Marginalia:

Web Annotation for Engaged Teaching and Learning

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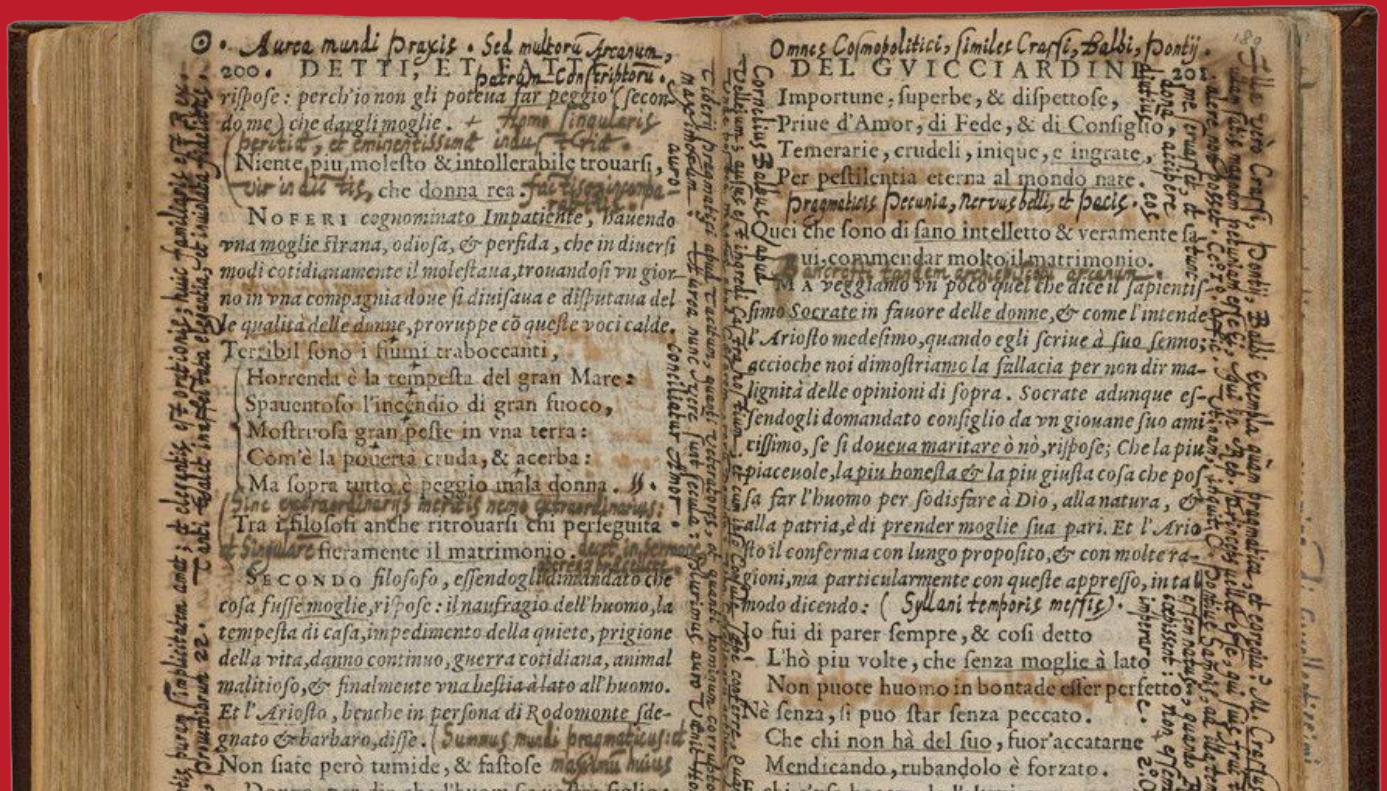
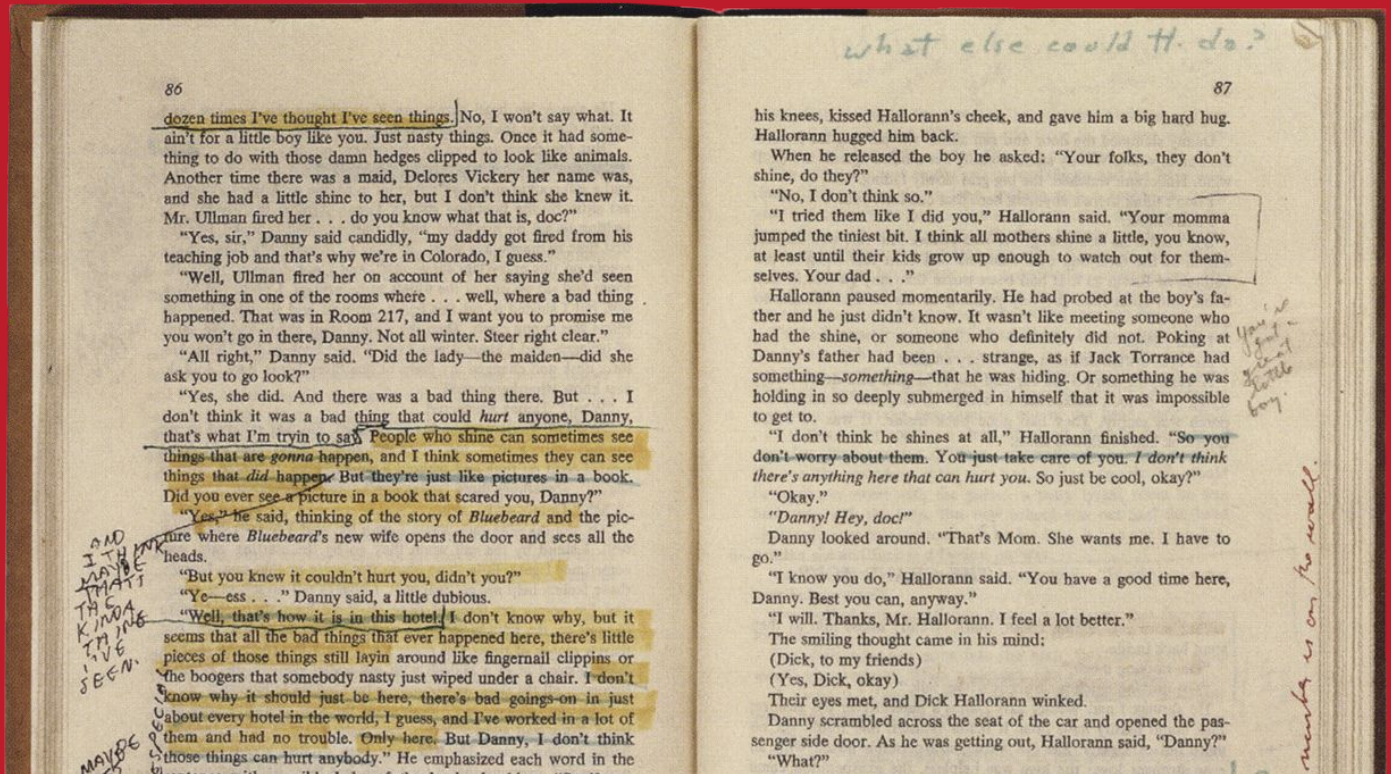
Annotation: An Age-Old Tradition



Annotation: A Proven Learning Tool



86

dozen times I've thought I've seen things. No, I won't say what. It ain't for a little boy like you. Just nasty things. Once it had something to do with those damn hedges clipped to look like animals. Another time there was a maid, Delores Vickery her name was, and she had a little shine to her, but I don't think she knew it. Mr. Ullman fired her . . . do you know what that is, doc?"

"Yes, sir," Danny said candidly, "my daddy got fired from his teaching job and that's why we're in Colorado, I guess."

"Well, Ullman fired her on account of her saying she'd seen something in one of the rooms where . . . well, where a bad thing happened. That was in Room 217, and I want you to promise me you won't go in there, Danny. Not all winter. Steer right clear."

"All right," Danny said. "Did the lady—the maiden—did she ask you to go look?"

"Yes, she did. And there was a bad thing there. But . . . I don't think it was a bad thing that could *hurt* anyone, Danny, that's what I'm tryin to say. People who shine can sometimes see things that are *gonna* happen, and I think sometimes they can see things that *did* happen. But they're just like pictures in a book. Did you ever see a picture in a book that scared you, Danny?"

"Yes," he said, thinking of the story of *Bluebeard* and the picture where *Bluebeard*'s new wife opens the door and sees all the heads.

"But you knew it couldn't hurt you, didn't you?"

"Ye—ess . . ." Danny said, a little dubious.

"Well, that's how it is in this hotel. I don't know why, but it seems that all the bad things that ever happened here, there's little pieces of those things still layin around like fingernail clippins or the boogers that somebody nasty just wiped under a chair. I don't know why it should just be here, there's bad goings-on in just about every hotel in the world, I guess, and I've worked in a lot of them and had no trouble. Only here. But Danny, I don't think those things can hurt anybody." He emphasized each word in the

87

his knees, kissed Hallorann's cheek, and gave him a big hard hug. Hallorann hugged him back.

When he released the boy he asked: "Your folks, they don't shine, do they?"

"No, I don't think so."

"I tried them like I did you," Hallorann said. "Your momma jumped the tiniest bit. I think all mothers shine a little, you know, at least until their kids grow up enough to watch out for themselves. Your dad . . ."

Hallorann paused momentarily. He had probed at the boy's father and he just didn't know. It wasn't like meeting someone who had the shine, or someone who definitely did not. Poking at Danny's father had been . . . strange, as if Jack Torrance had something—*something*—that he was hiding. Or something he was holding in so deeply submerged in himself that it was impossible to get to.

"I don't think he shines at all," Hallorann finished. "So you don't worry about them. You just take care of you. *I don't think there's anything here that can hurt you.* So just be cool, okay?"

"Okay."

"Danny! Hey, doc!"

Danny looked around. "That's Mom. She wants me. I have to go."

"I know you do," Hallorann said. "You have a good time here, Danny. Best you can, anyway."

"I will. Thanks, Mr. Hallorann. I feel a lot better."

The smiling thought came in his mind:

(Dick, to my friends)

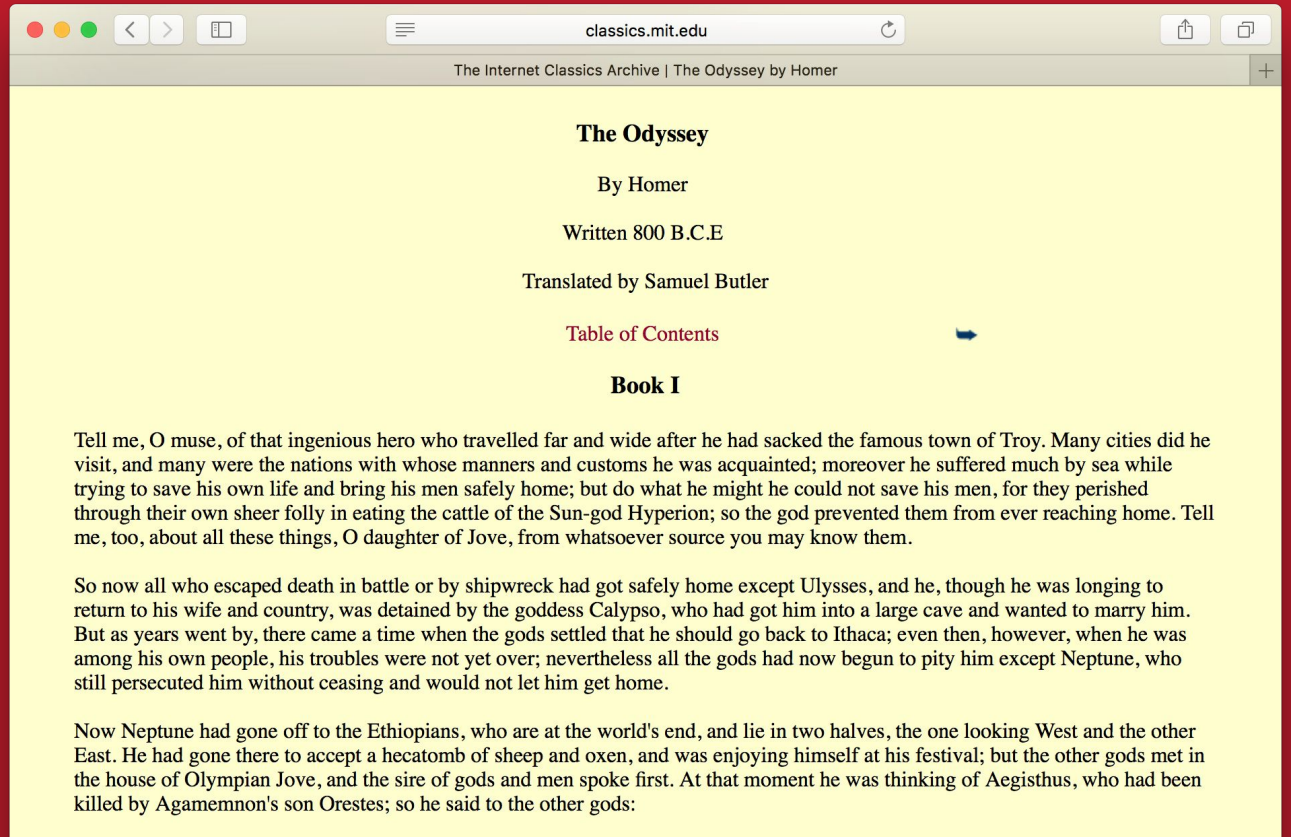
(Yes, Dick, okay)

Their eyes met, and Dick Hallorann winked.

Danny scrambled across the seat of the car and opened the passenger side door. As he was getting out, Hallorann said, "Danny?"

"What?"

Online reading poses problems



The Odyssey

By Homer

Written 800 B.C.E

Translated by Samuel Butler

Table of Contents

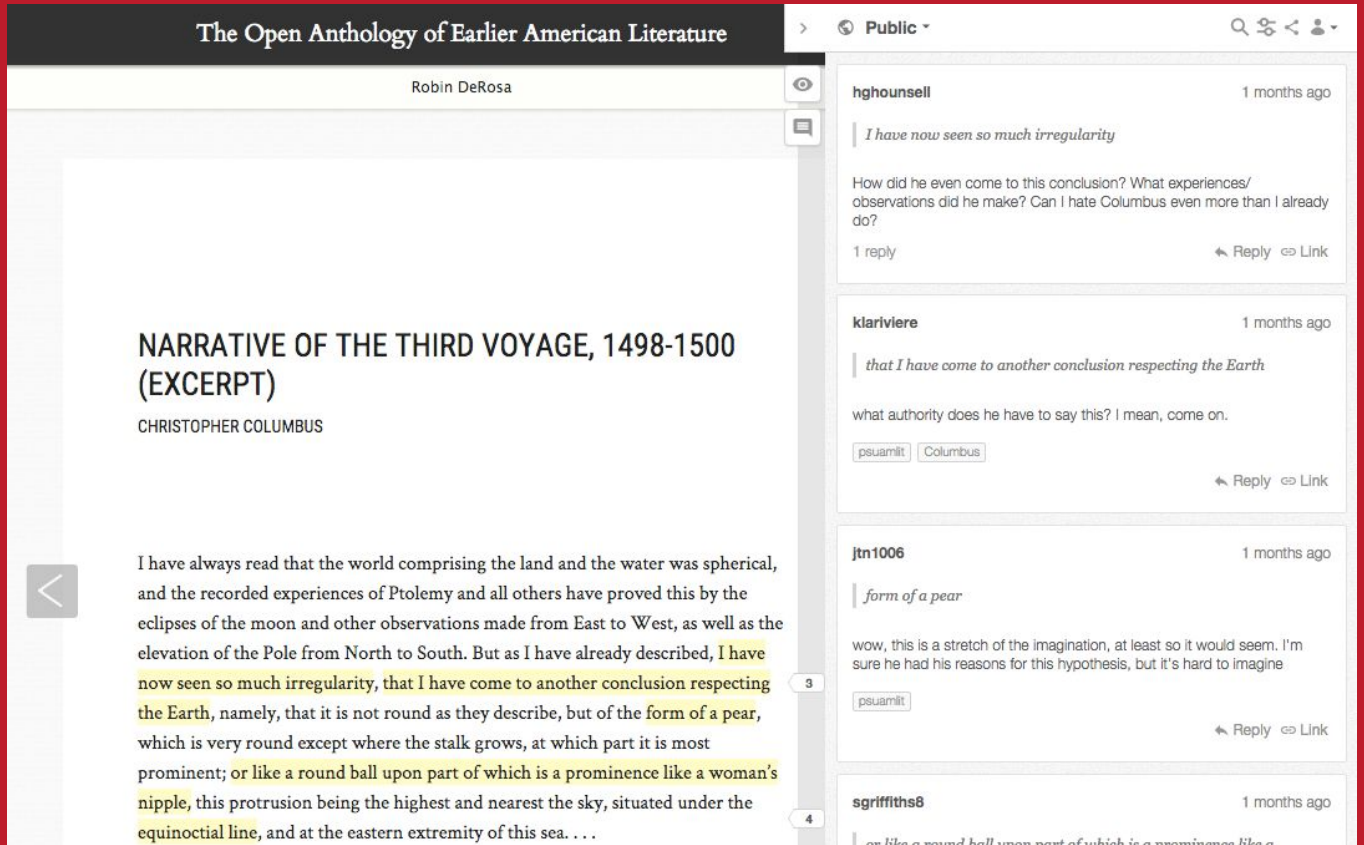
Book I

Tell me, O muse, of that ingenious hero who travelled far and wide after he had sacked the famous town of Troy. Many cities did he visit, and many were the nations with whose manners and customs he was acquainted; moreover he suffered much by sea while trying to save his own life and bring his men safely home; but do what he might he could not save his men, for they perished through their own sheer folly in eating the cattle of the Sun-god Hyperion; so the god prevented them from ever reaching home. Tell me, too, about all these things, O daughter of Jove, from whatsoever source you may know them.

So now all who escaped death in battle or by shipwreck had got safely home except Ulysses, and he, though he was longing to return to his wife and country, was detained by the goddess Calypso, who had got him into a large cave and wanted to marry him. But as years went by, there came a time when the gods settled that he should go back to Ithaca; even then, however, when he was among his own people, his troubles were not yet over; nevertheless all the gods had now begun to pity him except Neptune, who still persecuted him without ceasing and would not let him get home.

Now Neptune had gone off to the Ethiopians, who are at the world's end, and lie in two halves, the one looking West and the other East. He had gone there to accept a hecatomb of sheep and oxen, and was enjoying himself at his festival; but the other gods met in the house of Olympian Jove, and the sire of gods and men spoke first. At that moment he was thinking of Aegisthus, who had been killed by Agamemnon's son Orestes; so he said to the other gods:

Social annotation helps solve them



Outline

Act 1: Annotation then & now

Act 2: Web annotation in Teaching & Learning

Act 3: Open Source + Open Web

Act 4: Annotation in the classroom

Act 5: Annotation activity

1. Annotation Then & Now

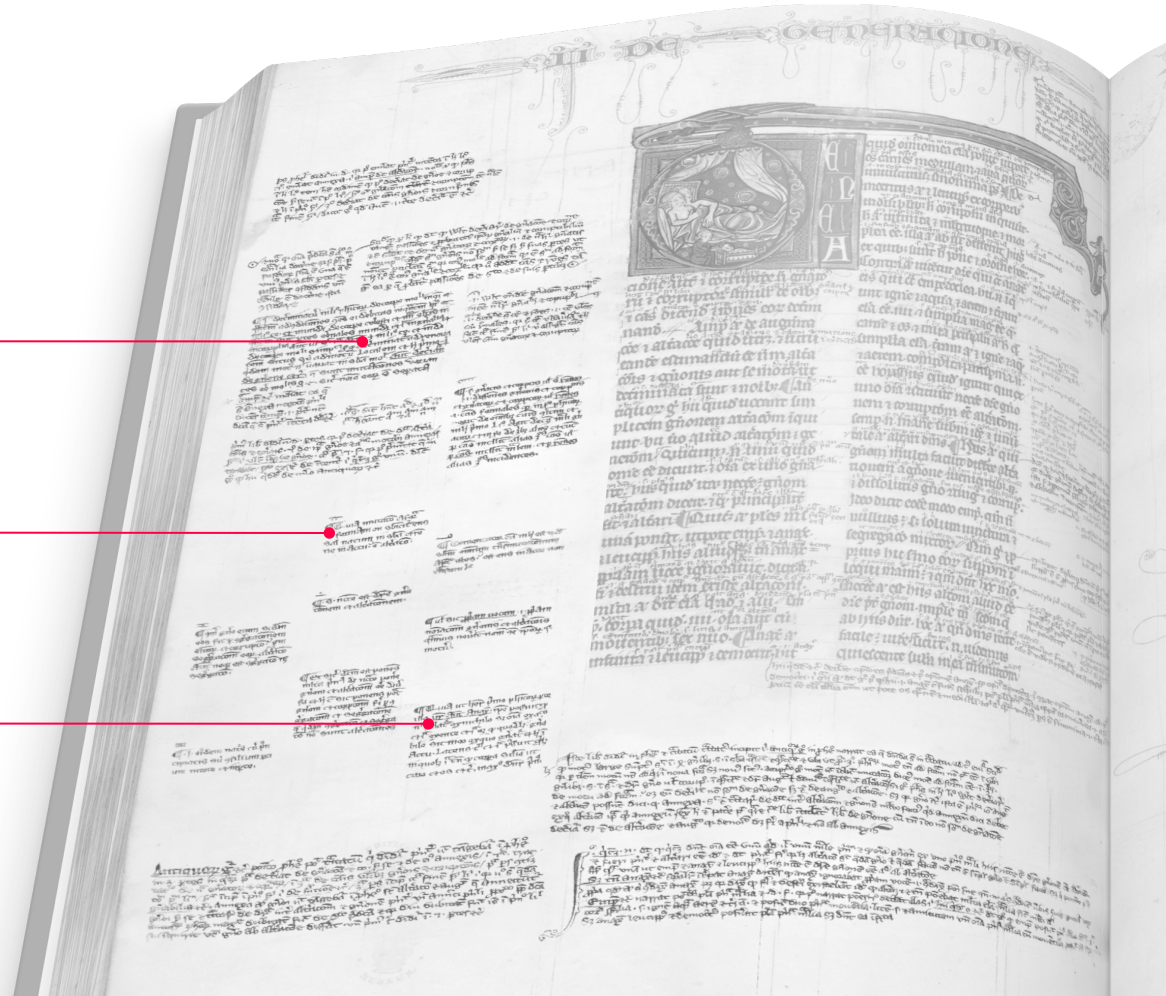
Ancient Ed-Tech

The Annotation

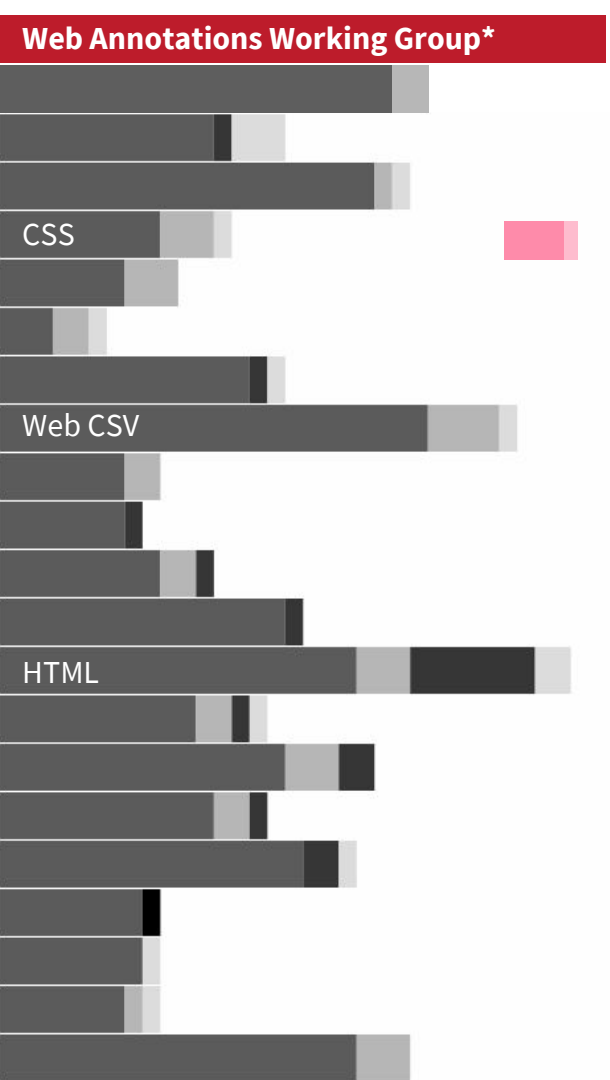
In context, In layers

Focused conversations

Additive to material



"Aristotle, Libri Naturales", 13th Century
British Library



Web Standard

On Feb 23, 2017 the W3C formally standardized Web Annotations

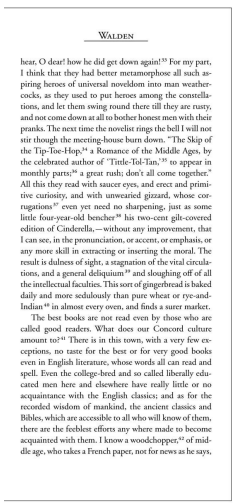
w3.org/annotation

38 Active Working Group Members

*Formal votes of support in October 2014

Annotation in the era of print

READ	WRITE	METHOD	USE CASE
ALL	SOME	PUBLISHER LAYER	Midrash, commentaries, critical editions, other curated supplements to primary text
ONE	ONE	PRIVATE ANNOTATION	Personal marginalia, notetaking



WALDEN

hear, O dear! how he did get down again![35] For my part, I think that they had better metamorphose all such aspiring heroes of universal noveldom into man weathercocks, as they used to put heroes among the constellations, and let them swing round there till they are rusty, and not come down at all to bother honest men with their pranks. The next time the novelist rings the bell I will not stir though the meeting-house burn down. "The Skip of the Tip-Toe-Hop,[36] a Romance of the Middle Ages, by the celebrated author of "Tittle-Tol-Tan,"[37] to appear in monthly parts;[38] a great rush; don't all come together." All this they read with saucer eyes, and erect and primitive curiosity, and with unwearied gizzard, whose corrugations[39] even yet need no sharpening, just as some little four-year-old bencher[40] his two-cent gilt-covered edition of Cinderella,—without any improvement, that I can see, in the pronunciation, or accent, or emphasis, or any more skill in extracting or inserting the moral. The result is dulness of sight, a stagnation of the vital circulations, and a general deliquium[41] and sloughing off of all the intellectual faculties. This sort of gingerbread is baked daily and more sedulously than pure wheat or rye-and-Indian[42] in almost every oven, and finds a surer market.

The best books are not read even by those who are called good readers. What does our Concord culture amount to?[43] There is in this town, with a very few exceptions, no taste for the best or for very good books even in English literature, whose words all can read and spell. Even the college-bred and so called liberally educated men here and elsewhere have really little or no acquaintance with the English classics; and as for the recorded wisdom of mankind, the ancient classics and Bibles, which are accessible to all who will know of them, there are the feeblest efforts any where made to become acquainted with them. I know a woodchopper,[44] of middle age, who takes a French paper, not for news as he says,

Ages of the World to Nearly the Present Time, also, Extensive Scripture Lessons by "a friend to general improvement" (New York, 1822).

29 Reading is a town in Massachusetts, although Thoreau may have had in mind Reading, England.

30 Possible allusion to folklore as represented in Sir Thomas Browne's "That the Ostrich Digesteth Iron" in *Pseudodoxia Epidemica, or, Enquiries into Very Many Received Tenents and Commonly Presumed Truths.*

31 Zebulun (or Zebulon), in the Bible, was the sixth son of Jacob and Leah (Genesis 30:19–20). Sephronia is a possible variation on Sophronia, a character in the 16th-century poem *Jerusalem Delivered* by Tasso (1544–1595). Both names were used in the 18th and 19th centuries.

32 Allusion to Shakespeare's *A Midsummer Night's Dream* 1.1.134: "The course of true love never did run smooth."

33 Unidentified allusion.

34 Possible allusion to James Fenimore Cooper's (1789–1851) novel *The Wept of Wish-ton-Wish* (1829), although it was about King Philip's War, not the Middle Ages.

35 In "Walking" Thoreau referred to "the child's *rigmarole*, Ivery wiery ichery van, tittle-tol-tan" [W 5:236].

36 Publishing a work serially in parts was a common 19th-century practice.

37 Seed-eating birds have muscular corrugated walls in their gizzards, to help with digestion.

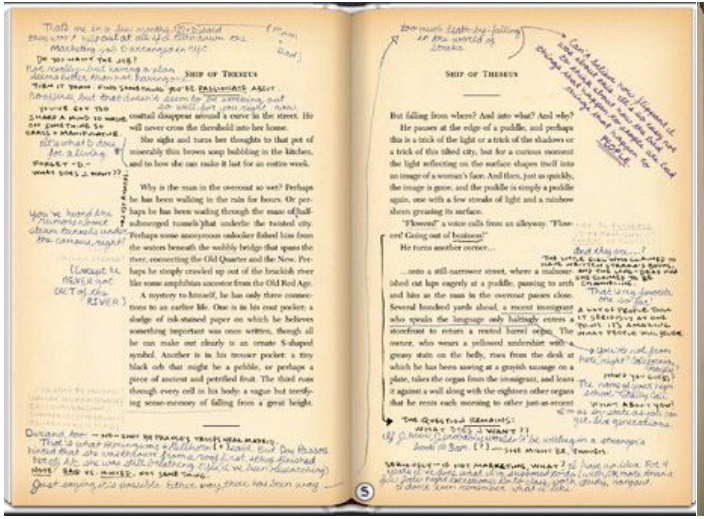
38 Refers to the form, or bench, mentioned above.

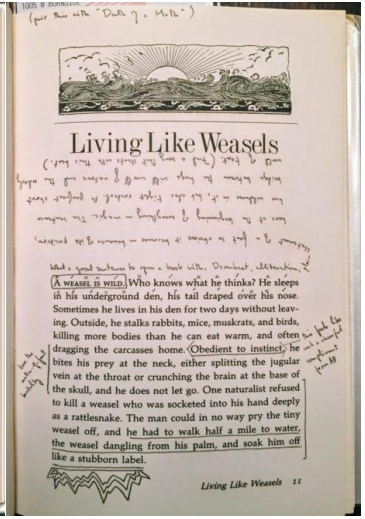
39 Lack of vitality.

40 Dark bread made of rye and Indian (maize or corn) meal.

41 By common standards, Concord's culture amounted to much—most of the town's leading men were Harvard graduates, and the Lyceum had begun in 1829—but Thoreau is looking for a more transcendental perception.

42 Alek Therien, who is described more fully in the "Visitors" chapter.





Living Like Weasels

A WEASEL IS WILD. Who knows what he thinks? He sleeps in his underground den, his tail draped over his nose. Sometimes he lives in his den for two days without leaving. Outside, he stalks rabbits, mice, muskrats, and birds, killing more bodies than he can eat warm, and often dragging the carcasses home. Obedient to instinct, he bites his prey at the neck, either splitting the jugular vein at the throat or crunching the brain at the base of the skull, and he does not let go. One naturalist refused to kill a weasel who was socketed into his hand deeply as a rattlesnake. The man could in no way pry the tiny weasel off, and he had to walk half a mile to water, the weasel dangling from his palm, and soak him off like a stubborn label.

Living Like Weasels 11

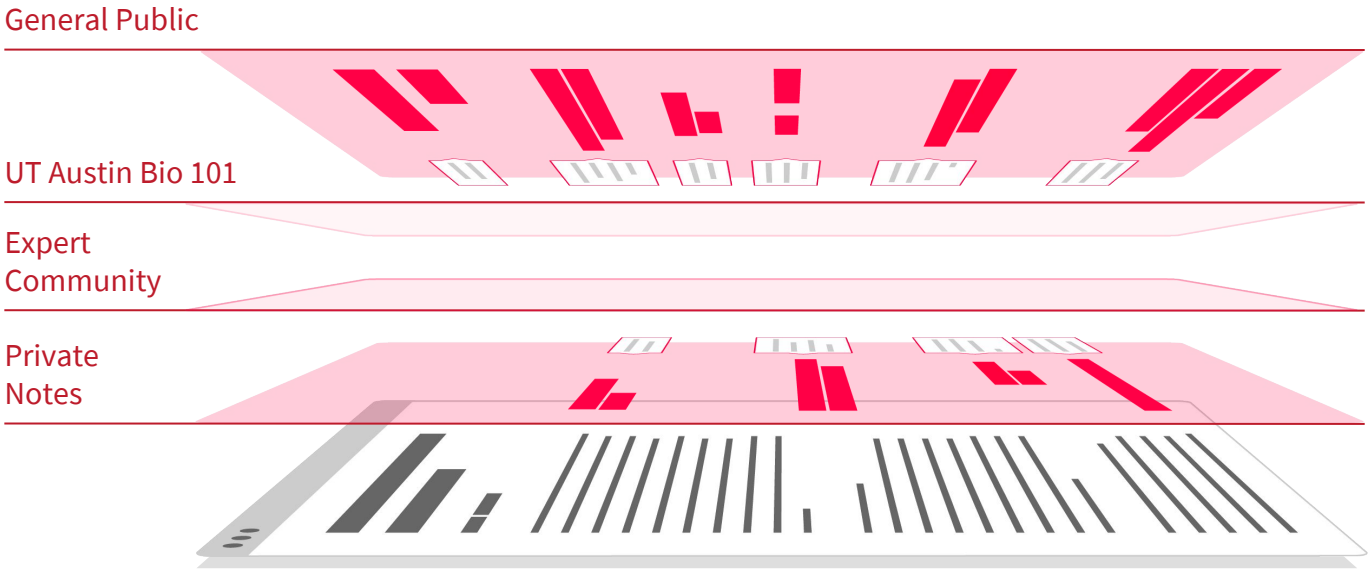
Annotation on the open web

READ	WRITE	METHOD	USE CASES
ALL	**ALL**	**PUBLIC ANNOTATION**	**Open learning & social conversation**
ALL	SOME	PUBLISHER LAYER	Midrash, commentaries, critical editions, other curated supplements to primary texts
SOME	**SOME**	**PRIVATE ANNOTATION GROUP**	**Educational classes, editorial review, affinity groups**
ONE	ONE	PRIVATE PERSONAL ANNOTATION	Personal marginalia, notetaking

Open web annotation doesn't just **enable new kinds of annotation**, it makes each of these methods possible **on the same text at the same time.**

Layers of Annotation

Built on Open Standards



Any Website, Article, eBook, Document, Multimedia

2. Web Annotation for Teaching & Learning

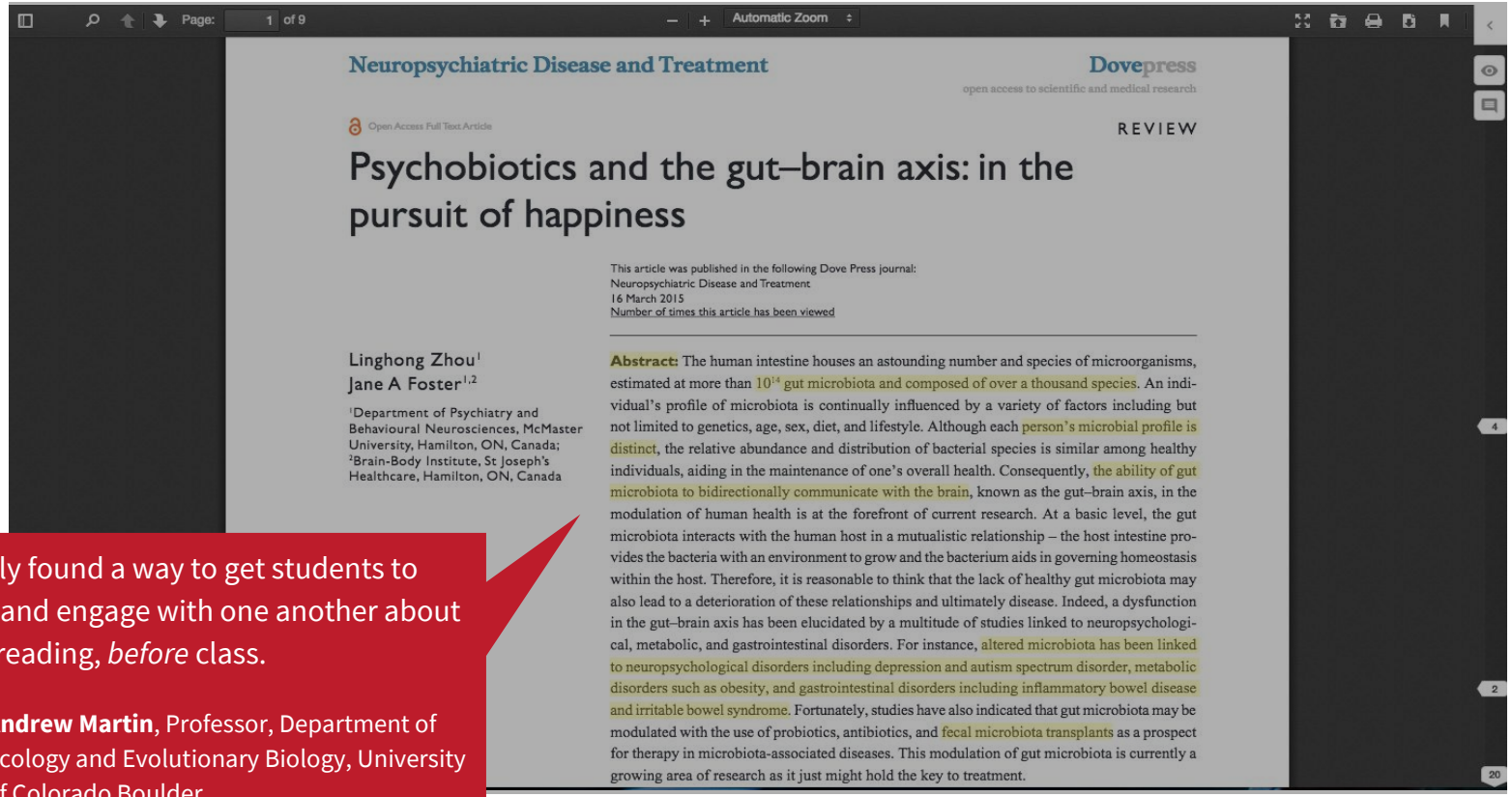
We have all seized the white perimeter as our own
and reached for a pen if only to show
we did not just laze in an armchair turning pages;
we pressed a thought into the wayside,
planted an impression along the verge.

– **Billy Collins**, *“Marginalia”*

Online, a book can be a gathering place, a shared space where readers record their reactions and conversations. Those interactions ultimately become part of the book too, a kind of amplified marginalia.

– **Jennifer Howard**, "*With 'Social Reading,' Books Become Places to Meet*" *(2012)*

Open web annotation makes reading visible



I finally found a way to get students to read, and engage with one another about their reading, *before* class.

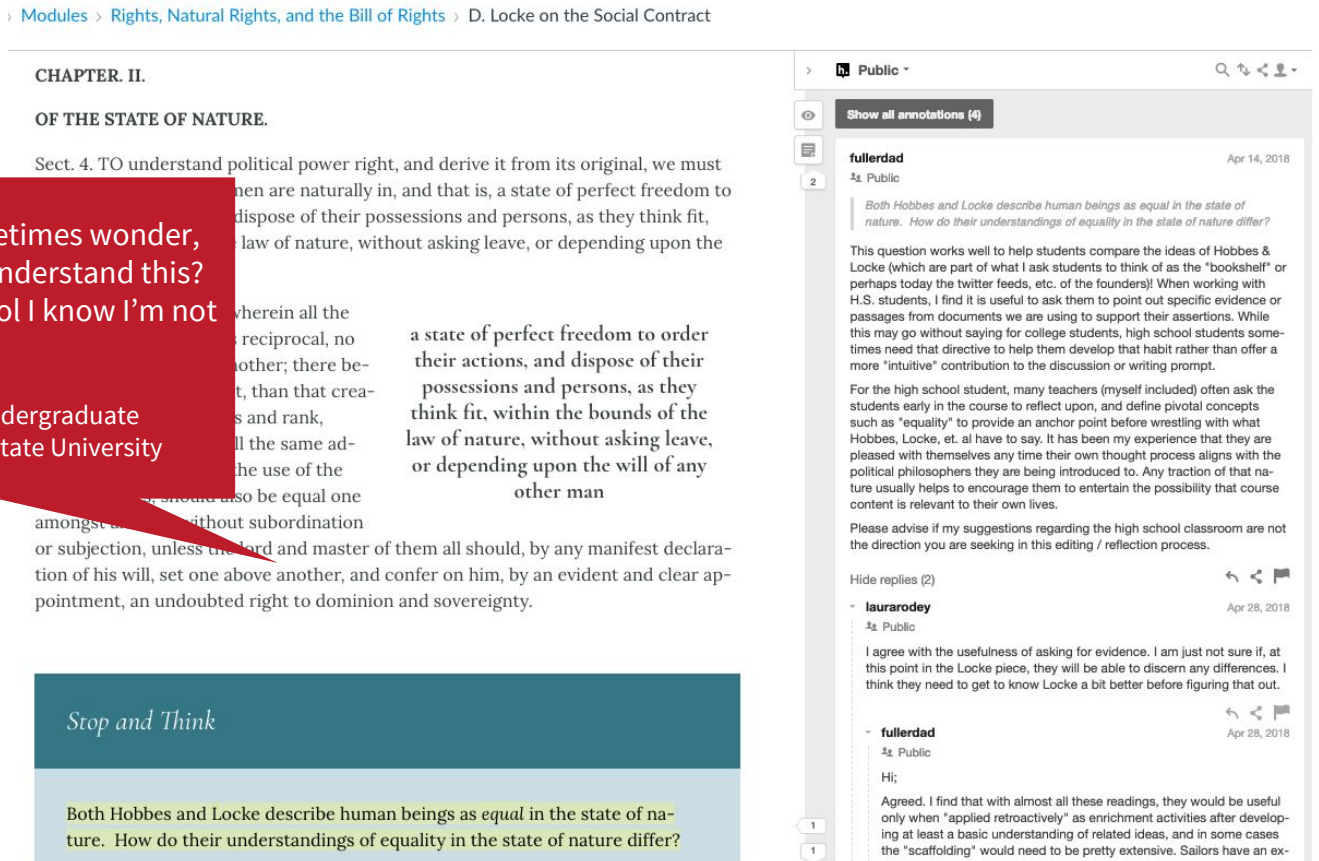
— **Andrew Martin**, Professor, Department of Ecology and Evolutionary Biology, University of Colorado Boulder

Open web annotation makes reading active

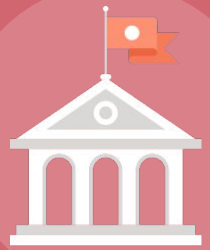
Open web annotation makes reading social

When I'm reading I sometimes wonder, 'Does anyone actually understand this? Am I crazy?' With this tool I know I'm not alone.

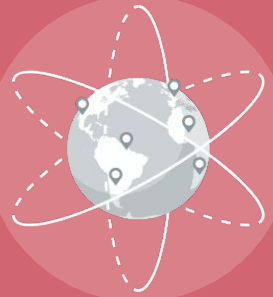
— **Shannon Griffiths**, undergraduate student at Plymouth State University



Part of a broader conversation

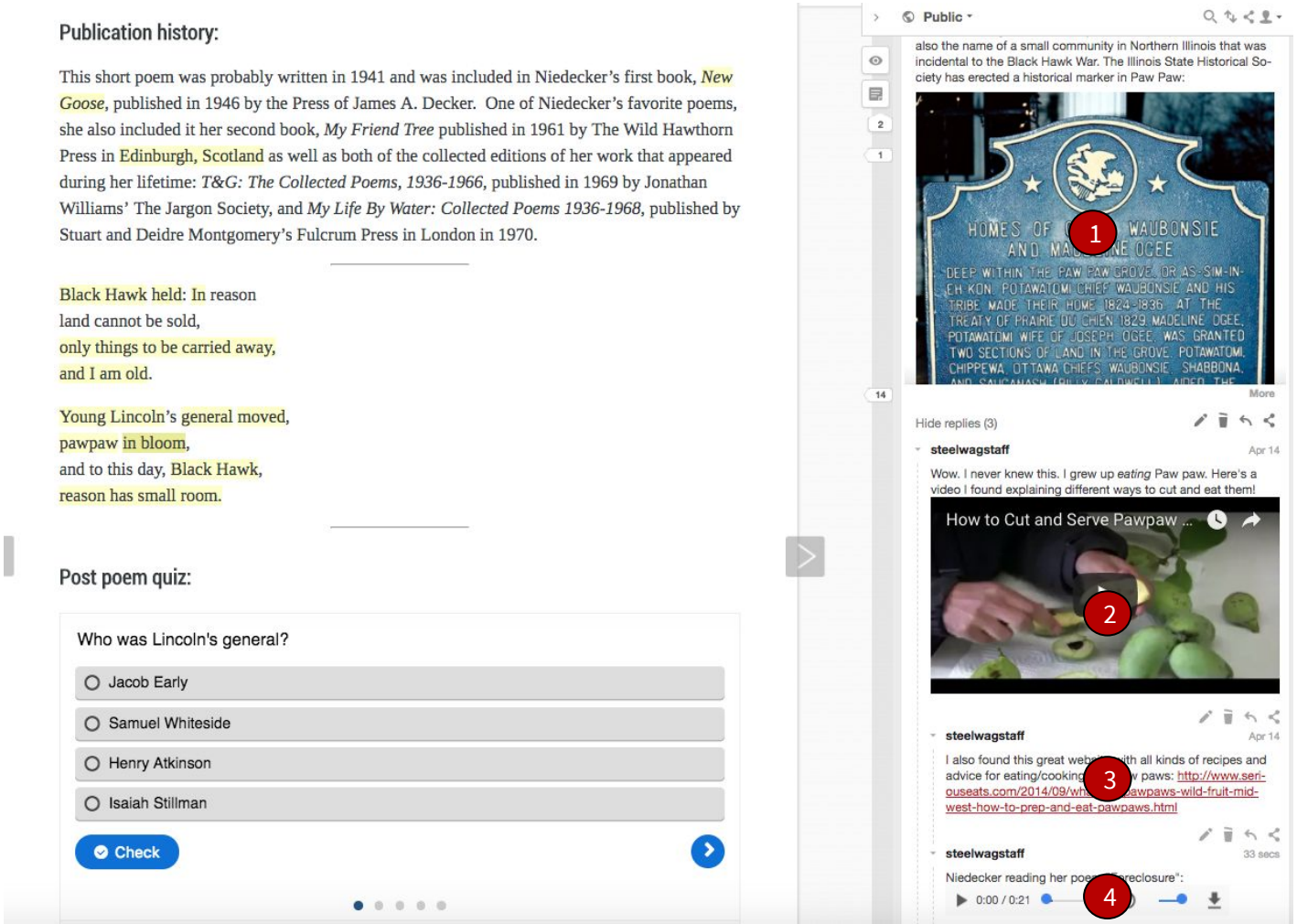


Empowering students to act as **knowledge producers** within and **beyond the classroom**



Empowering substantive **intellectual conversation** and **civic participation** across the web

Open web annotation can be **more** than **text on text**



At left: Pressbooks page with rich annotations.

Open web annotations can theoretically contain any browser-supported web element. **Examples:**

1. Images
2. Embedded video [iframe element]
3. External links
4. Embedded audio [HTML5 audio element]

For more: see Steel's writing about adding interactivity to web annotations or his talk at iAnnotate 2018

3. Open Source + Open Web

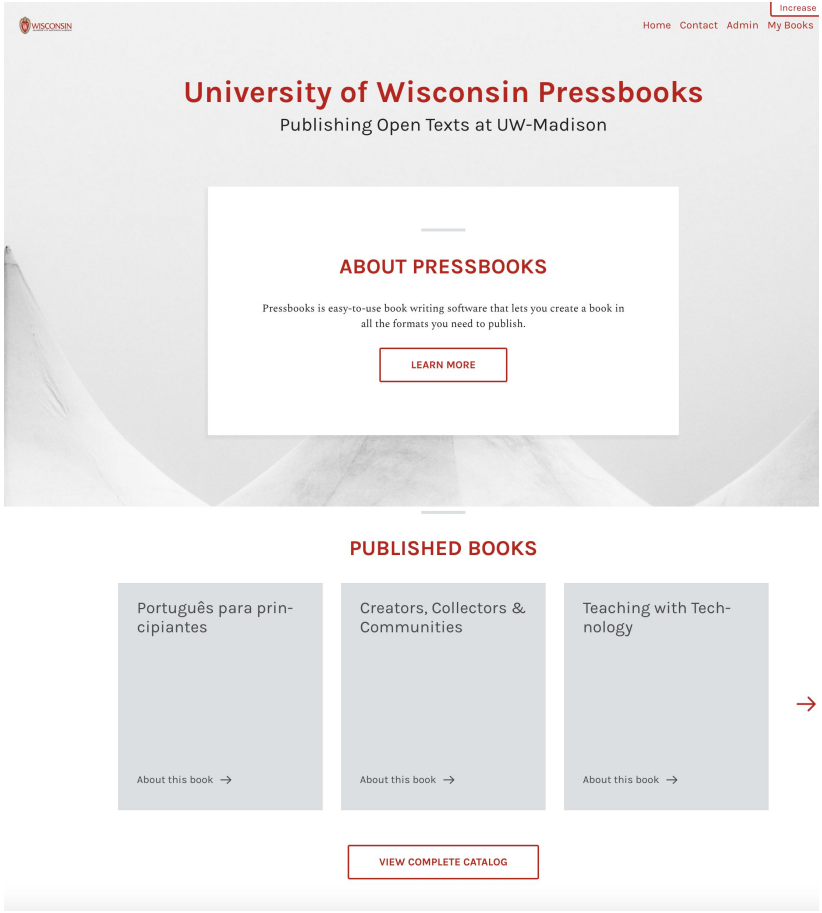
Pressbooks

Pressbooks is “an online book publishing platform that makes it easy to generate clean, well-formatted books in multiple outputs. Pressbooks is built on WordPress and is open source.”

— Hugh McGuire, *Pressbooks founder*

Pressbooks is a Network

- Each PB instance is a centrally-managed **network** (a WordPress multisite) which can contain an enormous number of separate “books.”
- Each “book” has a unique web address. Books on the same network can have different structures, appearances, copyright licenses, & permissions.

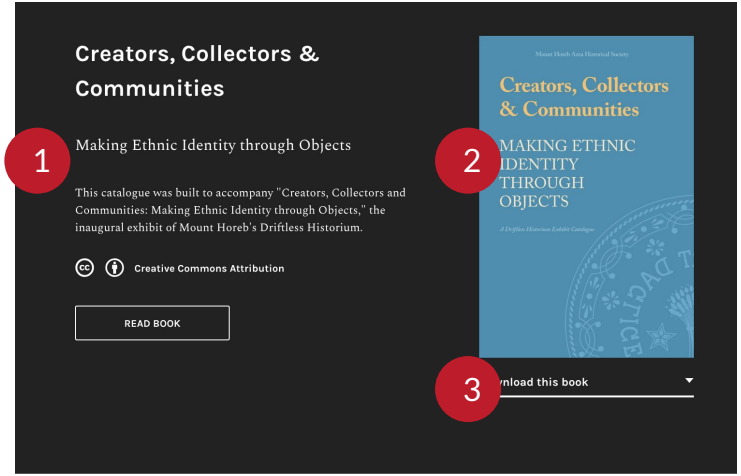


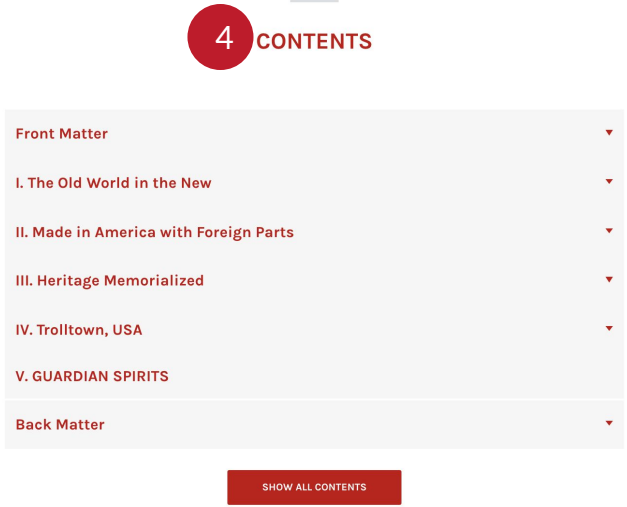
UW-Madison’s Pressbooks Instance

What is a Pressbook?

Published books exist as standalone web texts featuring:

1. Title & descriptive information
2. Cover image
3. Download options
4. Table of contents
5. Additional licensing information & metadata [not shown]





The Hypothesis Project

Non-profit

The Web works because, through standards, everyone can build on it—and no one owns it. The conversation over the web should be the same, and the organization behind it should be aligned with that outcome.

THE ANDREW W. MELLON FOUNDATION

OMIDYAR NETWORK

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Peg Fowler
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Katelyn Lemay
Support Engineer

Heather Staines
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Jon Udell
Director, Integrations

Sheetal Umesh Kumar
Developer

Arti Walker-Peddakotla
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Dan Whaley
Founder/CEO

Dave Wolfe
Designer/Developer

Our Team

100% dedicated to open annotation

1. Technology
2. Services
3. Adoption
4. Integrations
5. Partnerships
6. Use cases

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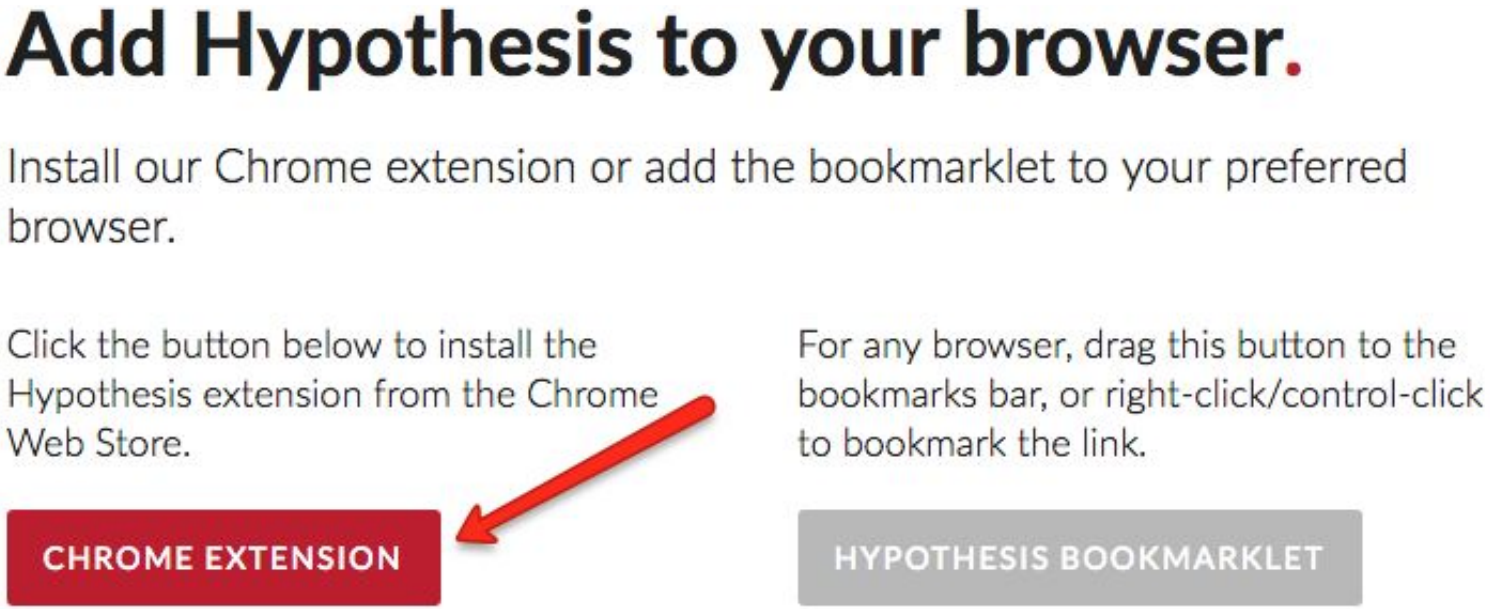
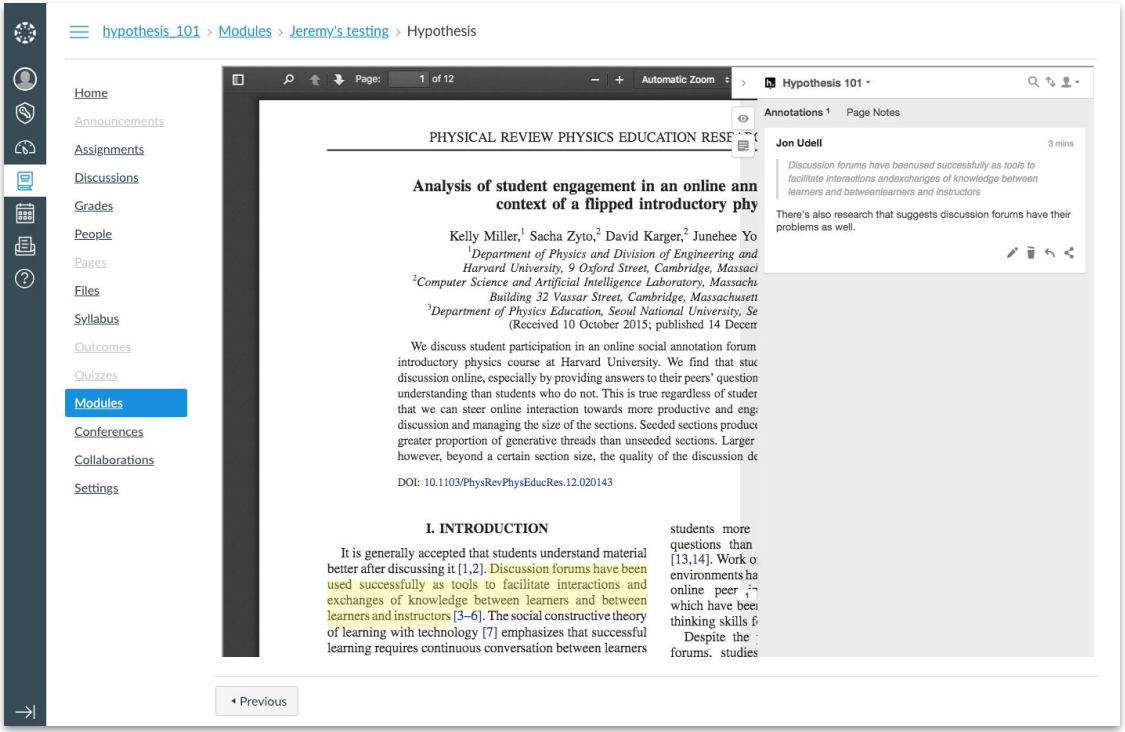
Visit http://hypothes.is/signup and confirm account via email.

Browser Extensions



Chrome extension and a bookmarklet (for other browsers)

LMS App with Single Sign On



Blackboard learn

brightspace by D2L

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moodle

Sakai

Configure Hypothesis to appear on readings

Select text to annotate

Select text to annotate.
Add tags and post publicly or save privately.

Reply to or share any annotation.
Link to notes or whole pages.

Annotate together in groups.
Collaborate privately with others.

Search your notes.
Explore all public annotations and profiles.

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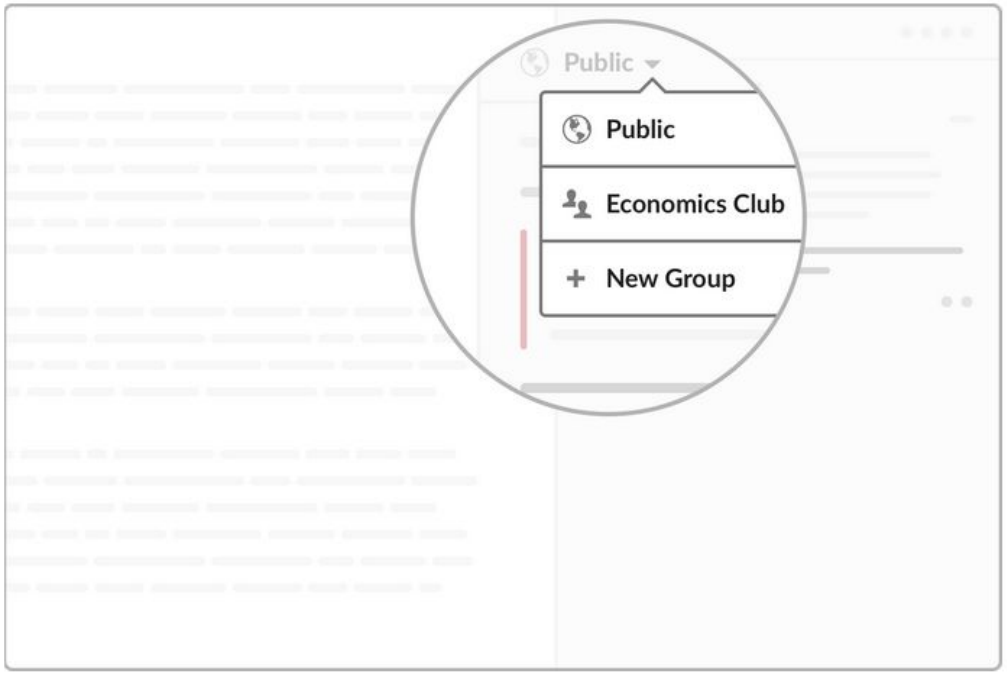

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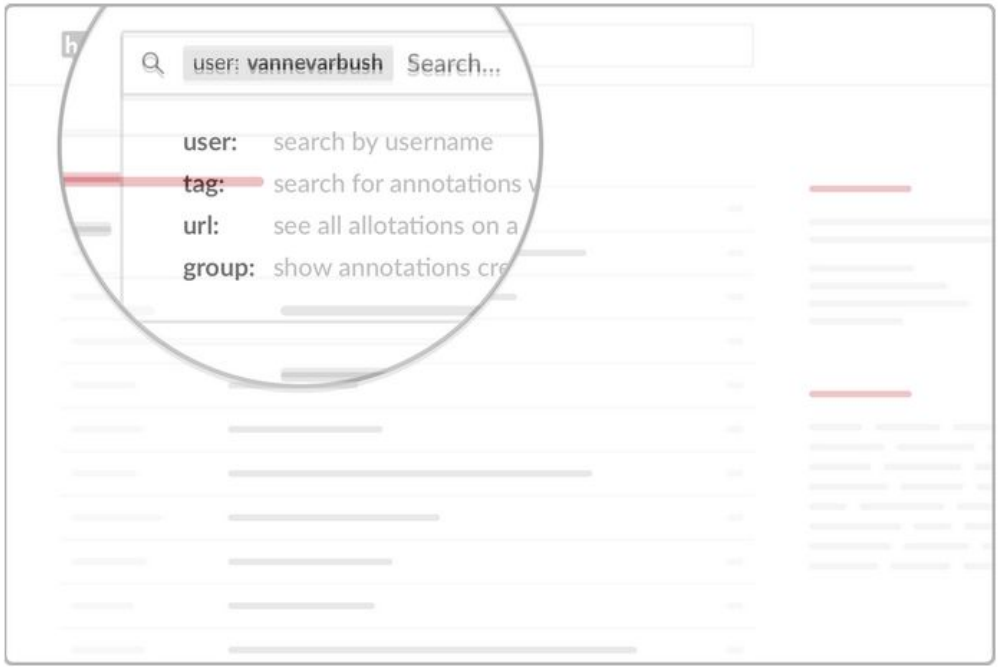

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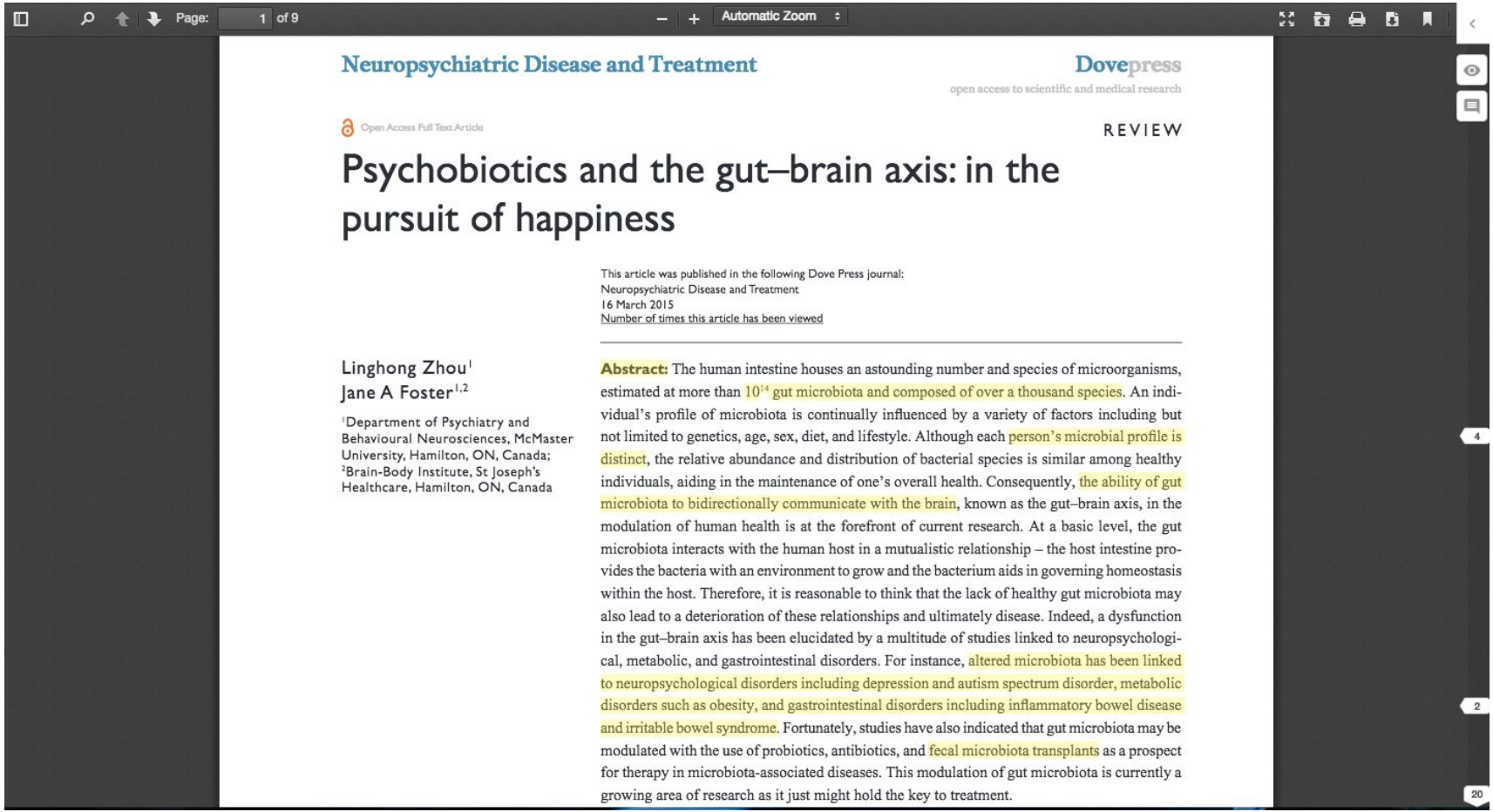
4. Annotation in the Classroom



Neuropsychiatric Disease and Treatment

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REVIEW

Psychobiotics and the gut–brain axis: in the pursuit of happiness

This article was published in the following Dove Press journal:
Neuropsychiatric Disease and Treatment
16 March 2015
Number of times this article has been viewed

Linghong Zhou[1]
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Abstract: The human intestine houses an astounding number and species of microorganisms, estimated at more than 10^{14} gut microbiota and composed of over a thousand species. An individual's profile of microbiota is continually influenced by a variety of factors including but not limited to genetics, age, sex, diet, and lifestyle. Although each person's microbial profile is distinct, the relative abundance and distribution of bacterial species is similar among healthy individuals, aiding in the maintenance of one's overall health. Consequently, the ability of gut microbiota to bidirectionally communicate with the brain, known as the gut–brain axis, in the modulation of human health is at the forefront of current research. At a basic level, the gut microbiota interacts with the human host in a mutualistic relationship – the host intestine provides the bacteria with an environment to grow and the bacterium aids in governing homeostasis within the host. Therefore, it is reasonable to think that the lack of healthy gut microbiota may also lead to a deterioration of these relationships and ultimately disease. Indeed, a dysfunction in the gut–brain axis has been elucidated by a multitude of studies linked to neuropsychological, metabolic, and gastrointestinal disorders. For instance, altered microbiota has been linked to neuropsychological disorders including depression and autism spectrum disorder, metabolic disorders such as obesity, and gastrointestinal disorders including inflammatory bowel disease and irritable bowel syndrome. Fortunately, studies have also indicated that gut microbiota may be modulated with the use of probiotics, antibiotics, and fecal microbiota transplants as a prospect for therapy in microbiota-associated diseases. This modulation of gut microbiota is currently a growing area of research as it just might hold the key to treatment.

Graduate students at New Mexico State annotating scholarly journal articles

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Contents
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Random article
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About Wikipedia
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Recent changes
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Tools
What links here
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Hypertext fiction

From Wikipedia, the free encyclopedia

Hypertext fiction is a genre of electronic literature, characterized by the use of hypertext links which provide a new context for 1 typically chooses links to move from one node of text to the next, and in this fashion arranges a story from a deeper pool of potentia

The term can also be used to describe traditionally-published books in which a nonlinear narrative and interactive narrative is achie Mark Z. Danielewski's *House of Leaves* (2000), Enrique Jardiel Poncela's *La Tournée de Dios* (1932), Jorge Luis Borges' *The Garc* and Julio Cortázar's *Rayuela* (1963; translated as *Hopscotch*) are early examples predating the word "hypertext", while a common 1 young adult fiction and other similar gamebooks. *The Garden of Forking Paths* is both a hypertext story and a description of a fictio

Contents [hide]

1 Definitions
2 History
3 Characteristics
4 See also
5 References
6 External links

Definitions [edit]

There is little consensus on the definition of hypertext literature.[2] The similar term cybertext is often used interchangeably with hyp role in the creation of the narrative. Each user obtains a different outcome based on the choices they make. Cybertexts may be equ a novel, and a game. In a novel the reader has no choice, the plot and the characters are all chosen by the author, there is no 'user person working their way through the novel is not an active participant. In a game, the person makes decisions and decides what to 1

To Espen Aarseth, cybertext is not a genre in itself; in order to classify traditions, literary genres and aesthetic value, texts should b is a kind of **ergodic literature**:

> In ergodic literature, nontrivial effort is required to allow the reader to traverse the text. If ergodic literature is to make sense a where the effort to traverse the text is trivial, with no extranoematic responsibilities placed on the reader except (for example) pages.[*citation needed*] 2

gnai_kah 8 days ago

> *Hypertext fiction is a genre of electronic literature, characterized by the use of hypertext links which provide a new context for non-linearity in literature and reader interaction*

More

The concept of being non-linear and interactive is what has stood out to me in the examples of electronic literature that I've seen so far. While this can appear in traditional books, it seems to be far less common and thus can be seen as a defining feature of hypertext fiction.

#d004x

Reply Link

spleenlesswonder 9 days ago

> *while a common pop-culture example is the Choose Your Own Adventure series in young adult fiction and other similar gamebooks.*

More

I've taught several lit classes where I begin by having students read a CYOA book. It is very effective at getting us thinking about structure, format, and readerly experience.

#d004x

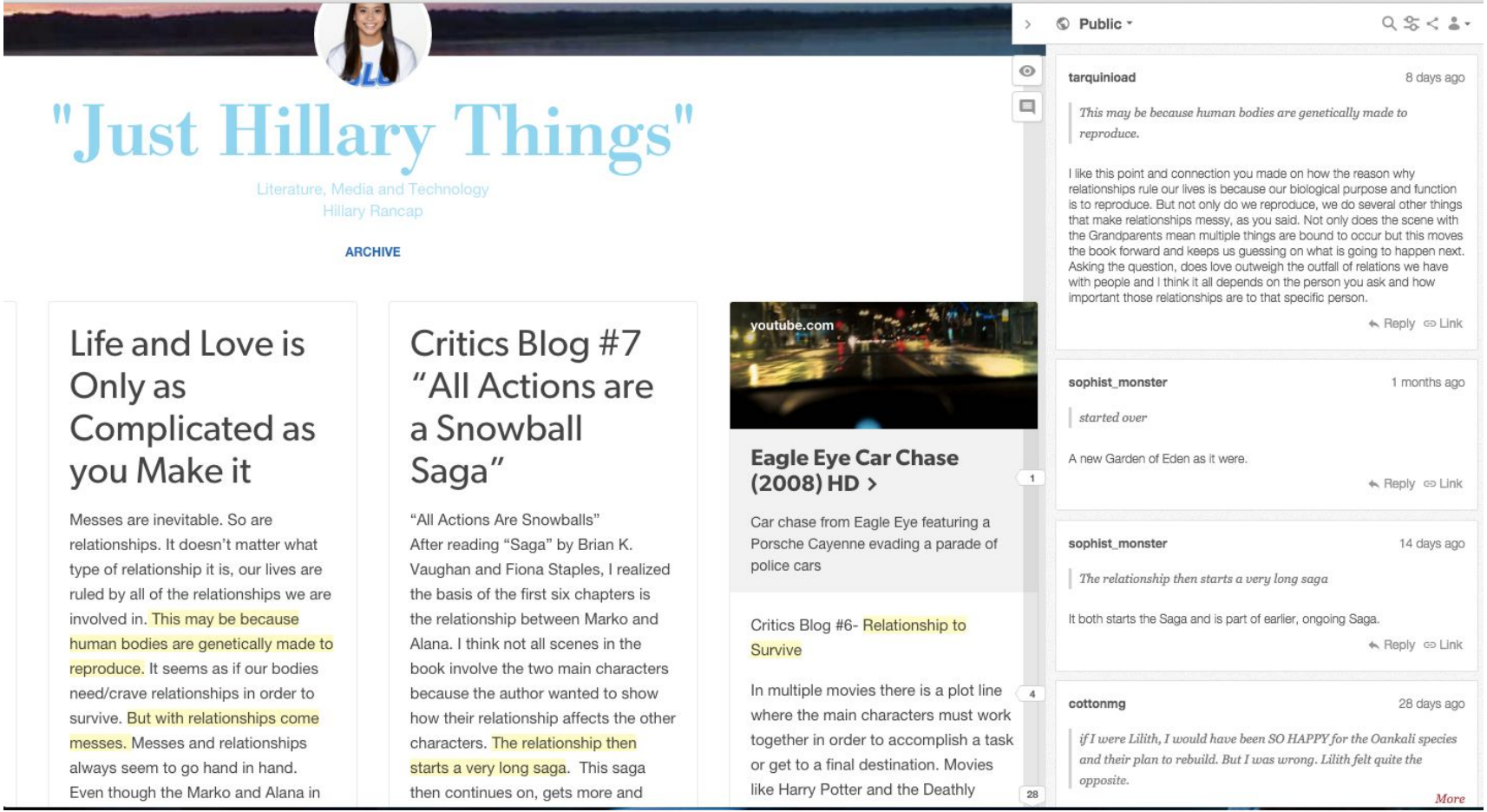
Reply Link

jessa 8 days ago

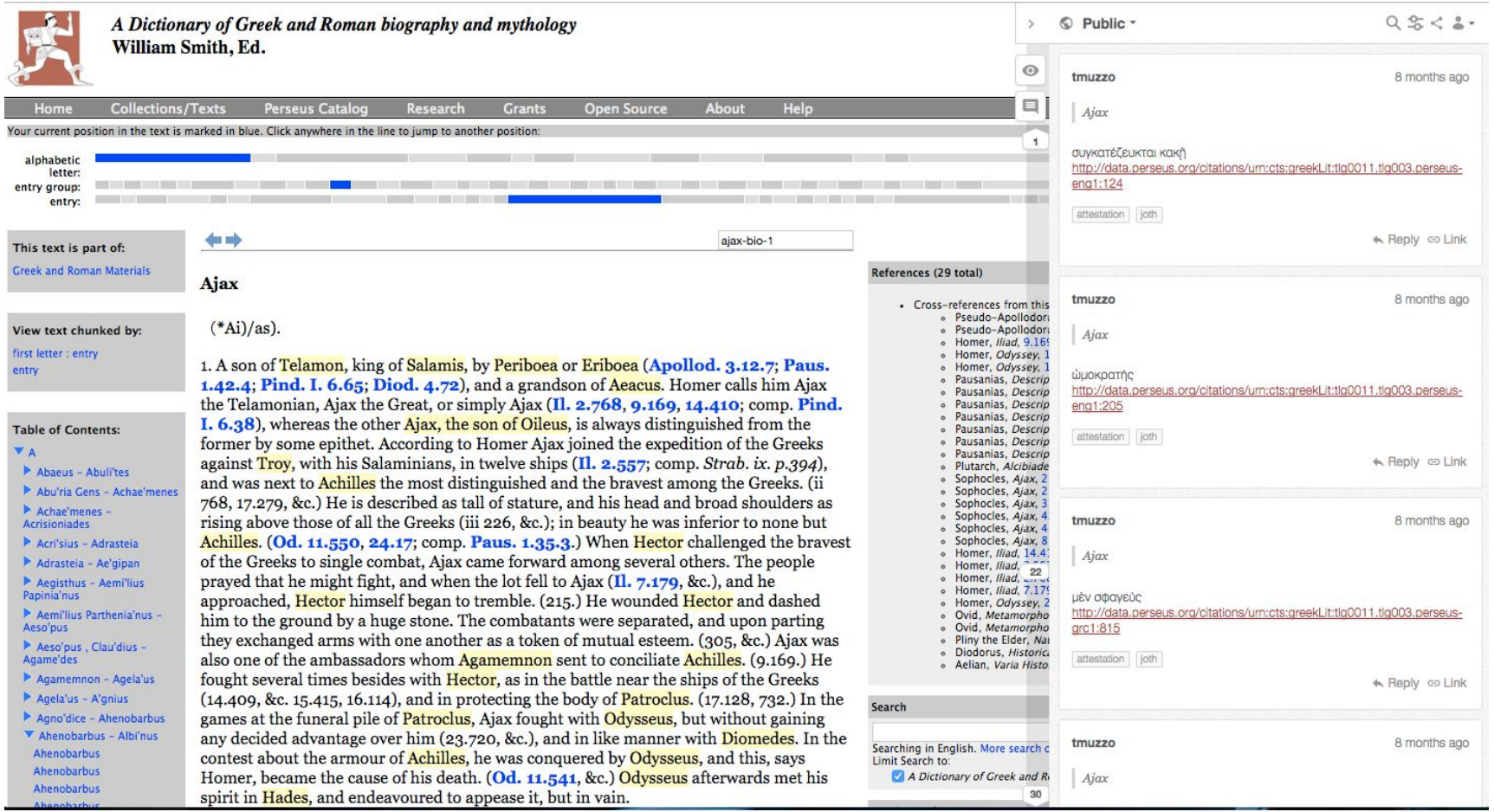
> *In a novel the reader has no choice, the plot and the characters are all chosen by the author, there is no 'user,' just a 'reader,' this is important because it entails that the person working their way*

More

Very interesting opportunities. Seems so interactive and promising to



Peer review of student Tumblr blogs by classmates at St. Louis University



Students at Tufts annotating a text within the classics digital library Perseus

Journey of the Hero

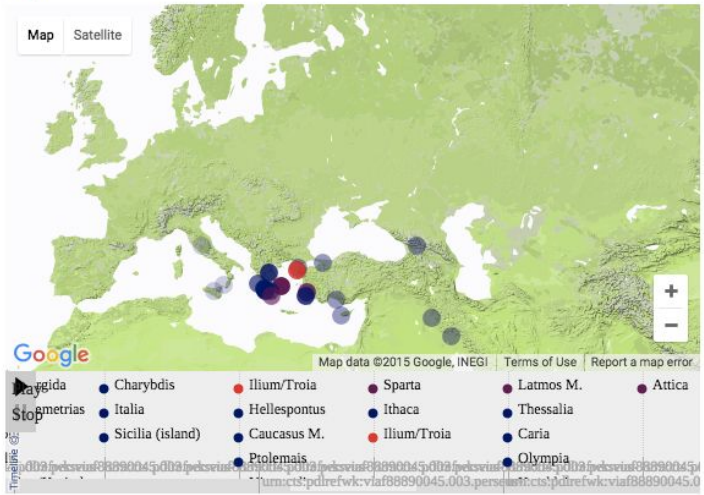
A Dictionary of Greek and Roman biography and mythology

By Smith, William

View on Perseus

Download Annotations: Places, Persons, Citations

Map



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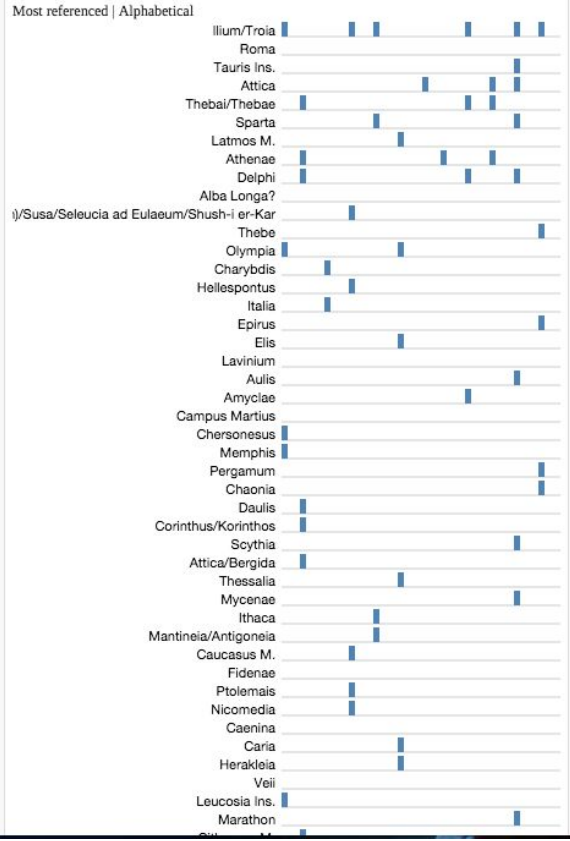


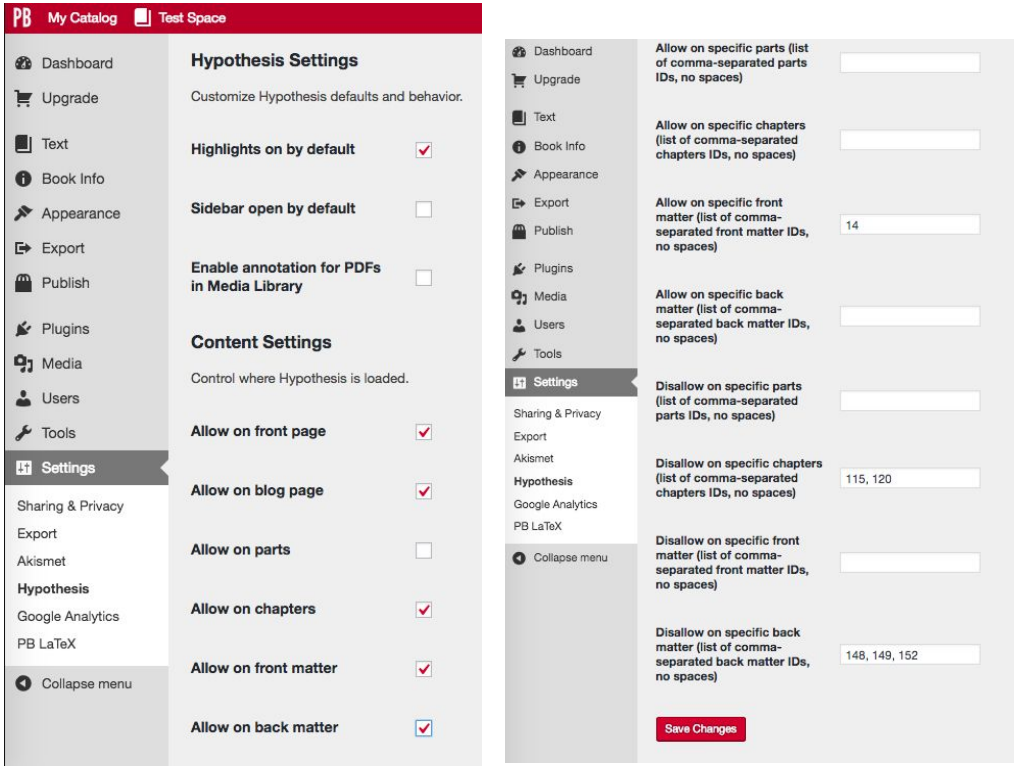
Using the Hypothesis API the Tufts professor created a map of the text using students annotations

Hypothesis + Pressbooks

Hypothesis is available as a plugin within Pressbooks.

It can be quickly configured to allow Hypothesis to be used in all or part of the book. **[right]**

Using the plugin means that all visitors to the site will be able to use Hypothesis within Pressbooks without having to install a browser extension.



Hypothesis Plugin Settings in Pressbooks

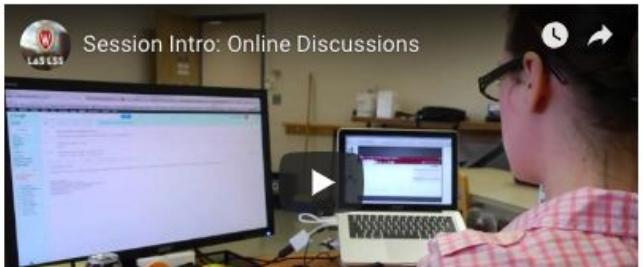
Sample Pressbook + Hypothesis Activated

1. Online Discussions Introduction

Thank you for participating in this session of L&S Learning Support Services' online workshop series, "Teaching With Technology." In the following short opening, you'll meet one of your facilitators, Theresa Pesavento, and get acquainted with the outline of the upcoming module on the exciting topic of online discussions.

Before we dive in, take a moment to consider the uniqueness of online learning. For instance, while we believe most of you will be joining us from here in Madison, Wisconsin, we also know that you may be participating from places near and far, using the power [illegible] In this light, we hope that by providing a brief look at our 'place' in and around W[illegible]e are offering a useful context for our culture and geography. And we hope to hear from you as we move through the course–about the topic at hand, of course, and also a little bit about your own place on campus or on your side of the world.

Annotate Highlight



Public

Annotations 2 Page Notes

rawrpounce Feb 16, 2017
Public

Before we dive in, take a moment to consider the uniqueness of online learning. For ... More

This is an annotation.

Show replies (1)

steelwagstaff 1 min
Public

while we believe most of you will be joining us from here in Madison, Wisconsin

2

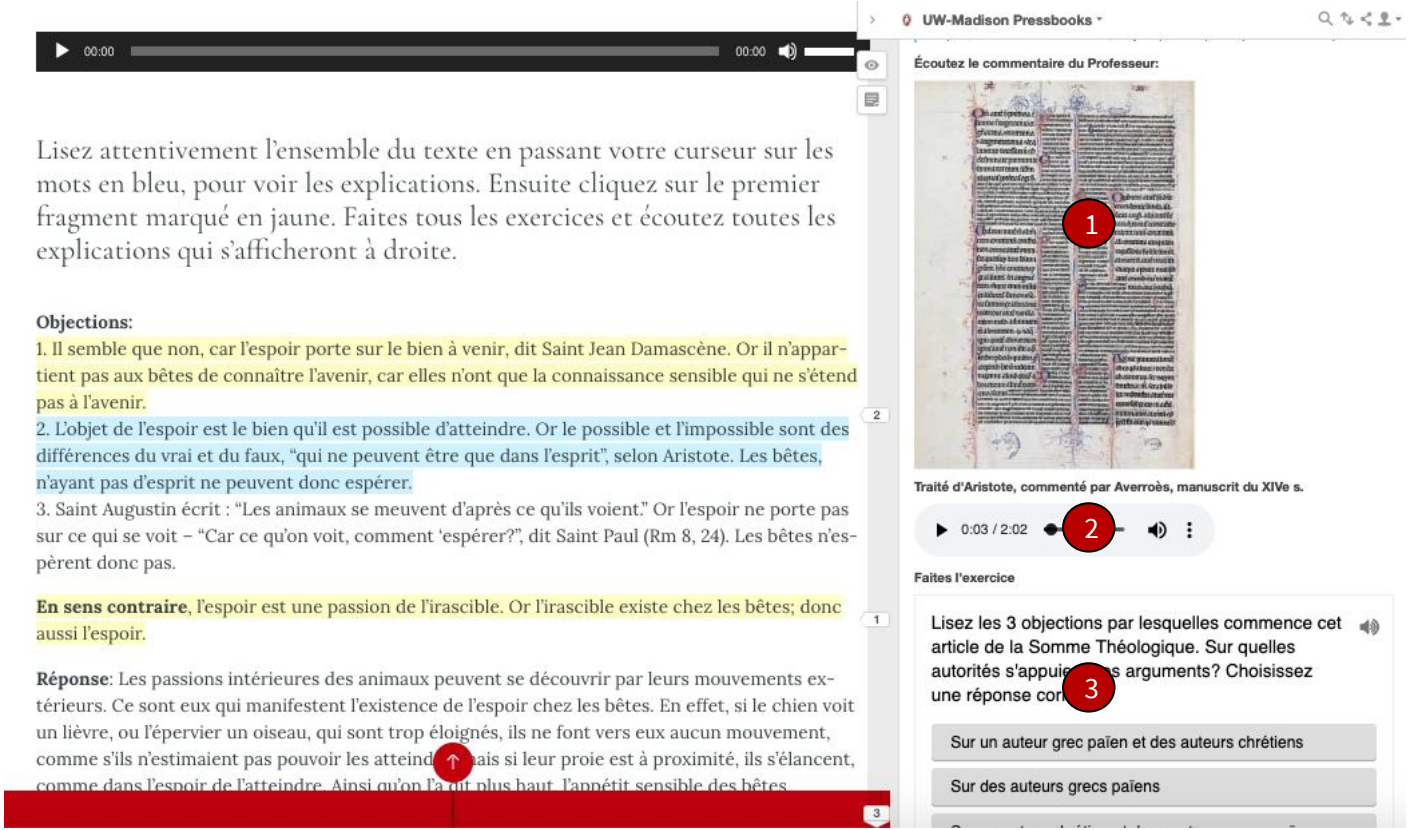
Preview

Add tags...

Post to Public Cancel

Annotations can be freely reused by anyone for any purpose.

Close Reading with Pressbooks + Hypothesis



At left: Annotations in the 'publisher' layer of a close reading activity made in Pressbooks and used in a French literature course. The image is of Averroes' 12th c. commentaries on Aristotle.

The public can view/use this layer, but only invited experts can write to it. This activity includes:

1. Image
2. Audio commentary
3. Interactive quiz [H5P]

5. Annotation Activity

Follow one of these annotatable links:

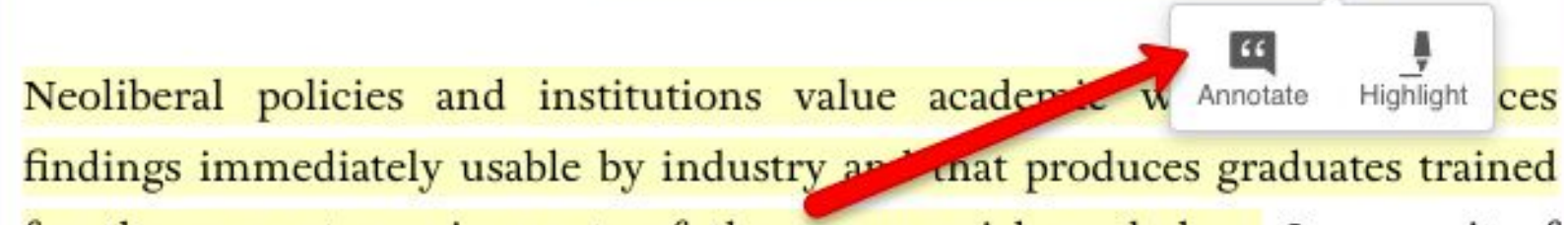
We built a basic ‘poetry anthology’ in Pressbooks for use in today’s webinar:

- https://university.pressbooks.pub/annotation/blackhawkheld
- https://university.pressbooks.pub/annotation/chapter/psalm/
- https://university.pressbooks.pub/annotation/chapter/a-travellers-song/
- https://university.pressbooks.pub/annotation/chapter/fragments-of-sappho/

If you’d prefer to create your annotations in a private group, we’ve created one for this activity here:
https://hypothes.is/groups/nmoZZZ3y/oeweek-annotation-demo

Create an annotation

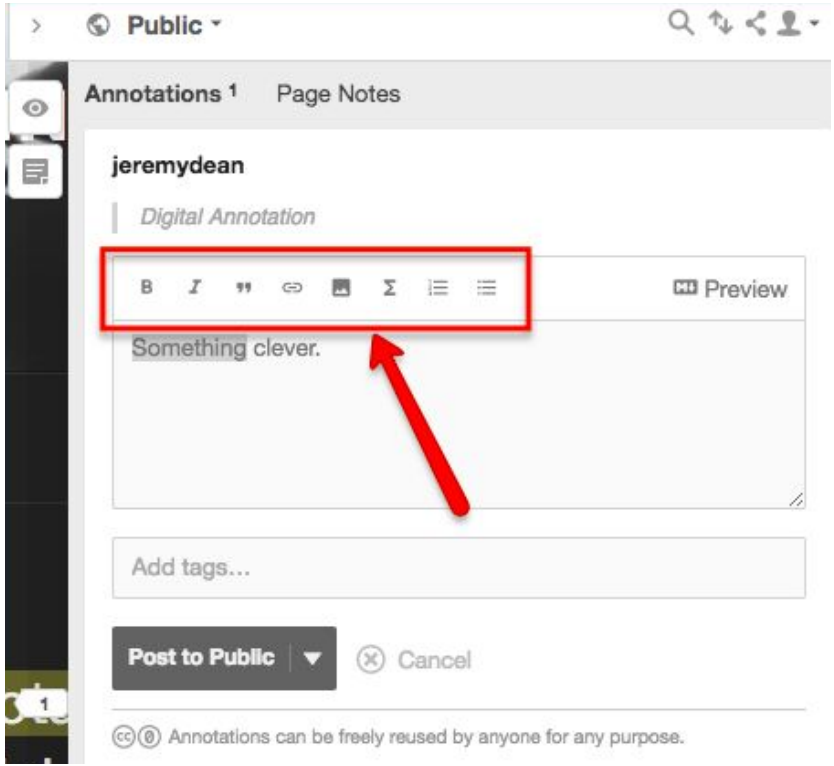
political import due to fear or ignorance of technology. But the unparalleled level of material support that Digital Humanities has received suggests that its most significant contribution to academic politics may lie in its (perhaps unintentional) facilitation of the neoliberal takeover of the university.

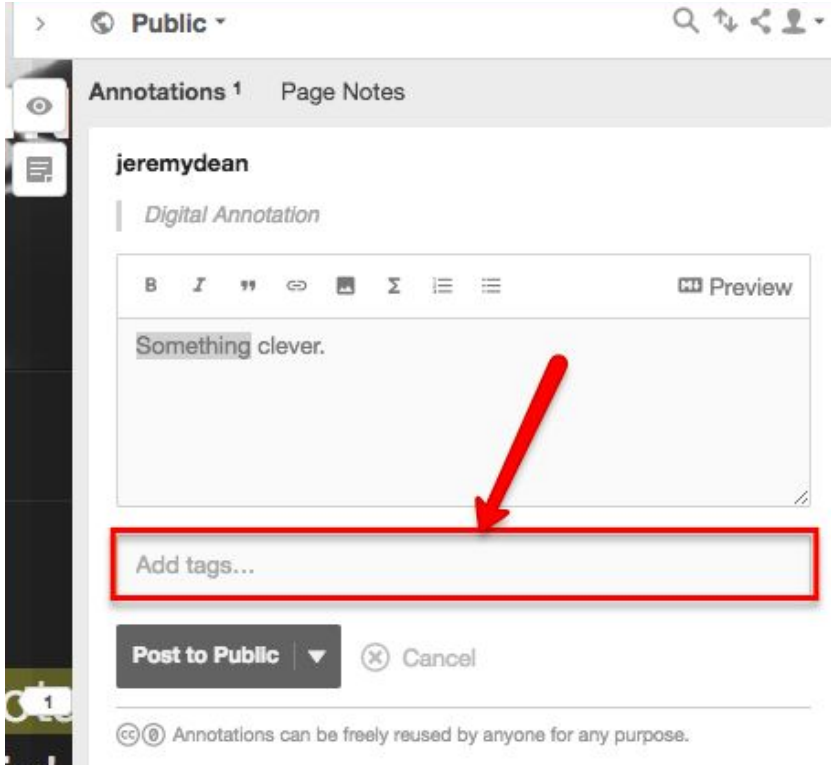


Neoliberal policies and institutions value academic w ces findings immediately usable by industry a hat produces graduates trained for the current requirements of the commercial workplace. In pursuit of

Select text and click “Annotate”

Add links, images, & rich text [L] and tags [R]





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