Introduction to Nvivo: Qualitative Coding for Text Analysis

Taught by Milan Skobic and Caroline Grand for
SOCL 4600 Senior Sociology Seminar
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Spring 2021

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Workshop Agenda

- Workshop objectives
- Qualitative Coding: annotating and highlighting sources
- What is NVivo?
- Important vocabulary and functions
- NVivo demonstration

Slides & handouts at **http://bit.ly/diti-spring2021-marshall**

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Workshop Objectives

- Define qualitative coding and why it can be useful while doing research

- Understand what NVivo is as a research tool and what it can do

- Learn important NVivo-specific vocabulary to aid independent research

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Qualitative Coding

Qualitative coding is when you create a list of themes, or a **schema**, that you want to analyze in a primary/secondary source. Then, you review those sources and highlight particular instances in the text according to those themes.

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Coding in practice

key, at that point.

M: Sure sure, so I did not understand, what was the comparison with other five, with other locals, did they have more issues or less, or did they also have that similar experiences like you, across all those different locals [26]

R1: They had, you know, similar experiences that I did. Very strong, present, you know, walking. I didnt see hear, early on, anyways for the initial, when we pulled them that day, the Thursday, that anyone was saying "i'm not going". Didnt hear that from anybody. Didnt hear it from my local, didnt hear it, you know because all the locals have facebook pages too. You know, they have, social pages, so you can also keep in touch that way, and, you know, between reading and [unclear], you know talking to [unlcear] and stuff like that, we were hearing nothing but positive feedback, on on, people walking. People were ready. They were angry, with the contract that was being presented, and they were ready, they were ready to take it, to go to the sidewalk [27] so to speak. And then, and to state their point, yep.

M: Can I maybe ask you yes, related to that anger, like, how did people, hm how to say, how did they precisely rationalize their anger, or, how did they justify their anger. What did they say, who, or how did they understand, why that unjustice was being done to them. How did they understand why the managers at all decided to offer them such a bad contract, how did they think about that anger?

R1: Sure. So, with that, when we, when we, with the organizer, we met earlier, weeks earlier to, so, we met up in [unclear], the organizer brought as many - you know, every, its open invitation, to any local member of the store, to come to this, rather large gathering of people [28] where he broke down the contract. So, not only if you couldn't make, these contract breakdowns came back to the store, and were handed out to, individuals to read, and were posted on the union board. So, the people had time to see, what the contract, you know, here

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What is NVivo?

NVivo is a **text analysis** and **research organization** software that is available through MyNU. NVivo allows you to annotate and code documents using user-created tags (nodes/codes), summarize and visualize these codes, and organize research materials.

NVivo is particularly helpful for organizing and annotating research materials such as:

- secondary sources: scholarly articles you read for the literature review, newspaper articles, book chapters.
- primary sources: any primary sources you may be analyzing such as interview transcripts, texts, or field notes
- your own notes about your project (you can even compose in NVivo)

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What can NVivo do?

NVivo is designed for qualitative coding research materials, such as survey results, interviews, audio recordings, text documents, articles, and other data formats. It also has other functions:

- Create projects that store, organize, and code documents/files
- Provide a method for you to code your documents with a user-created coding schema (nodes)
- Query, summarize, organize, and visualize information about your coding
- Conduct forms of computational text analysis, like word counts, on the documents themselves

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NVivo for Annotating & Coding Research

With NVivo, you can store and organize your **primary** and **secondary** sources together (most file types work, including images). You can also separate your different types of research materials. For this project, your research materials are your interview transcriptions.

NVivo also allows you to **annotate** texts and use **qualitative coding** methods to highlight specific texts/images/pieces under themes.

Then you can **summarize** and **visualize** these annotations and codes.

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NVivo Vocabulary

Full definitions are available on the handout

- **Data**: your research documents & files
- **Codes**: the method to annotate the themes/concepts
- **Nodes**: the actual themes/concepts that you create
- **Relationships**: coding connections between two data items

- **Cases:** units of analysis for your research.
- **Maps**: visualization tool to see connections between the cases and nodes
- **Query**: a flexible way to explore and analyze your files, cases, and nodes

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NVivo is <u>NOT</u> cross-platform friendly

The Mac and PC versions of NVivo–as well as the version numbers–are different and have different file types.

- Mac NVivo projects end in .npvx and can only open that file project type
- Windows NVivo projects end in .npv, but can open both .npv *and* .npvx
- Version numbers (10, 11, 12) also affect which projects can be opened on which platform

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Anatomy of NVivo: Opening on Windows

Your version number (you should have version **11** or **12**)

Create a new **project** (stores all your documents, codes, etc)

NVivo 12 Pro

Recent Projects

Parole Transcription Code

NVivo Experimentation

Open Other Project

The recent projects you opened

Open another project that is not recent

New

Blank Project

Sample Project

Learn and Connect

Research Ready

Getting Started

Customer Success Center

to be best in any point of view. **Research** search for examine in facts or pri

Get your research ready for NVivo

-START-

NVivo quick steps tutorial

Courses, resources & support

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Anatomy of NVivo: Opening on Macs

Create a new **project** (stores all your documents, codes, etc)

Your version number (you should have version **11** or **12**)

The recent projects you opened

Open another project that is not recent

×

Welcome to NVivo 12

Version: 12.5.0 (3729)
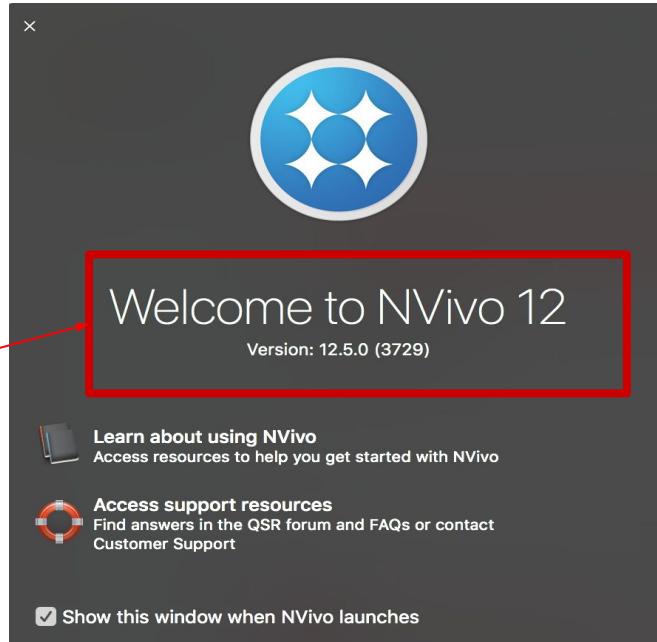
Create new project
Create a new project

Create a copy of the sample project
Explore and experiment with NVivo using the sample project

Parole Trans Code_...sion (NVivo 12).nvpx
~/Downloads

TEST.nvpx
~/Documents

Untitled.nvpx
~/Documents

Sample Project.nvp.nvpx
~/Downloads

Learn about using NVivo
Access resources to help you get started with NVivo

Access support resources
Find answers in the QSR forum and FAQs or contact Customer Support

☑ Show this window when NVivo launches

Open Another Project...   Open

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Anatomy of NVivo: Projects on Windows

Toolbar to access functions

The window that will open the files, queries, etc. You can annotate documents here.

Menu to access files, nodes, cases, notes, etc.

List of nodes, files, etc.

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Anatomy of NVivo: Projects on Macs
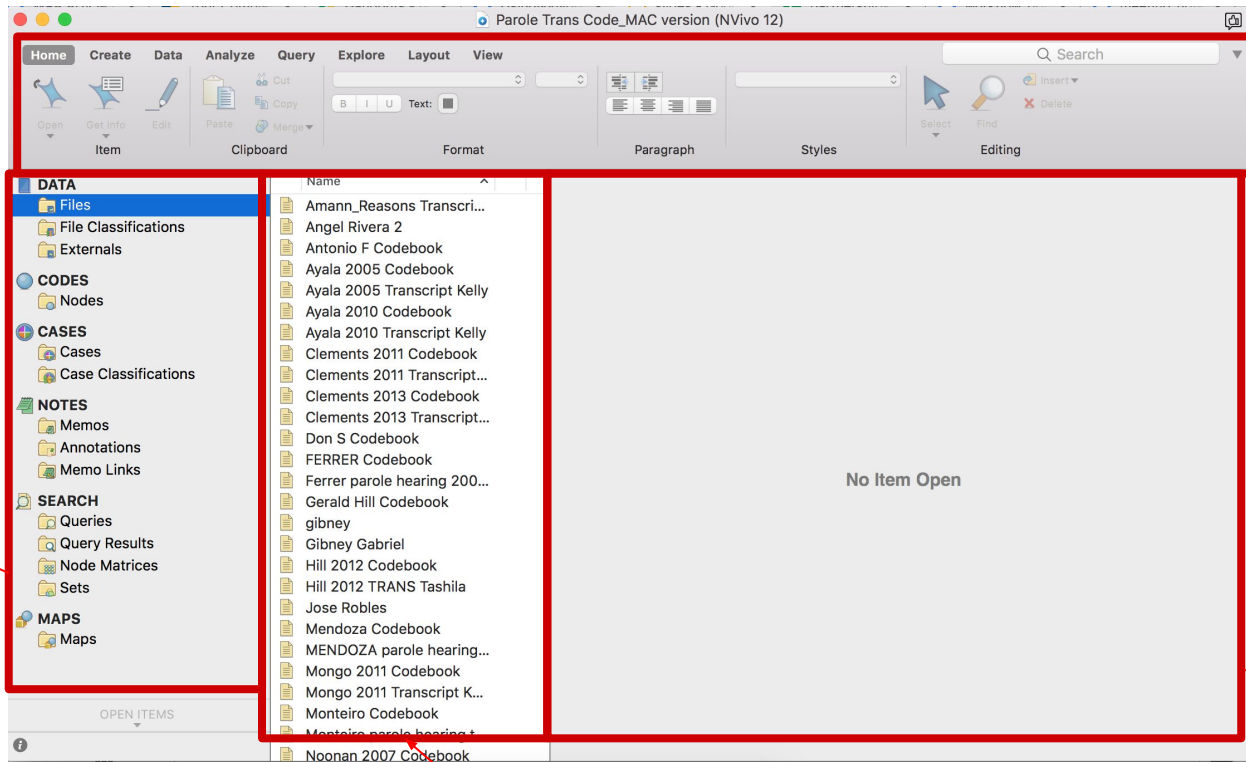
Toolbar to access functions

Menu to access files, nodes, cases, notes, etc.

The window that will open the files, queries, etc. You can annotate documents here.

List of nodes, files, etc.

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Data

The "Data" in NVivo are all the research materials you are using (scholarly articles, transcriptions, newspapers, research notes, etc.).

DATA   Hide
📁 Files
📁 File Classifications
📁 Externals

Navigation View
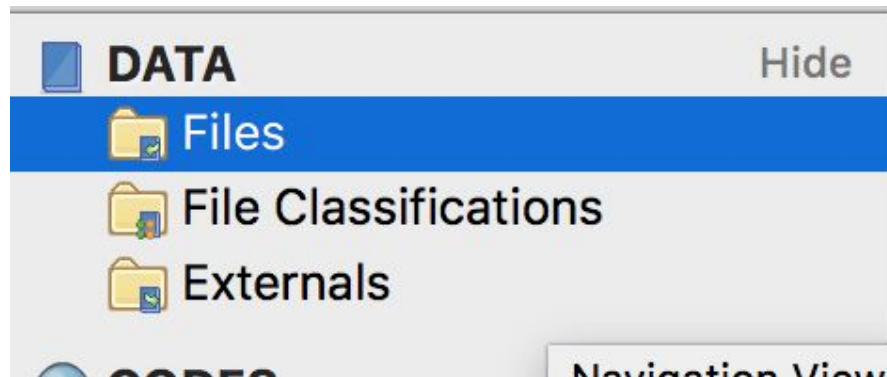
"Files" will be where you can access all the research materials you have imported into this project.

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Important Reminders

NVivo can import all types of files, including .docx, .pdf, .doc, .csv, .png, .jpeg, .txt, video/audio files, and more.

You should always **save** your original documents on your local computer or in cloud storage, even if these documents are imported into NVivo. NVivo can store documents, but it is more of an organization and analysis tool, rather than a storage option.

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Codes and Nodes

The list of nodes you will use to code your files. The "nodes" folder will be empty until you add your own! You can add nodes and sub-nodes

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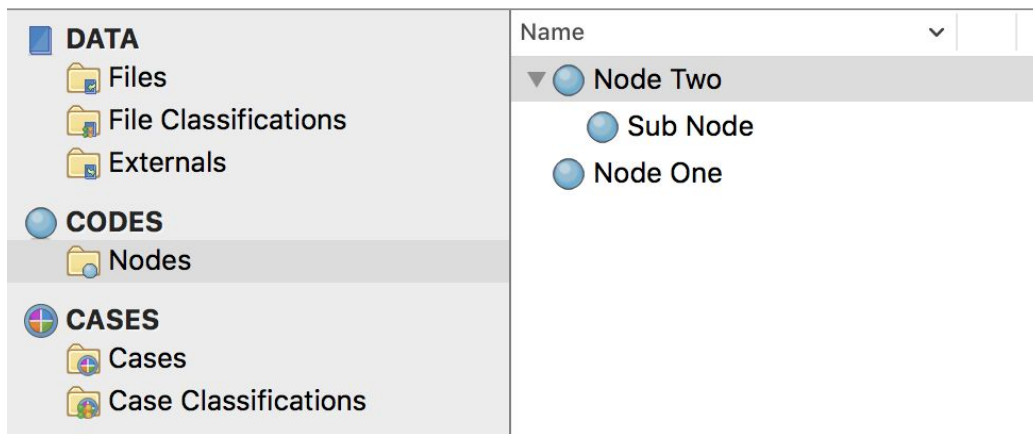
Creating Nodes (Windows)

1. Go to "Create" in the toolbar
2. Click "Node"
3. Your new node will pop up and ask for a name and description
   a. To add a *subnode*, follow the same steps, but click on the original node where you want to add the subnode

Feel free to ask questions at any point during the presentation!
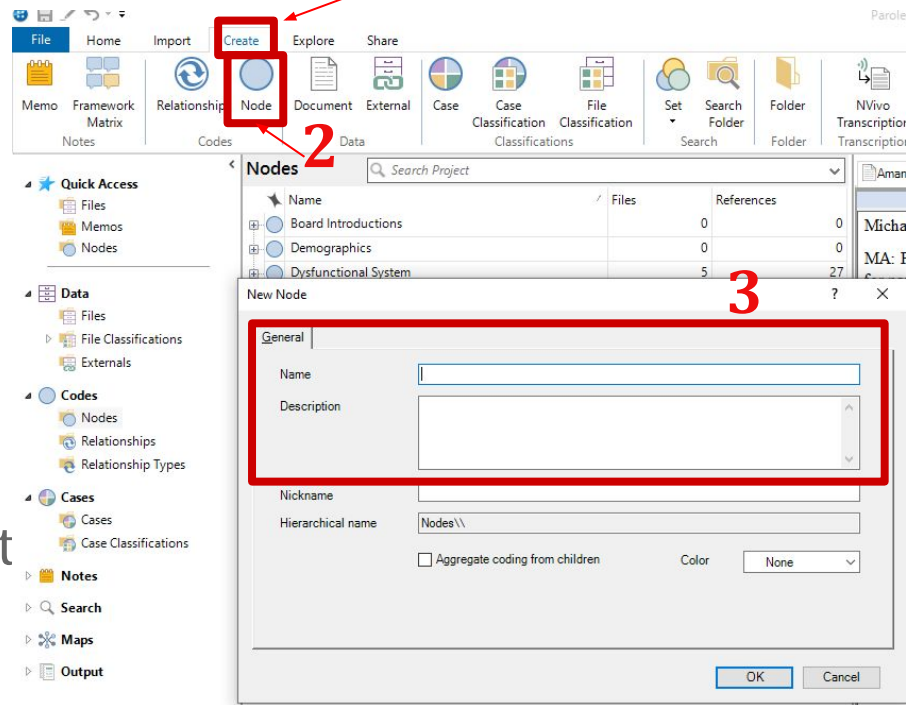
Creating Nodes (Macs)

1. Go to "Create" in the toolbar
2. Click "Node"
3. Your new node will pop up and ask for a name and description
   a. To add a *subnode*, follow the same steps, but click on the original node where you want to add the subnode
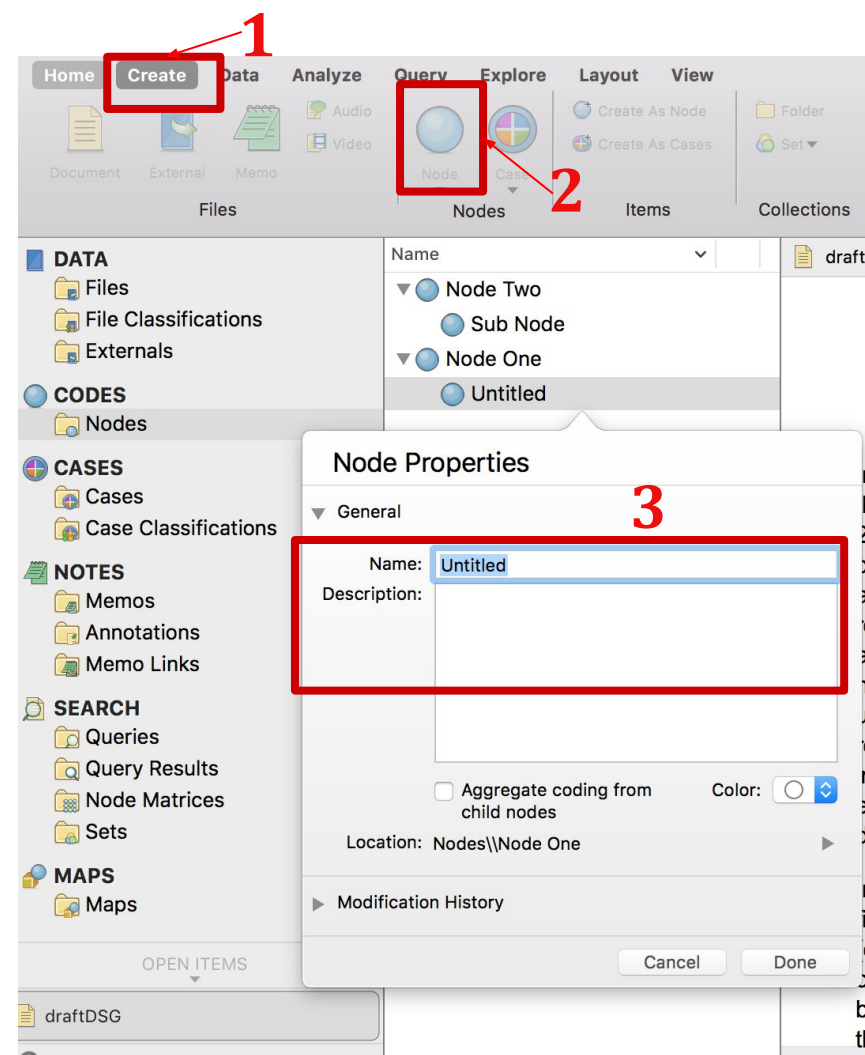
Coding Files/Documents (Windows)

1. Open the file you would like to annotate
2. Highlight the text you want to code
3. Drag and drop the selection onto a node
4. Alternatively, you can Command/Control+click and select "Code"
5. You can also add new nodes/cases as you annotate

Feel free to ask questions at any point during the presentation!
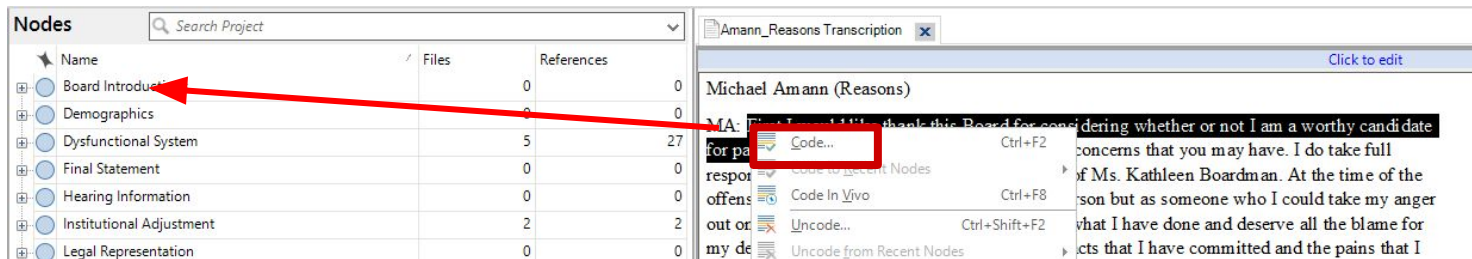
Coding Files/Documents (Macs)

1. Open the file you would like to annotate
2. Highlight the text you want to code
3. Command/Control+click and go to "Code Selection"
4. Click "At Existing Nodes or Cases"
   a. Once you use nodes, the nodes will show up when you click "Code Selection"
   b. You can also add new nodes/cases as you annotate

Feel free to ask questions at any point during the presentation!
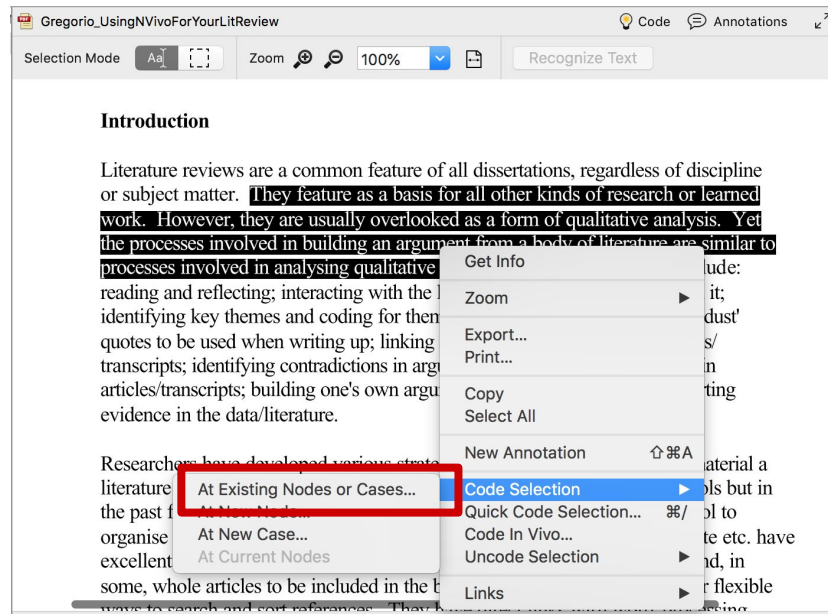
View Your Codes (Windows)

1. Go to "Document" in the toolbar
2. Click "Highlight" then "All Coding"
3. Click "Coding Stripes" and "All Coding" to see the code names and where they appear in the document.
   a. If you have tagged an entire file as a "case," everything will be highlighted. Simply choose "Coding for Selected Items"

Coding stripes (shows what codes appear where in the doc)

The document you are coding and annotations

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View Your Codes (Macs)

1. Go to "View" in the toolbar
2. Click "Highlight" then "Coding for All Nodes"
3. Click "Coding Stripes" and "All Nodes Coding" to see the code names and where they appear in the document.
   a. If you have tagged an entire file as a "case," everything will be highlighted. Simply choose "Coding for Selected Items."

Coding stripes (shows what codes appear where in the doc)

Your document you are coding and annotation (yellow = codes, blue = annotations)

Feel free to ask questions at any point during the presentation!

Annotating Files (Windows)

To annotate (comment), follow the same steps as coding except click "New Annotation" instead after you highlight and Command/Control click. Find all your annotations in the "Notes/Annotations" section in the left menu.

List of annotations

Where you can find all your annotations listed

The text from the document you highlighted and are annotating

Your annotation

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Annotating Files (Macs)

To annotate (comment), follow the same steps as coding except instead click "New Annotation" after you highlight and Command/Control+click. Find all your annotations in the "Notes/Annotations" section in the left menu.

Where you can find all your annotations listed
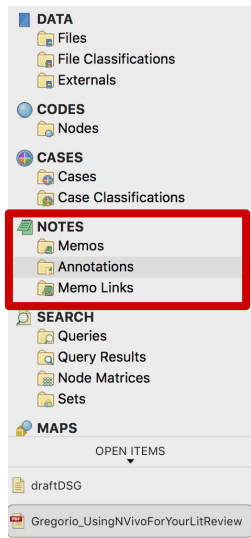
List of annotations

The text from the document you highlighted and are annotating
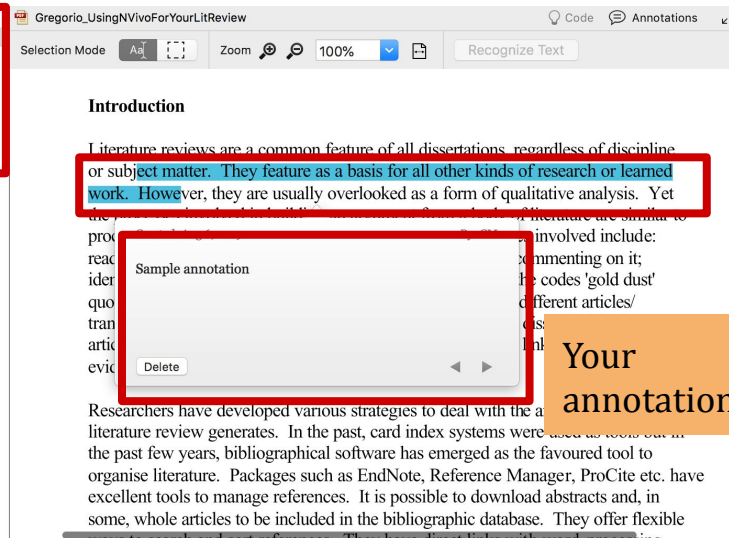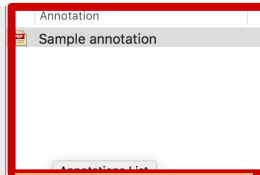
Your annotation

Feel free to ask questions at any point during the presentation!
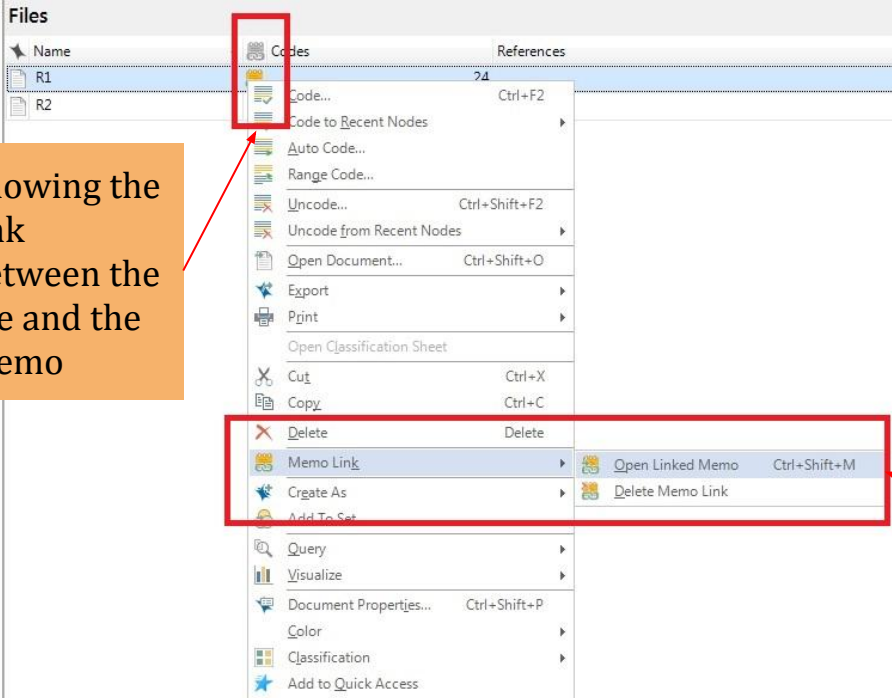
Memos (Windows)

- Memos are more extended write-ups of your analytical insights
- They can stand alone, but also be linked
- "Memo link": linking memo to a particular file, case, or node

Option to link the memo to a node

Menu where memos are located

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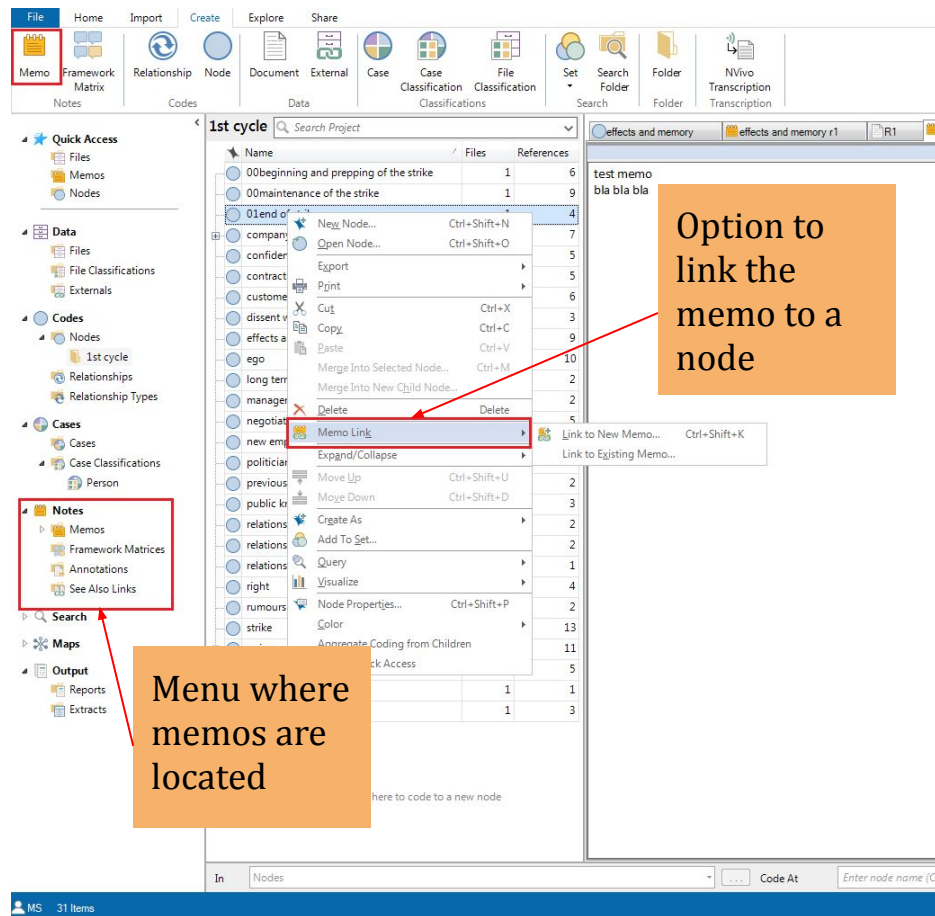
Memo Links (Windows)

Showing the link between the file and the memo

Accessing the memo from the file

Feel free to ask questions at any point during the presentation!

Memos and Memo Links (Macs)

Navigating memo creation

Menu where memos are located

Option to link the memo to a node

Showing the link between the file and the memo

Accessing the memo from the file

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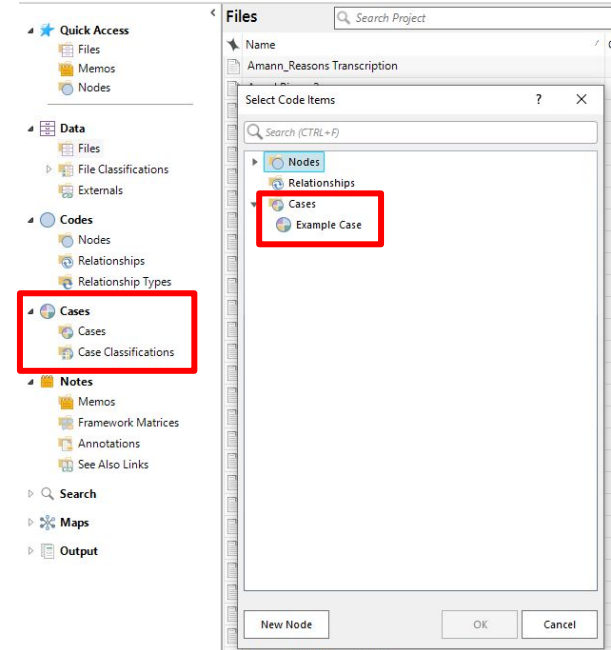*Feel free to ask questions at any point during the presentation!*
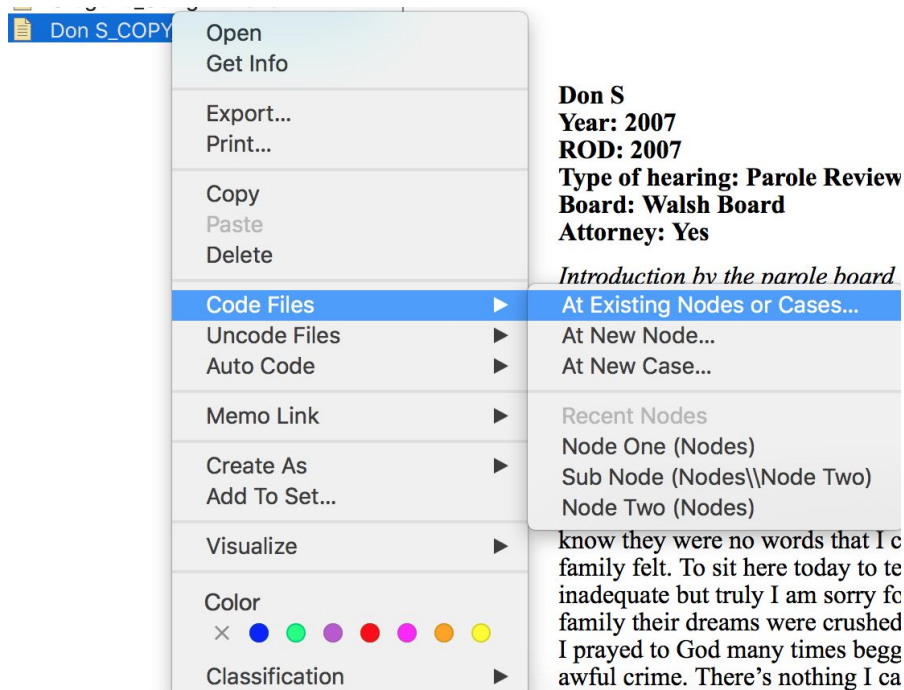
Cases (Windows)

Cases are the types of research texts in your project; they can be organized based on your selections. "**They might represent people, places, events, organizations or other entities that you want to analyze and compare**." For example, if you have several transcripts from different trials, but want to categorize the type of trial for each text, you would use cases to do so.

-"About Cases", NVivo

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Cases (Macs)

To add a "case" to a file, it's the same method as adding a node, except you choose the "Cases" folder and the proper case.

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Querying

Querying, or asking something from your data, in NVivo provides multiple ways to explore both your codes and your texts.

- **Word Frequency**: Counts the number of times words (with stopwords removed) appear in one or more files
- **Coding**: Shows the number of codes, the text that was coded, and the files
- **Crosstab**: Cross-references nodes and case classifications. For example, you might want to know how often a particular node appears in both scholarly articles and your primary texts.

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Word Frequency Example (Windows)

"Query" can be found in the "Explore" Tab

Alternatively, you can Command/Control+click on a file and select "Query"

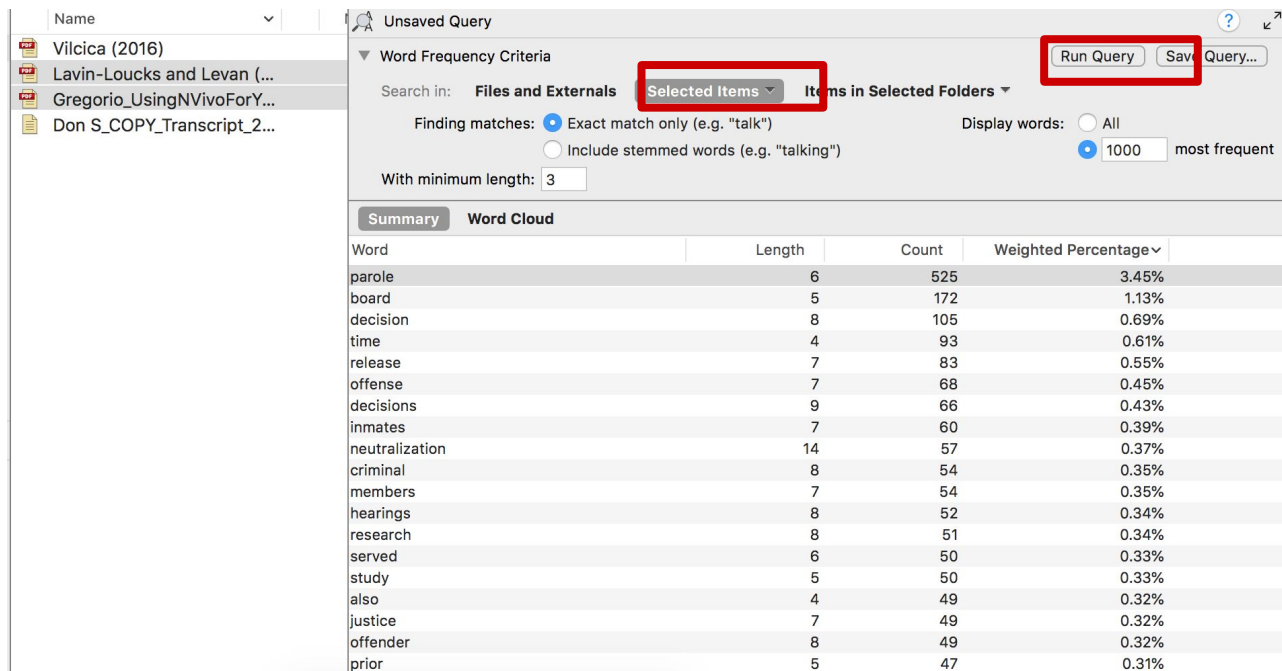To query multiple items, select the items you would like to query in the "Selected Items" tab and then click "Run Query"

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Word Frequency Example (Mac)

Select the items you would like to query in the "Selected Items" tab and then click "Run Query"

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Exploring Codes (Windows)

- **Chart**: bar chart of the number of times codes were used in a file

- **Hierarchy Chart**: visualizes number of codes used in a file

- **Explore Diagram**: explore the codes used in a file

- **Comparison Diagram**: compare the nodes used in multiple files

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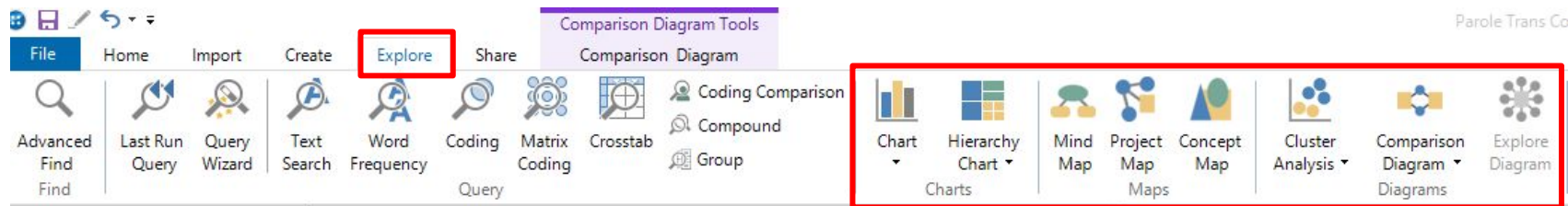
Exploring Codes (Macs)

Comparison diagram example

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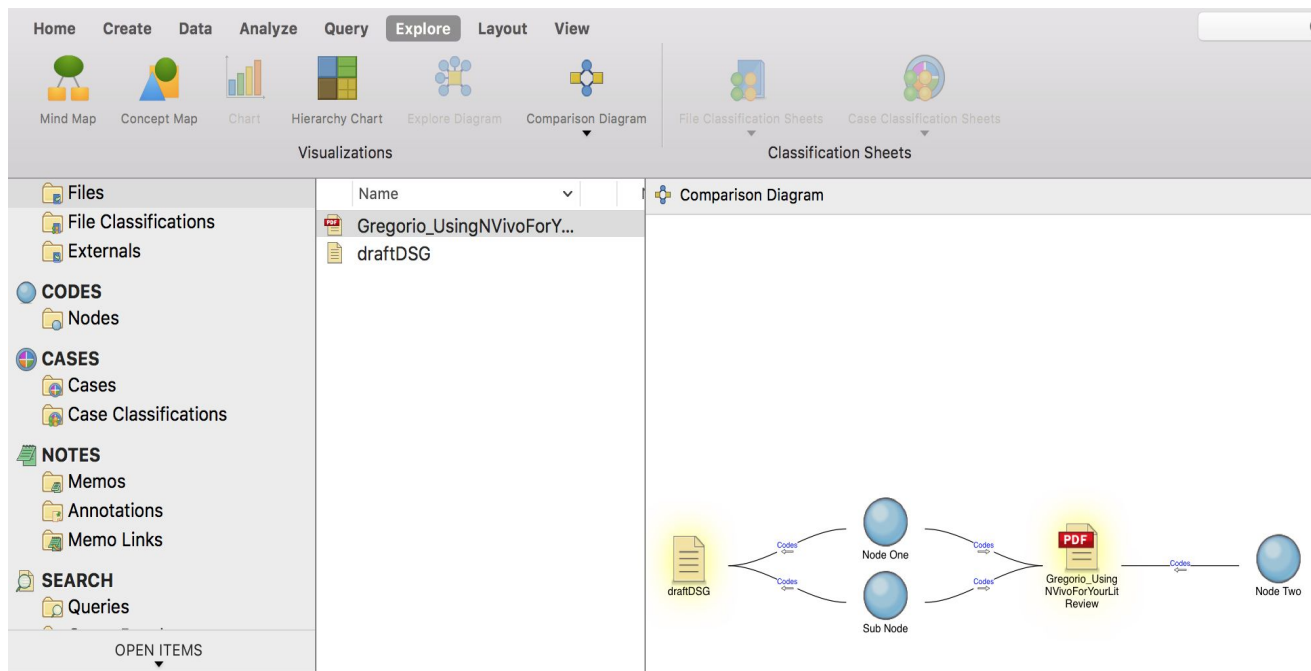
Qualitative Coding is about *Interpretation* and *Arguments*

The nodes you create are themselves **arguments**; you are choosing what information you value and want to extract from the transcripts

Feel free to ask questions at any point during the presentation!

Demonstration of Tool

Using our own examples, we will quickly show you how to input the documents, code, and visualize your codes.

We will do this both for interviews and social media examples.

You will be doing this on your own in a minute, so take this time to watch and ask questions!

Feel free to ask questions at any point during the presentation!

Group Discussion

- What did you find surprising or interesting in your exploration of the tool?
- What are some challenges you faced? How might you work with these as you move forward?
- How else might you use NVivo in your future studies/career?

Feel free to ask questions at any point during the presentation!

Thank you!

If you have any questions, contact us at:

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Slides, handouts, and data available at
http://bit.ly/diti-spring2021-marshall
Office hours for help with NVivo: **https://calendly.com/diti-nu/**

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