

# Digital tools for visual analysis

New ways of seeing:  
Social research in a digital, visual age

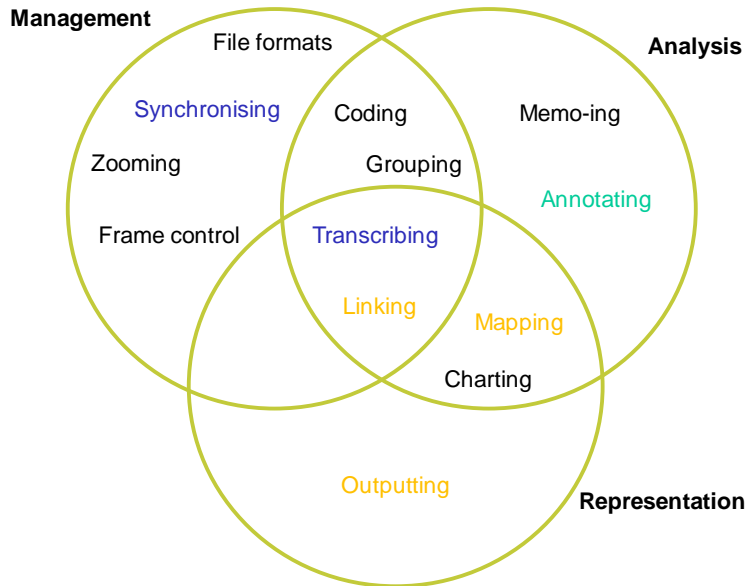
SRA Summer Event 3<sup>rd</sup> July 2019

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Qualitative Data Analysis Services

## Dedicated CAQDAS-packages



# CAQDAS tools for visual analysis



## Fidelity of visual data and digital tools

### Fidelity of data

- Multi-modality
- Quality
- Temporality
- Access to emotional context
- Loyalty of reproduction

### Fidelity of tools

- Ability to handle high-fidelity data

## Transcription & synchronising

Direct vs. indirect working

Concurrent and independent working

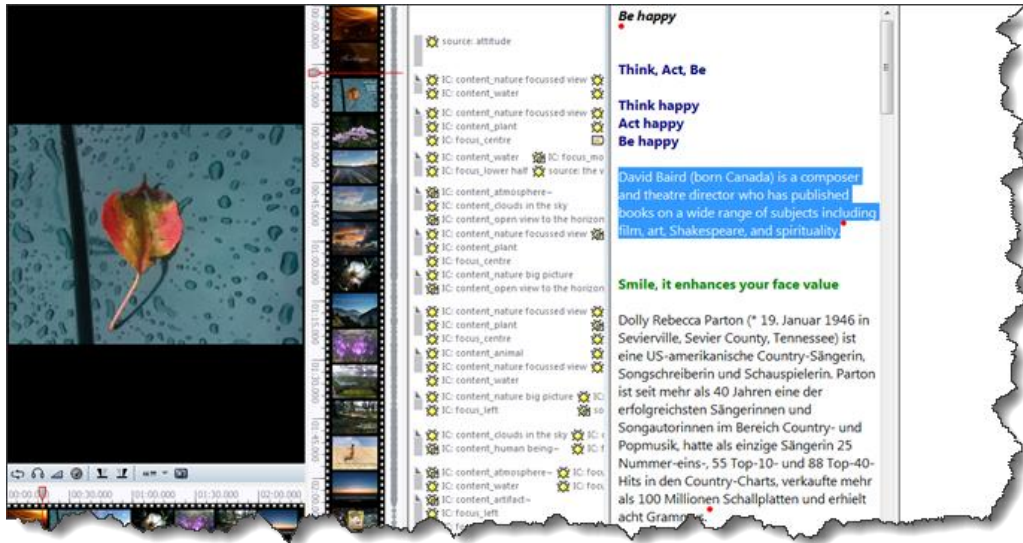
## Working with video directly



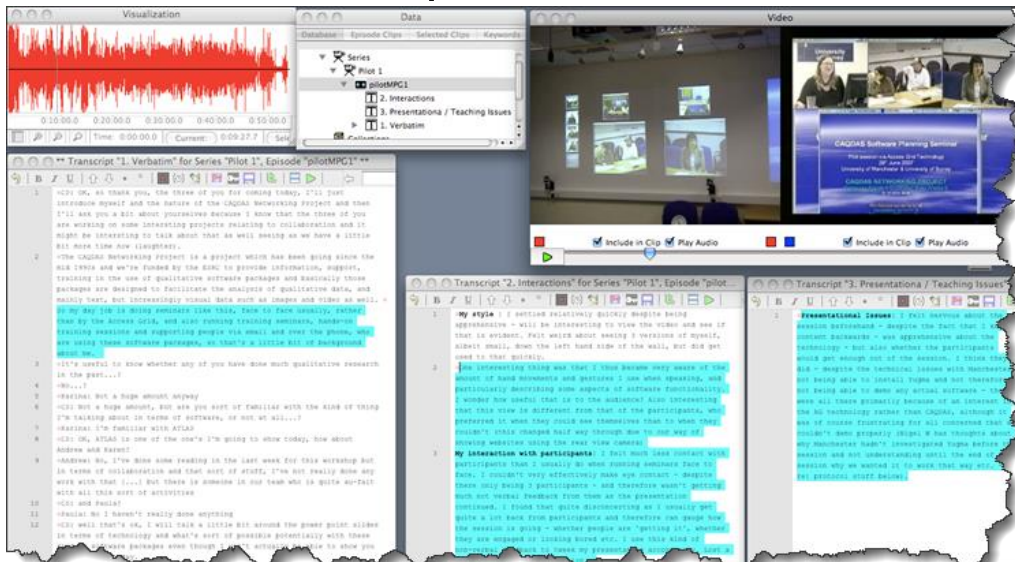
The screenshot displays the NVIVO software interface. At the top, there is a timeline from 0:00.0 to 0:27.0. Below the timeline, a 'Coding Density' bar shows various codes: 'female gaze' (purple), 'shirtless male' (blue), and 'coke bottle' (yellow). A video player is embedded in the interface, showing a Coca-Cola light commercial. Below the video player, there is an 'Annotations' table.

Item	Content
1	The women are more active in this version of the advert than in the original version - what does this say about gender-dynamics?

# Working with video directly & indirectly



# Multiple synchronised video streams & transcripts





# Embedding stills in transcripts



The screenshot shows the Transana Professional interface. The main window displays a transcript titled "4 Descriptive with Enhanced Images". The transcript contains the following text:

2

3 An Asian shopkeeper turns to face the camera. A young Asian woman, a few steps back, also turns.

4

5 The young man nods eagerly.

6

On the right side, there is a video player showing a still from the video. Below the video player is a "Data" panel with a tree view showing the project structure, including "1995 Hardware Store Commercial" and "4 Descriptive with Enhanced Images".

# Formats & (in)flexibility of transcripts



The screenshot shows the NVIVO software interface. The top part features a video player with a waveform and playback controls. Below the video player is a table of transcript segments:

Timespan	Content	Speaker
	<i>This interview of Betty and Paul was recorded in their bait shop, and the recording captures the hum of their freezers in the background, making their speech a little more difficult to understand.</i>	
0:00.0 - 0:13.1	What about the natural environment or the landscape of Down East? Are there things that you particularly like or value about the environment here, or don't like about the environment here?	Henry
0:13.1 - 2:42.9	I have kind of mixed feelings about that in terms of... One thing we see right here, we have lots of foxes trying to live in the little bit of woods we have left, and you see them on the road all the time where they've been killed. I wish we had areas that that wildlife could still grow and not be in danger of being killed on the highway. On the other side, I really wish we had places for the young folks to be able to at least for a short time, or until they could get on their feet to be able to afford their own homes, place for them to be able to live. There's not a whole lot of that down here - affordable anyway. You buy a piece of land, and you've spent just about all your money just on the land itself. In that respect, just small communities, not the big condos, and not the big stuff, just homes that our children or other folks in the community, their children can at least afford to live. I don't want it to grow where we have all the condos. I'm very fearful that we've already stepped over that particular bridge and we're on that way. But if we could still have those small community atmosphere, family-oriented, church... I grew up we always went to church, still go to the same church, and not have just... not industry, but big condos, big developments that don't look like what we grew up in. Being able to go to the shore, and we still have our waterfront lot, and being able to go down there and the water's nice. It still looks natural. The one thing that maybe we all don't talk enough about down here is keeping the waters clean. We can certainly play a big part in that in doing what we can to not pollute it, but if we lose that part of it, there's many businesses down here that will lose everything they have as well. The waters very important. If we just keep some wooded area available for the wildlife that still lives around here, to me that's important. To offset that with places for us to live is a big problem.	Betty

At the bottom of the interface, there are fields for "In Nodes" and "Code At" with a prompt "Enter node name (CTRL+Q)".

# Annotating visual materials



## Descriptive log of images – a form of textual annotation

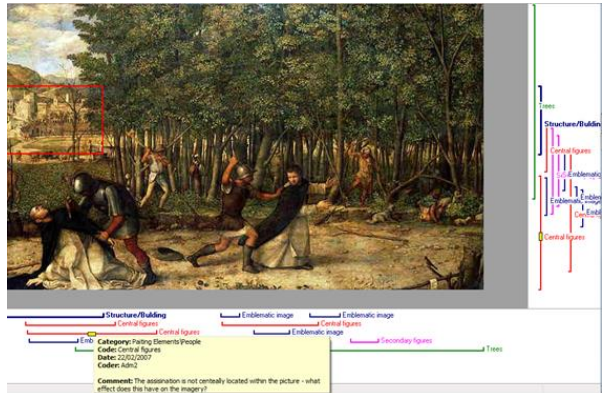
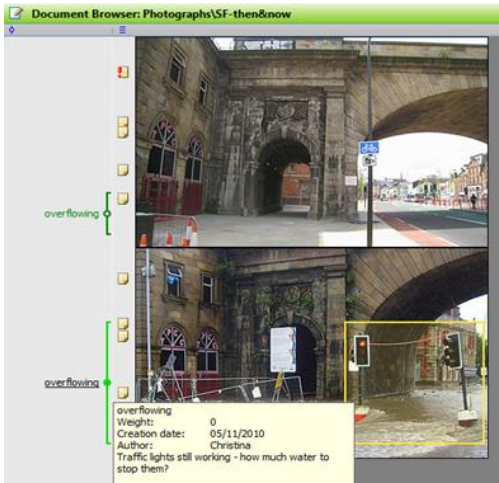


### Sheffield Photos - all



	Region	Content
1		This picture shows the extent of flooding on a residential road in Sheffield during the 2007 floods. It is interesting to note the number of vehicles that continue attempting to drive, despite the high water levels
2	350.70 - 460.170	What is the science relating to speed of travel through deep water and extent of subsequent engine damage?
3	90.140 - 260.240	The ability to zoom in onto the expressions of the passengers would be interesting - are they exhibiting any sense of fear, excitement, trepidation etc?
*		

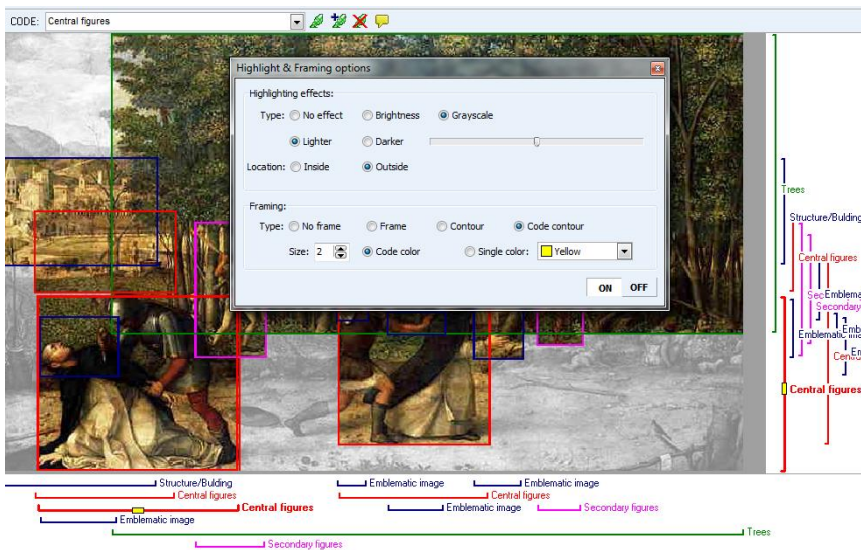
# Textual annotation of still images



FIVE LEVEL QDA

QDAS qualitative data analysis services

# Visual annotation of still images

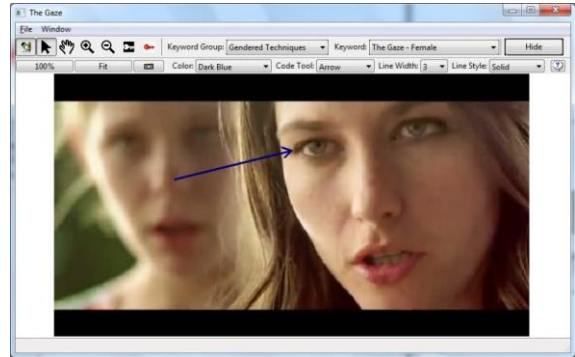


FIVE LEVEL QDA

QDAS qualitative data analysis services



# Visual annotation of still images

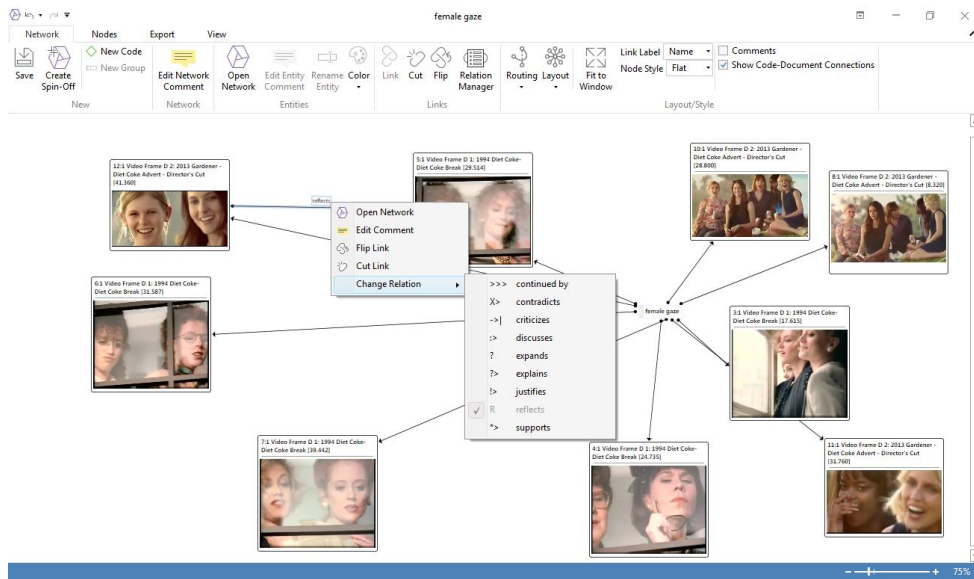


# Making, visualising and representing connections

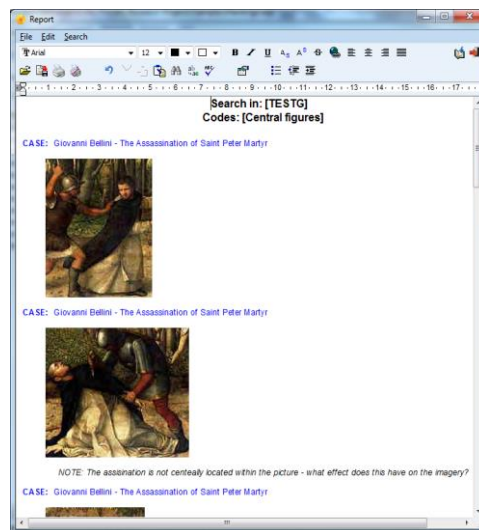
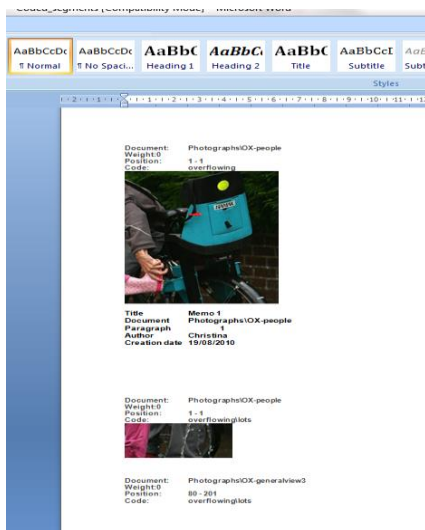
Linking  
Mapping  
Outputting



# Links between data segments



# Outputting data segments



## Blunt tools for fine purposes?



Under-developed analytic and representational tools  
Tools developed for text analysis not fine enough

## Our responsibilities

Concrete documentation

Systematic critical evaluation



# Choosing between and within tools

PROS

CONS

Analytic strategies *drive* software tactics  
Qualitative – Quantitative analytic continuum  
Conceptualising interpretive meaning  
Direct vs. indirect working  
Status of visual data within project  
Outcome requirements  
Team-working considerations



## References

Silver, Christina & Patashnick, Jennifer (2011). Finding Fidelity: Advancing Audiovisual Analysis Using Software [88 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 12(1), Art. 37, <http://nbn-resolving.de/urn:nbn:de:0114-fqs1101372>.

Analysing audio-visual data using CAQDAS-packages, CAQDAS Networking Project archive

<https://www.surrey.ac.uk/computer-assisted-qualitative-data-analysis/archive/analysing-audiovisual-data>