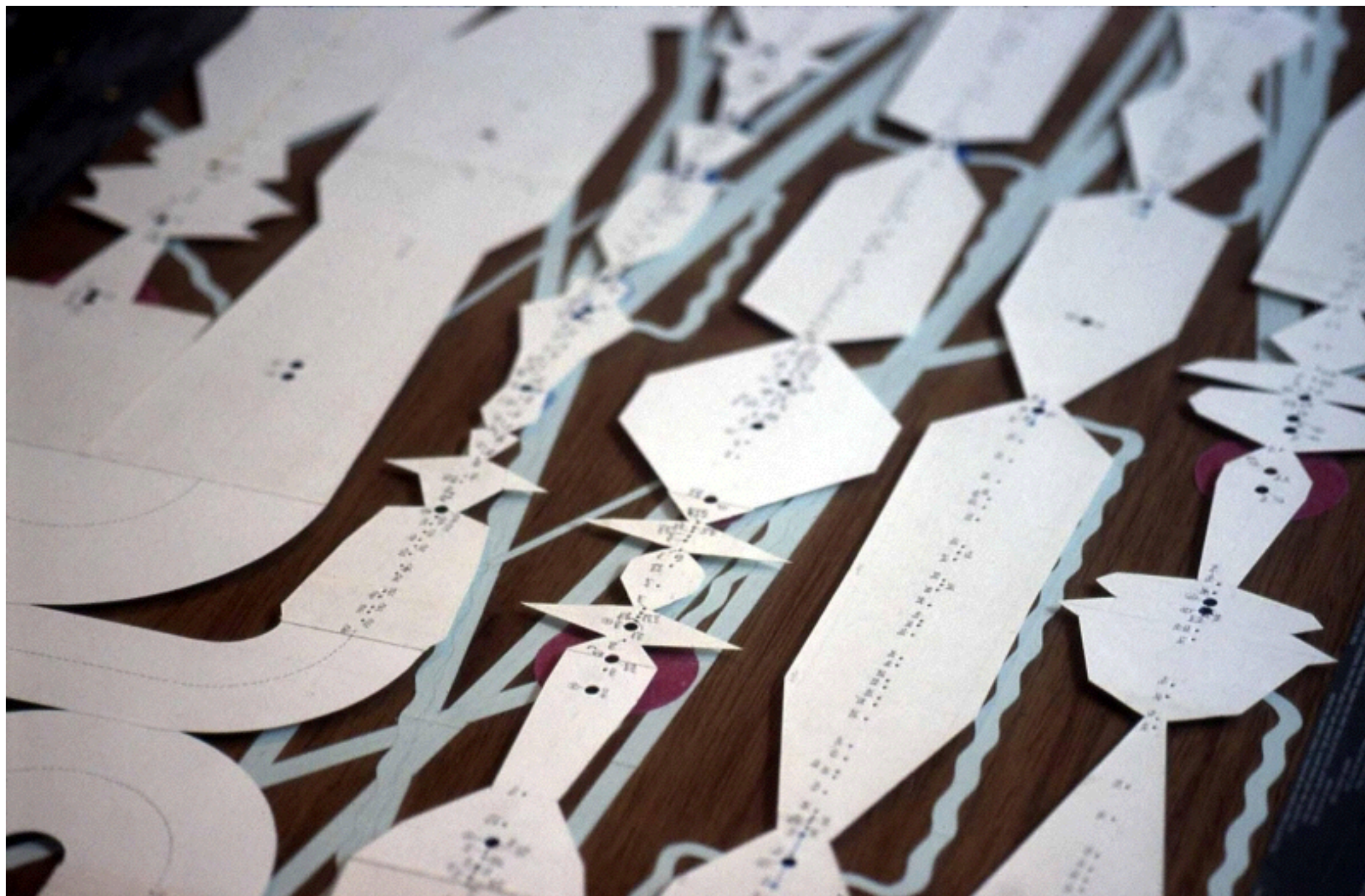



Through this glaciated silence the white walls of the apartment fixed arbitrary planes. She began to dress, aware of his eyes staring at her body. Then she realised that she was standing in his way. [...]

Standing in front of him as she dressed, Karen Novotny's body seemed as smooth and annealed as those frozen planes. Yet a displacement of time would drain away the soft interstices, leaving walls like scraped clinkers.

J.G. Ballard, *You: Coma: Marilyn Monroe*

Christoph Fink – *Atlas of Movements, Movement #52 (The Frankfurt Walks)*






Twine is an open-source tool for telling interactive, nonlinear stories.

You don't need to write any code to create a simple story with Twine, but you can extend your stories with variables, conditional logic, images, CSS, and JavaScript when you're ready.

Twine publishes directly to HTML, so you can post your work nearly anywhere. Anything you create with it is completely free to use any way you like, including for commercial purposes.

Twine was originally created by [Chris Klimas](#) in 2009 and is now maintained by a whole bunch of people at [several different repositories](#).




Download 2.0.6


For [Windows \(32-bit\)](#), [OS X](#), and [Linux \(32-bit\)](#)

[Use it online](#)

Version 1.4.2 for [Windows](#) and [OS X](#) is also available.




Do you love Twine?
[Help it grow with a donation!](#)



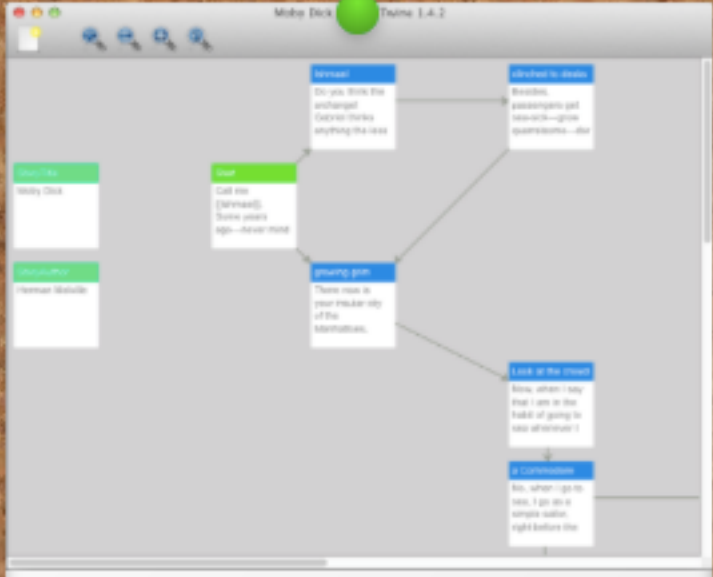
Wiki

tutorials, documentation

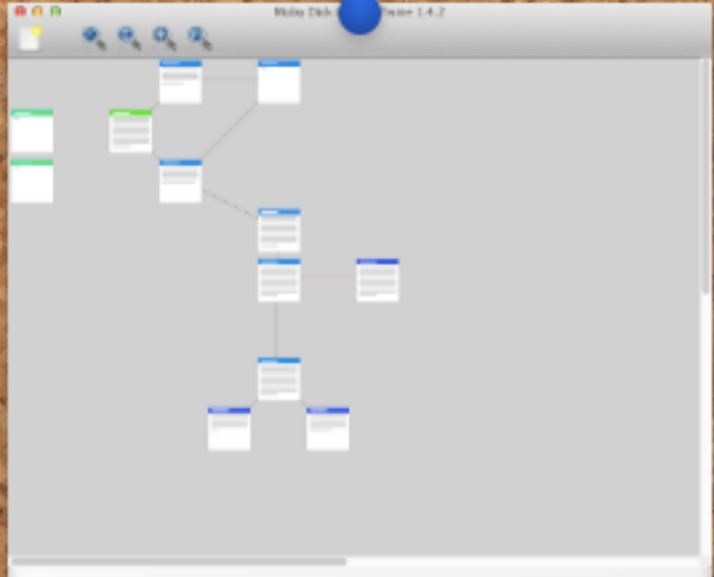


Forum

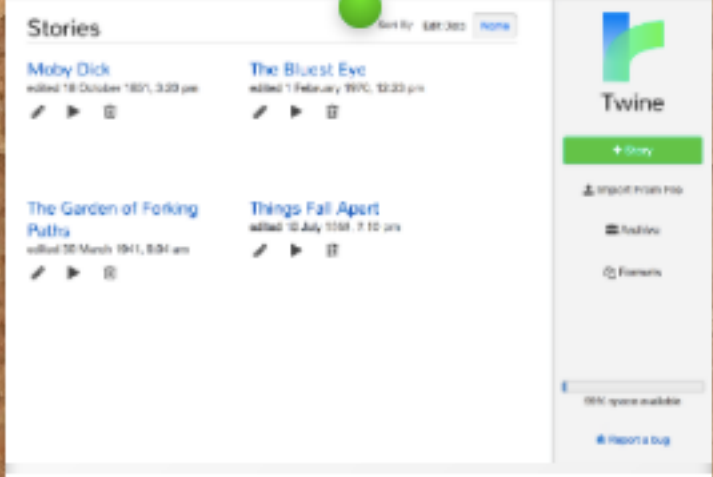
get help, share your work




Editing a story in Twine 1.4.



A bird's-eye view of a story map in Twine 1.4.



The story list in Twine 2.0.



Editing a story in Twine 2.0.

Twine has been used to create hundreds of works. Here's a sample:

Hippasus



Blog: <http://hippasus.com/blog/>

Email: rubenrp@hippasus.com

Twitter: @rubenrp

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