

# Lurking and Listening: Exploring Annotation Readership

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**CPSC 554M: TOPICS IN HCI**  
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# “Using Web Annotations for Asynchronous Collaboration Around Documents” [R1]

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- **Benefits:**

- Communication
- ‘In-context’ collaboration
  - ✦ Anchoring
- Community-building [R2]

- **Challenges:**

- Communicating outside system?
- Edits to original document
  - ✦ Orphaning
- Conflict avoidance

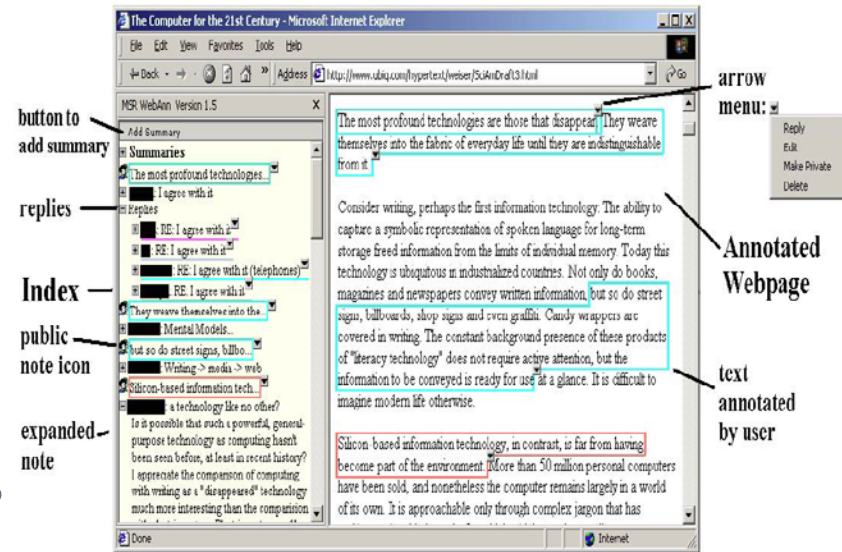


Figure 1: WebAnn interface embedded in Internet Explorer. On the right is the webpage being annotated, on the left is the index of notes and replies. Student names are blacked out to provide anonymity.

# What about *readers* of annotations? [R1]

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- **Who are they?**
  - Cadiz et al. looked only at annotators: one-time users (33%), occasional users (32%), and regular users (32%)
- **What are they reading?**
  - Notifications, but lack of meta-awareness
  - Who has seen my comment? Who subscribed to notifications?
  - 25% of subscribers to notifications never annotated
- **Why aren't they *contributing*?**

# System Limitations and Constraints? [R1]

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- **Beaten to the punch, or 'ditto' effect**
  - Reduce redundancy
  - But at what cost? Comment repeats with spreadsheet method conveyed consensus
- **The public nature of annotations**
  - Self-consciousness
  - Diplomacy
  - A record for everyone to see
  - Behavioural difference?

# “Exploring the Relationship between Personal and Public Annotations” [R3]

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- **WebAnn system; personal annotation functionality with export option**
- **Study of personal annotations and “the transitions they undergo as they are shared” (p. 349)**
  - Assignment O’s gone public
- **Personal annotations:**
  - Not predicative # of public annotations contributed
  - Must be changed a lot to be intelligible to others
  - Mostly of the ‘anchor-only’ variety (ie. highlighted, underlined)

# What about readers of annotations?

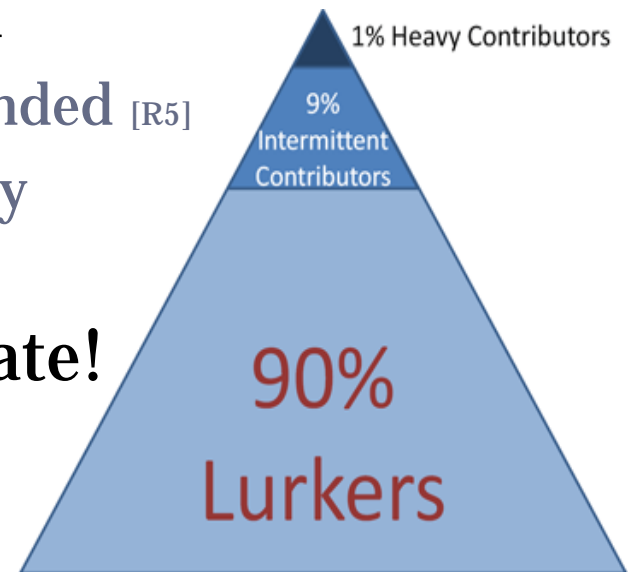
6

- Who are they?
- What are they reading?
- Why aren't they contributing?
- Why should we *care*?

# Annotation Readership: A Research Agenda

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- **Realizing the effect that annotations can have on reading** [R4]
  - Better recall of material; affected interpretation of text
- **Applications for design evaluation**
  - Understand why not being used as intended [R5]
  - Improve usability, approach universality
- **Because most users don't participate!**
  - Lurkers: the hippies of the Internet?



# “We Are All Lurkers...” [R6]

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- Lurking is normal; lurking is not even negative
- Lurkers as ‘indirect contributors’ to system [R7]
  - Altruism; prefer not to add clutter
  - Idealism; defer to more informed users
- Lurkers as ‘indirect contributors’ outside system [R8]
  - Taking knowledge outside original community



# Lurking as Listening

- A third potential benefit:
  - Awareness
  - Distributed groups, “by their nature, are denied the informal information gathered from a physically shared workspace and the proximity which is an important factor in collaboration between colleagues” (p. 542) [R9]
  - Lurking as ‘learning about the group’ [R7]
    - ✦ Listening *before* speaking

# “Is This What You Meant? Promoting Listening on the Web with Reflect” [R10]

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- **Designing for listening**

- Communication theory; conversational feedback; grounding for mutual understanding
- Providing evidence of listening *without* the need for new content or judgements



**Figure 1. Rating interfaces in common use today.**

# “Is This What You Meant? Promoting Listening on the Web with Reflect”

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## Readers

- 1 Hovering over bullets highlights relevant text in the comment.
- 2 Readers can positively or negatively evaluate bullet points.

Lisa Russell

This idea has already been put into action by the Seattle City Council with disastrous results. If you want to eliminate parking requirements, then make each person who moves into a building with no requirements sign an affidavit that they will not park their car on the street- if they won't sign then they can't live there. The current result of this idea is that developers make more money because they haven't provided parking- and neighborhoods lose because new people come in and park on the street.

Readers hear Lisa saying...

- 1
  - Instead, the city should implement better neighborhood coverage of public transit and zipcar. *ballardborn*
  - Seattle City Council already tried this before, and it didn't end well *Katie*
  - What do you hear Lisa saying?

Does Katie's summary... 2

- elegantly distill meaning?
- uncover a good point?
- clarify the message?
- provoke unnecessarily?
- umm, its not a summary

## Listeners

- 3 Any reader can become a listener by restating a point they hear the commenter making in 140 characters or less.
- 4 After restating, a listener connects their bullet point to the relevant sentences in the comment.

• What do you hear Lisa saying?

• The lack of parking motivates outsiders to use scarce parking spaces

Done cancel 103 summaries, not replies

• The lack of parking motivates outsiders to use scarce parking spaces *Henry*

Please click the relevant sentences

Done cancel

## Speakers

- 5 A commenter can verify the accuracy of a restatement of their comment, and clarify if necessary.
- 6 Verifications are prominently displayed to other readers.

• The lack of parking motivates outsiders to use scarce parking spaces *Henry* 5

Is this accurate?

- Yes
- Maybe, but I should clarify
- No, its not a summary

Done

• The lack of parking motivates outsiders to use scarce parking spaces *Henry*

**clarification:** yes, but its not just outsiders, its new residents whose developers did not provide them parking

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Figure 2. Mechanics of the Reflect interface.

# Listening as De-lurking

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## How do I know if a friend has seen a message I sent?

When someone sees your most recent message, it will be marked as seen, and you'll see who did and who didn't.



Messages are marked as seen if the person is actively chatting with you.

This feature is a part of every message you send, whether it's a text or a video.

Was this answer helpful? Yes · No

## How do I know who's seen each post in a group?

The checkmark ✓ under each post indicates how many group members have seen it. This way you can see who's seen your posts and who hasn't. This feature is updated on the group's activity.



Hover over the checkmark ✓ to get an idea of who's seen it.

Anyone who can view the group post will see the checkmark ✓.

Was this answer helpful? Yes · No

# Discussion

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- Do you lurk? Why do you lurk? Under what circumstances will you de-lurk and contribute?
- Cadiz et al. identify agree/disagree buttons as a way to document 'repeat' annotations. Would this be useful? Can you think of a better affordance?
- How can awareness be afforded with respect to users' privacy and preferences?

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*Figure 2.* Retrieved from: Kriplean, T., Toomim, M., Morgan, J., Borning, A., & Ko, A. (2012). Is this what you meant?: Promoting listening on the Web with Reflect. In *Proceedings of the 2012 ACM Annual Conference on Human Factors in Computing Systems* (pp. 1559-1568). New York, NY: ACM.

*Screenshots, Facebook Help Center.* Retrieved from: <http://www.facebook.com/help/316575021742112/>;  
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