

Introduction to digital transcription

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Suggested timings (if you use these slides)

- Approaches to digital transcription (10m)
- Getting started with CLAN (25m + 5m break)
- More advanced work with CLAN (25m + 5m break)
- Getting started with ELAN (25m + 10m break)
- Using CLAN and ELAN together (40m + 5m break)
- Future tools and directions for digital transcription
- Questions/follow-ups (10m)

Outline

- **Approaches to digital transcription**
- Getting started with CLAN
- More advanced work with CLAN
- Getting started with ELAN
- Using CLAN and ELAN together
- Future tools and directions for digital transcription
- Questions/follow-ups

Major paradigms for digital transcription

- **Turn-by-turn editors**

- [CLAN](#) / [TranscriberAG](#) / [FOLKER](#) (specialist tools)
- [Inqscribe](#) / [Transana](#) (more generic tools)
- Simple: Word processor + video player + footpedal/hotkeys

- **Partition editors**

- [ELAN](#) / [ExMaralda](#) (especially for GAT2 users)
- [Max QDA](#)/[NVIVO](#)
- Simple: Graph paper + video player + pencil

NB: All research software is buggy. Backup your work!

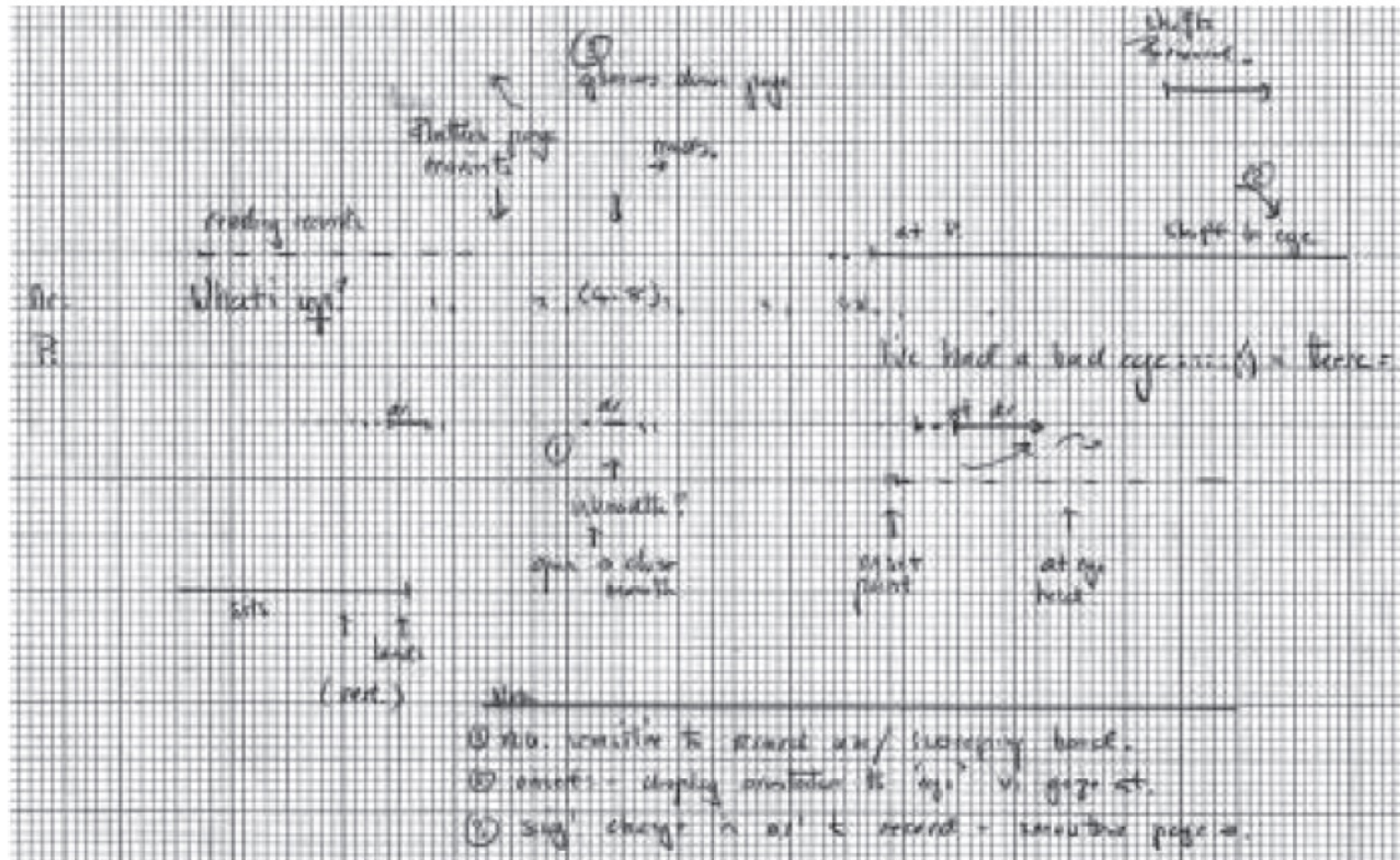


FIGURE 4.4 A copy of an original transcript of Fragment 4.1

(Heath et al, 2010 p. 72)

Why use digital transcription tools anyway?

- Individual benefits
 - Synchronizing audio/video with transcripts for ease of use
 - Interoperability with other formats/tools & associated sub-disciplines
 - Future-proofing your transcriptions using convertible formats
- Field-wide benefits
 - Incentivizing software developers to take EM/CA into account
 - Standardizing and streamlining the process of learning to transcribe
 - Growing the pool of community-wide digital transcription resources

Is your computer set up and ready?

- Download sample files: <https://saulalbert.net/digital-transcription/> and unzip them onto your desktop
- Make sure you have CLAN installed
 - <http://dali.talkbank.org/clan/>
- Install CAfont
 - <http://dali.talkbank.org/clan/CAfont.otf>
- Make sure you have ELAN installed
 - <https://tla.mpi.nl/tools/tla-tools/elan/download/>
- Have you opened test.cha and test.eaf and tried playing them?

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Ex1: CHAT format and its file headers

Familiarize yourself with a CLAN file:

- CHAT is the native file format of CLAN, CA users don't use 'strict' CHAT
- Open the sample Game_Night.cha file, look at the 'headers'
- Open newfile.cha in CLAN and copy the contents across line by line.
 - @Participants line (structured as code / name / role)
 - @Options (relevant for us are CA / CA unicode / heritage)
 - @ID lines include demographic / metadata
 - (@ID: language|corpus|code|age|sex|group|SES|role|education|custom|)
 - @Media (show where the audio/video is – NB: can be in a 'media' subfolder)
 - Speaker tiers (the important bit)

Common teething problems

Making sense of @Participants and @ID lines

- You can generate @ID tiers from your @Participants list
- You can use keyboard shortcuts to insert participant codes (ctl+1/2/3)


Font & presentation problems

- You should use the CAfont (<http://dali.talkbank.org/clan/CAfont.otf>)
- When you use @Options CA / heritage, CAfont is auto-selected

Try closing and reopening your newfile.cha, it should be in CAfont now.

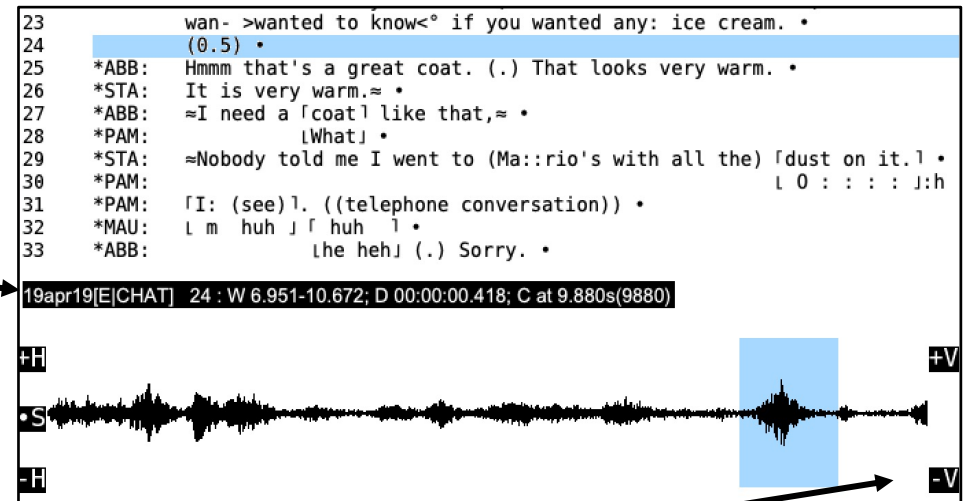
Ex 2a: Navigating/playing transcripts in CLAN

Open Game_Night.cha in CLAN

- Make sure that line numbers are showing (in the 'mode' menu)
- Place your cursor on line 17 and press {esc-8} – it should play through
- Put your cursor on line 25 and press F9 – it should play once
- Press 'ctl' (win)/ 'command' (mac) & click to replay the current line
- Press esc-0 or use the 'mode' menu to go to 'sonic mode'
- Select any part of the audio to play it. ctl/cmd click to replay it
- Double click on any line that ends with a circular bullet. 

Ex 2b: Using the CLAN audio window

- Try selecting a bit of silence, then add a bullet. You can 'time' this silence
- When you've got some audio selected, click on the black info bar above the waveform. Click a few times to change the information displayed.
- Try pressing the +H and -H keys at the sides of the audio window
- Now try pressing the +V and -V keys



NB: omit 0.1-0.2 'beats' if using machine timing for longer gaps (Hepburn & Bolden 2017 p. 27)

Ex 3: Starting a new transcript from scratch

- Open newfile.cha
- Fill in the header lines for the media file you are going to transcribe
- Hit 'update' in the 'Tiers' menu to check your keyboard shortcuts
- Hit 'ID Headers' if you want to enter demographic/corpus data
- Go into 'sonic mode' (esc-0 or via the 'mode' menu)
- Use your cursor to select the first turn you can hear in the waveform
- Use control/command 1/2/3 etc. to attribute the turn & transcribe it
- At the end of the turn press 'ctl/cmd i' to place an audio 'bullet'

Ex 4: Linking a/v data to transcript lines

Open Game_Night-unlinked.cha

- Enter 'sonic mode' and select the audio corresponding to line 17
- Place an 'audio bullet' at the end of line 17 using 'cmd/ctl i'
- Continue to line 33 (use the shift key to modify your audio selection)

When you've finished, press *esc-a* – to 'expand bullets' or use the 'expand bullets' menu item. These are the millisecond start/end times 'hidden' by CLAN in each bullet. Press *esc-a* again to hide/show them.

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Ex 5: Alternative (rough) linking approach

Open Game_Night-unlinked.cha (remove bullets if you saved them)

- Go to Edit/Select F5 option and choose 'bullet on every line'
- Place your cursor anywhere on line 17
- Get ready to press the space bar at the end of the line, now press F5!

Keep pressing the space bar until there is a bullet at the end of every line. This is a rough, quick way to link a non-digital transcript to audio/visual data.

Ex 6a: CHAT 'Special characters' & overlaps

CLAN uses 'Unicode' symbols that are particularly useful for CA transcripts:

- Using Unicode symbols can make your transcripts computationally usable
- E.g., CLAN's Unicode overlap markers enable automated overlap alignment

Open the 'special characters' window to see some CLAN Unicode symbols – you do not have to use all of these but some of them are very useful.

Try creating some Unicode overlap markers by typing F1 +square braces for the top line of the overlap, and F1 +curly braces for the bottom line. Make sure to add spaces within the overlap markers to match to/bottom lines

Ex 6b: CLAN's brilliant unicode underlines

- CLAN's unicode underlines let you paste transcripts into plain text without *losing your precious underlines in the publication process.*
- Put the cursor ahead of any character, then press F2 underscore
- Unicode underlines allow easy migration into other text editors
- Try copying underlined text from Word into CLAN or any other plain text editor e.g., Notepad (Win) or TextEdit *in plain text mode* (Mac)
- Now try copying/pasting F2-underline text from CLAN. It should work.

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Ex 7: Getting started with ELAN

- Open Game_Night.mp4 in ELAN (file/open or drag it into the window)
- Make sure you are in 'Options/annotation mode'.
- Try out the play/frame/1 second controls under the video window
- Click and drag on the default tier to highlight an embodied action.
- Double click on the highlighted section to add an annotation.
- Click away to deselect the area, click the annotation to re-select it.
- Press the 'selection' play button to play the selected area
- Go to 'Tier/Add New Tier' to add additional tiers for each speaker

Ex 8: Synchronizing media files in ELAN

- Go to 'Options/Media Synchronization Mode'
- Go to 'Edit/Linked Files/' and add Game_Night-zoomed.mp4
- Now you can (un/re)synchronize the files by playing Player 1 or 2
- Go to 'Edit/Linked Files/' and add Game_Night-clanw.wav
- Now you can (un/re)synchronize the files by playing Player 1 / 2 / 3

Ex 9: Using multimodal tiers & annotations

- Add some tiers for Abbie's talk (call it ABB), Terry's talk (TER) etc. & transcribe a few lines of talk for each speaker.
- Add a separate 'gaze' or a 'gesture' tier for Abbie called gaz@ABB or ges@MAU etc. Once you've created them, drag to re-order your tiers.
- Add some embodied details on these tiers, creating annotations that correspond to the onset, sustain and retraction of the movement.

Resize annotations by selecting an area of timeline, holding shift to increase/decrease the selection & pressing ctl/cmd + the return key.

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Why & how to combine these digital tools

- Each one is good for different things:
 - CLAN is good for turn-by-turn talk and relatively fast transcription
 - ELAN is good for multi-party activities, visible actions and accurate timing
 - Combining tools allows us to focus on & describe different orders of action
- We can combine these tools systematically:
 - Use turn-by-turn editors like CLAN to create a starting point
 - Consider making a verbatim version followed then a more detailed Jeffersonian version
 - Focus on timing accuracy and multi-activity using partition-editors like ELAN
 - Work with ELAN to help create a more accurate, polished, multimodal transcript

Some tips for transcribing with CLAN for ELAN

- If the turn is very long and covers multiple lines, you can break up the line into shorter sections with audio bullets on the end of every line.
- If you are transcribing lots of overlapping talk that include long turns, try to break it up into multiple lines, so each line only includes one (long), or at most two (shorter) overlapping segments.
- Before converting files from CLAN to ELAN, mark inter-turn gaps with a temporary speaker ID e.g., “*SIL: ”, which you can remove later.
 - In CLAN, search/replace all instances of: “+tab (“, with “*SIL: +tab (“
 - later, you can reverse this process by replacing “*SIL: +tab (“ with “+tab”.

Some tips for transcribing with ELAN for CLAN

- If you are transcribing lots of overlapping talk that include long turns, try to create multiple annotations so that each annotation only has one, or at most two overlapping segments. Try to do this in CLAN too.
- When annotating silent actions, you can either follow [Mondada's conventions](#) by putting in e.g., (1.0) or a ((description)) in the person's 'talk' tier corresponding to your annotation in their gesture/gaze tier
 - *This is so that CLAN can later render your transcript in a 'line-by-line' format*

Ex 10: Adding visible actions in CLAN for ELAN

- In CLAN, you can do ((Jeffersonian style descriptions)) to start with and add multiple time-synced %ges (gesture) or %gaz (gaze) 'tiers':
 - Add a new line under a speaker's turn labelled %ges or %gaz, describing their action, then select the corresponding timeline area & add a timing bullet.
 - To annotate silent – but visible – actions and e.g., bodily movements, use a ((description)) or (0.1) time reference in a speaker tier above the gesture tier.
- You can make up extra tiers using the '%' sign e.g., %com (comment).
- Show/hide each tier type by pressing {esc-4} or 'show/hide tiers'.

Save your Game_night.cha file with the new %ges, %com, or %gaz tiers

*NB: Make sure you've added temporary *SIL: ids for lines with gaps*

Ex 11: Moving from CLAN to ELAN

- Open open the ‘command’ window in CLAN
 - Type ‘chat2elan +e.mp4’ (+e.mp4 tells CHAT to look for an mp4/mov/wav file)
 - click ‘file in’ and locate *Game_Night.cha*, add it, (an ‘@’ appears), click ‘run’
 - You should now have a file called *Game_Night.c2elan.eaf*. Open it in ELAN
- You can now refine your CLAN %ges or %gaz tiers in ELAN
 - When making tiers in ELAN use CLAN naming style e.g., ges@MAU / ges@TER
 - When creating a new tier, assign its ‘parent tier’ to the speaker e.g., MAU/TER
 - You can re-organize the order of tiers in your ELAN file for visual coherence
 - Refine/add new tier annotations using ELAN’s more accurate timeline
 - Note that you can only add an annotation to a ‘child’ tier if you have annotated something happening e.g., talk or a ((description)) in its parent tier

Ex 12: Moving from ELAN back to CLAN

- Convert your new eaf file back to .cha in the CLAN command window:
 - Type 'elan2chat', 'file in' and locate the *Game_Night.c2elan.eaf* file
 - You will need to untick 'show only .cha and .cex files' to see your .eaf file
 - Click 'run' – you should now have a file called *Game_Night.c2elan.elan.cha*
 - Notice that your indents are now misaligned (the conversion deletes spaces)
- Use the INDENT command to automatically re-align your indents
 - Open the 'commands' window and type INDENT
 - The 'File in' box should become clickable – click it and select your file.
 - An @ symbol should appear in the command window. Click 'Run'.
 - Check alignments in your new file: *Game_Night.c2elan.elan.indnt.cex*

Ex 13: Moving from CLAN into a publication

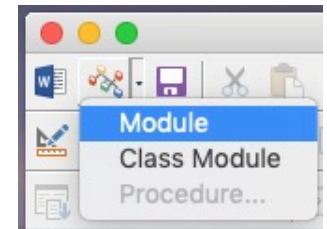
- In CLAN, try turning line numbering off in the 'mode' menu
- Copy and paste your transcript into a word processor file without line numbers, then try using automatic line numbering for your transcript.
- If you don't like that, temporarily cut the header lines in your .cha file so your transcript extract starts at line 1, then copy and paste it.
- Try tweaking it to make it look OK
 - Try changing fonts, playing with line spacing and see what works best for you
 - Use search/replace all to remove asterisks and/or change speaker names
 - Try adding video stills, line drawing figures etc. into your word processor file

Ex 14: CLANning legacy (Word) transcripts

- Open newfile.cha and the Game_Night Word document
- Copy and paste the lines of dialogue from Game_Night.doc into CLAN
- You'll notice that all the underlines have disappeared.

To fix this:

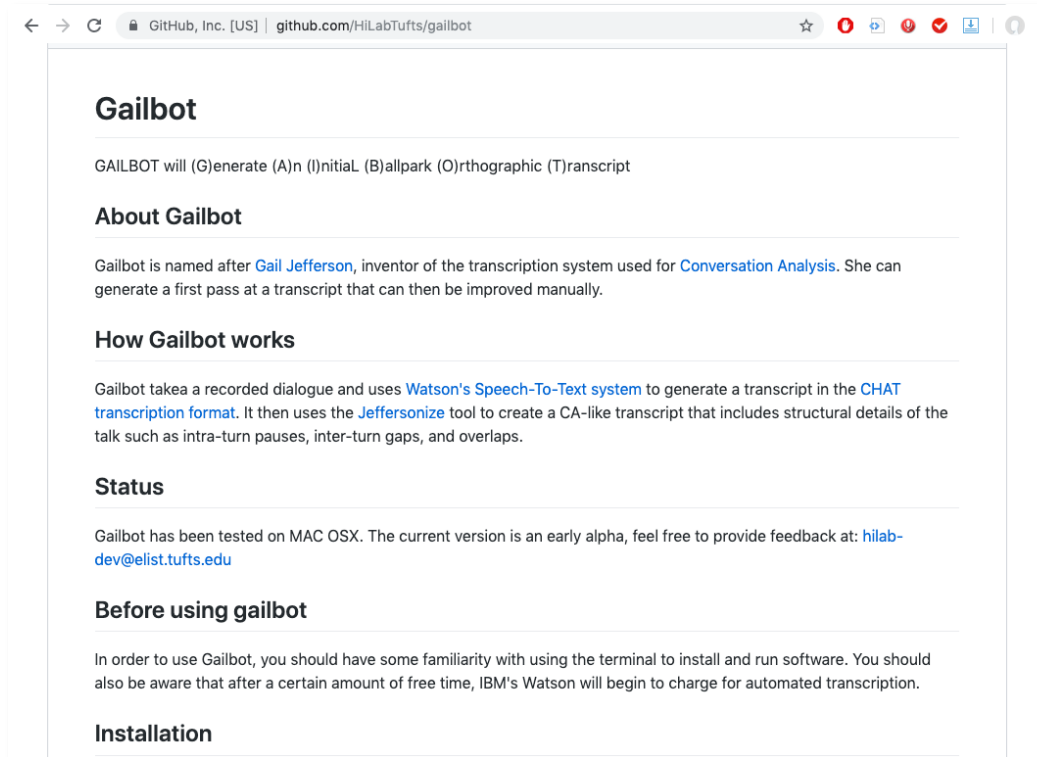
1. Open unicode_underlines.txt and copy it
2. In Word, Open Tools/Macro/Visual Basic Editor and create a 'module'
3. Paste in the contents of unicode_underlines.txt and press the 'play' button
4. Try copying and pasting from Word to CLAN again – now it should work
5. Clean up the transcript by search/replacing IDs like *MAU: with "Maureen:"



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Future tools for digital transcription



The screenshot shows the GitHub repository page for Gailbot. The page title is "Gailbot". The description states: "GAILBOT will (G)enerate (A)n (I)ntial (B)allpark (O)rthographic (T)ranscript". The "About Gailbot" section explains that Gailbot is named after Gail Jefferson, inventor of the transcription system used for Conversation Analysis. It can generate a first pass at a transcript that can then be improved manually. The "How Gailbot works" section describes that Gailbot takes a recorded dialogue and uses Watson's Speech-To-Text system to generate a transcript in the CHAT transcription format. It then uses the Jeffersonize tool to create a CA-like transcript that includes structural details of the talk such as intra-turn pauses, inter-turn gaps, and overlaps. The "Status" section mentions that Gailbot has been tested on MAC OSX and is an early alpha version, with a link to provide feedback at hilab-dev@list.tufts.edu. The "Before using gailbot" section advises that users should have some familiarity with using the terminal to install and run software, and that after a certain amount of free time, IBM's Watson will begin to charge for automated transcription. The "Installation" section is partially visible at the bottom.

Gailbot

GAILBOT will (G)enerate (A)n (I)ntial (B)allpark (O)rthographic (T)ranscript

About Gailbot

Gailbot is named after [Gail Jefferson](#), inventor of the transcription system used for [Conversation Analysis](#). She can generate a first pass at a transcript that can then be improved manually.

How Gailbot works

Gailbot takes a recorded dialogue and uses [Watson's Speech-To-Text system](#) to generate a transcript in the [CHAT transcription format](#). It then uses the [Jeffersonize](#) tool to create a CA-like transcript that includes structural details of the talk such as intra-turn pauses, inter-turn gaps, and overlaps.

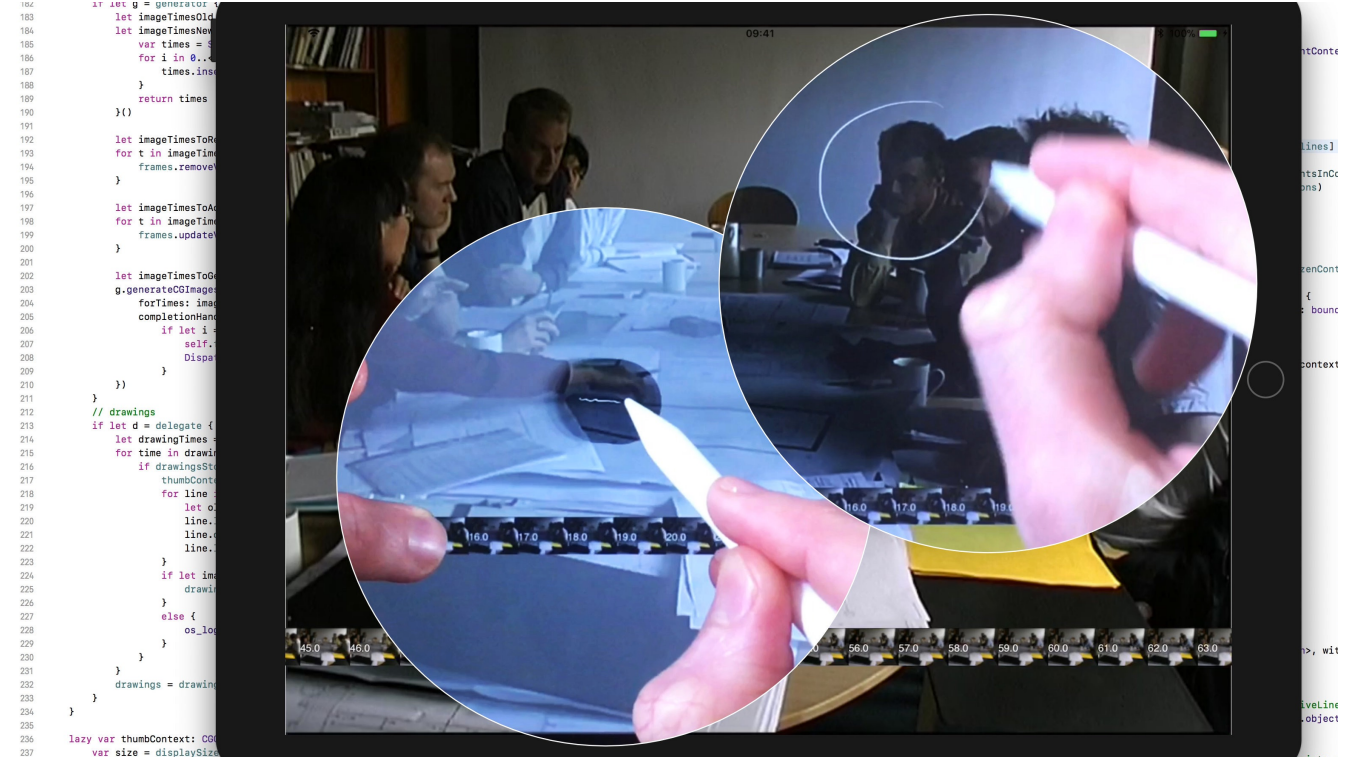
Status

Gailbot has been tested on MAC OSX. The current version is an early alpha, feel free to provide feedback at: hilab-dev@list.tufts.edu

Before using gailbot

In order to use Gailbot, you should have some familiarity with using the terminal to install and run software. You should also be aware that after a certain amount of free time, IBM's Watson will begin to charge for automated transcription.

Installation



Automated CA transcription

<https://bit.ly/gailbot-talk>

Drawing on video, in time

<https://saulalbert.net/project/drawing-interactions/>

Question & follow-ups

Thank you for participating in the digital transcription workshop!

- All workshop materials and now-to videos will remain online at :
 - <http://saulalbert.net/digital-transcription>
- Your feedback is very welcome:
 - <http://bit.ly/digital-transcription-feedback>

Recap:

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