Introduction to Nvivo:
Text Analysis for Research Projects

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NULab for Texts, Maps, and Networks

Group Discussion

When you're reading for research, school, or professional reasons, how do you **annotate** and keep notes about what you are reading and learning?

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Workshop Agenda

- Workshop objectives
- Sample of NVivo project
- What is NVivo?
- Important vocabulary and functions
- NVivo demonstration
- Hands-on activity

Slides & handouts at **http://bit.ly/crim_capstone_singer**

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Workshop Objectives

- Understand what NVivo is as a research tool and what it can do
- Learn the differences between NVivo file types and why knowing this is important
- Learn important Nvivo-specific vocabulary to aid independent research

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Example: NAME OF SIMON'S PROJECT

Using NVivo, Dr. Singer + his collaborators are writing a book **about what**

They use NVivo projects to store and code/annotate important resources, texts, and ideas.

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What is NVivo?

NVivo is a **text analysis** and **research organization** software that is available through MyNEU. NVivo provides methods for 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 researchearch materials, such as survey results, interviews, audio recording, 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

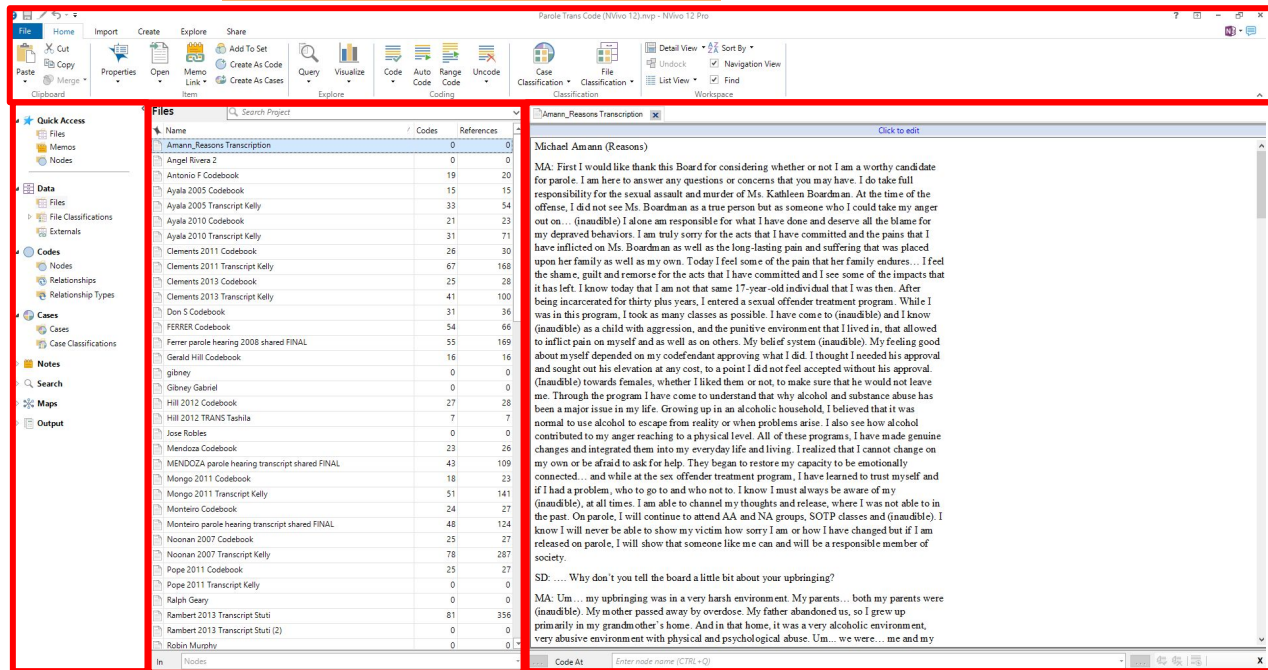Northeastern University
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Important Reminders

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 a useful organization and analysis tool, rather than a storage option.

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NVivo Vocabulary

Full definitions available on the handout

- **Data**: your research documents & files
- **Codes**: the ways to annotate the themes/concepts in your research.
- **Nodes**: the themes/concepts that are user-created
- **Relationships**: coding connections between two data item

- **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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Anatomy of NVivo: Opening on Windows

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

The recent projects you opened

Open another project that is not recent

NVivo 12 Pro

Recent Projects

Parole Transcription Code

NVivo Experimentation

📁 **Open Other Project**

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

✦ **Blank Project**

✦ **Sample Project**

Learn and Connect

Research Ready
to be best in any point of view. Research search for examine in facts or prin
Get your research ready for NVivo

Getting Started
-START-
NVivo quick steps tutorial

Customer Success Center
Courses, resources & support

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Anatomy of NVivo: Opening on Macs

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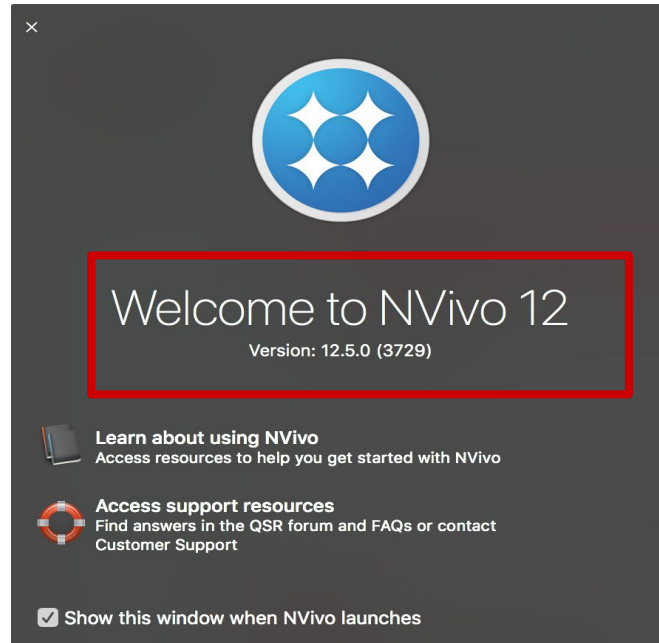
Create new project
Create a new project

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

The recent projects you opened

Welcome to NVivo 12

Version: 12.5.0 (3729)

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

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

Open another project that is not recent

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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
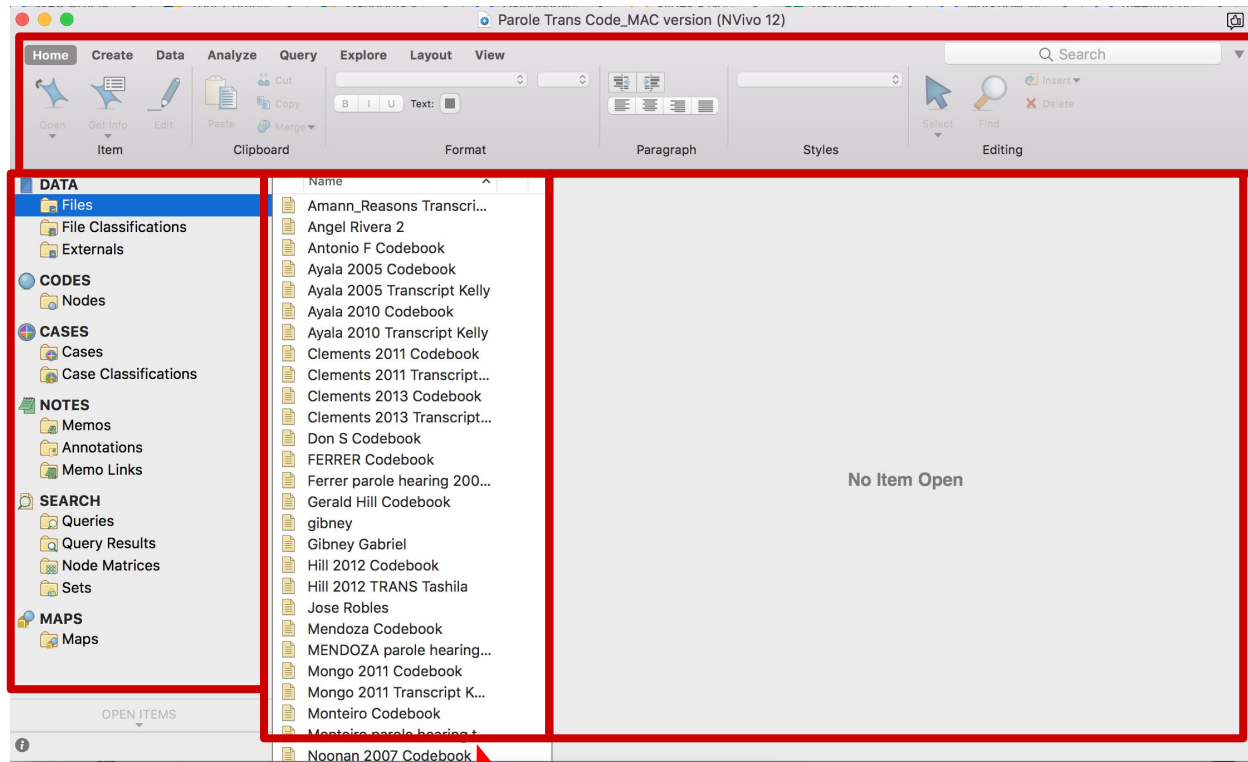
Toolbar to access functions

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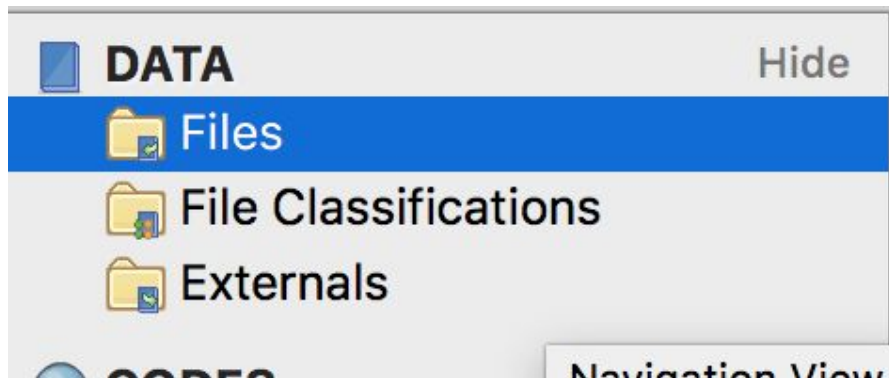
On "Files" will be where you can access all the research materials you have imported into this project.

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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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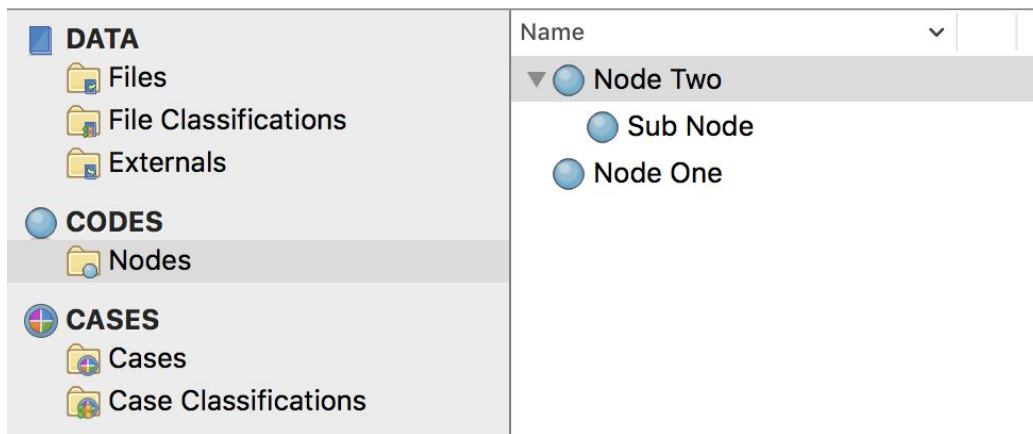
Creating Nodes (Windows)

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!
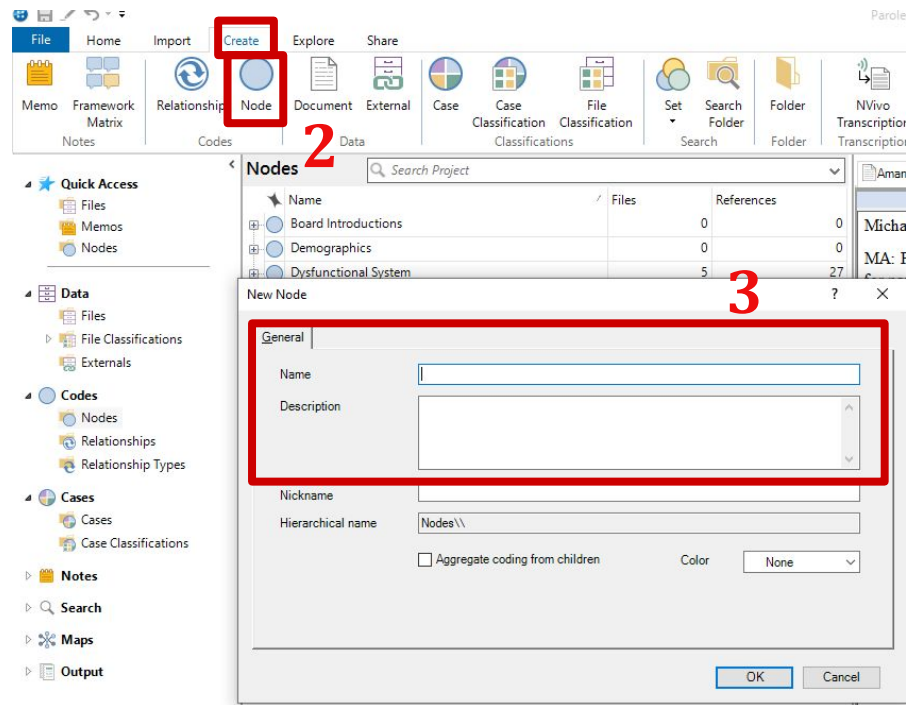
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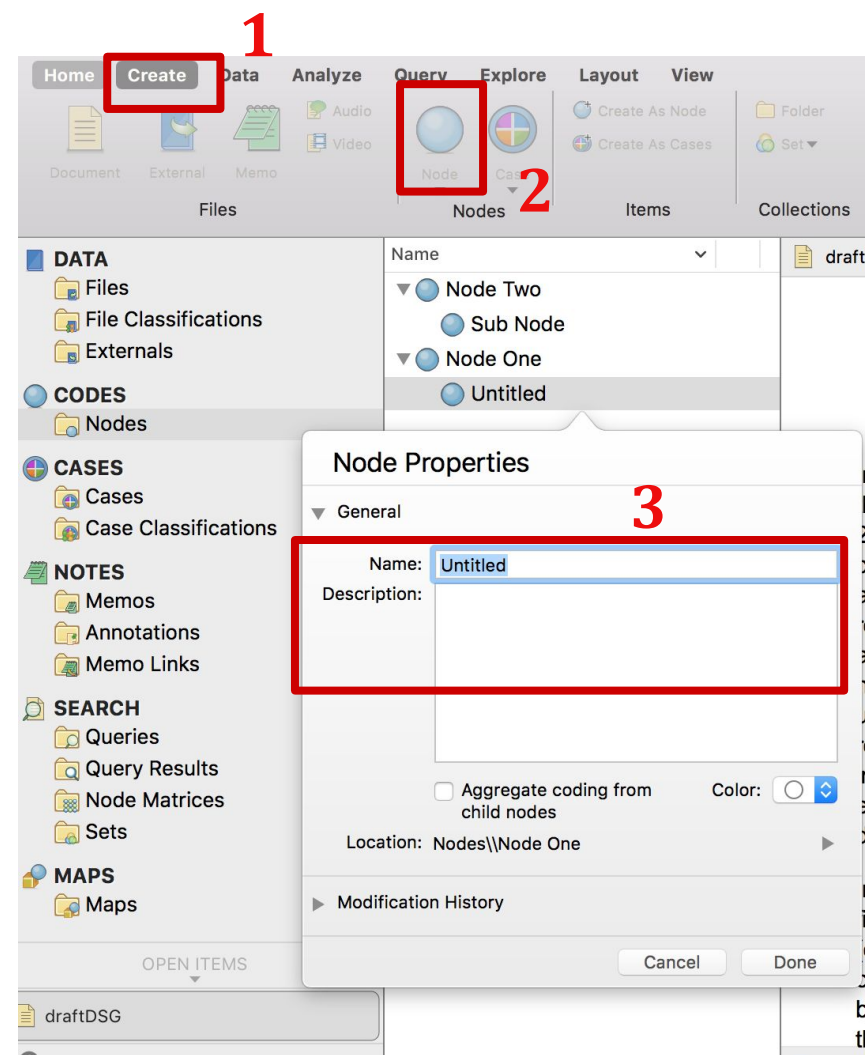
Coding Files/Documents (Windows)

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 right-click and select "Code"
5. You can also add new nodes/cases as you annotate.

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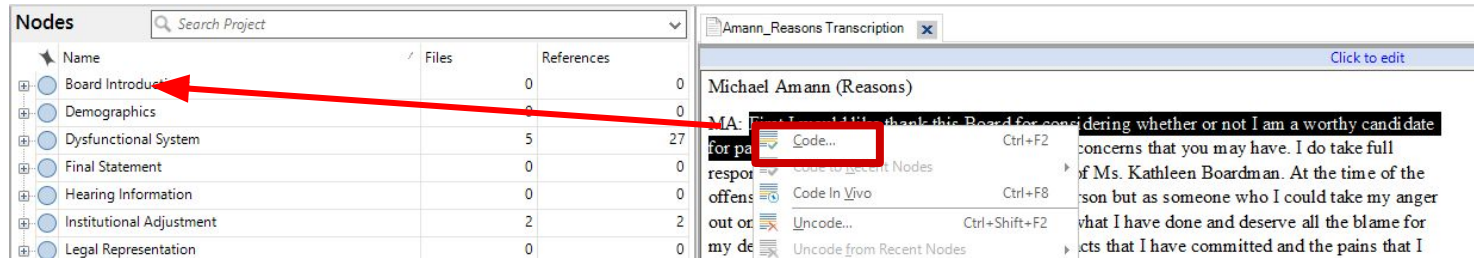
Coding Files/Documents (Macs)

1. Open the file you would like to annotate
2. Highlight the text you want to code
3. Right 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!
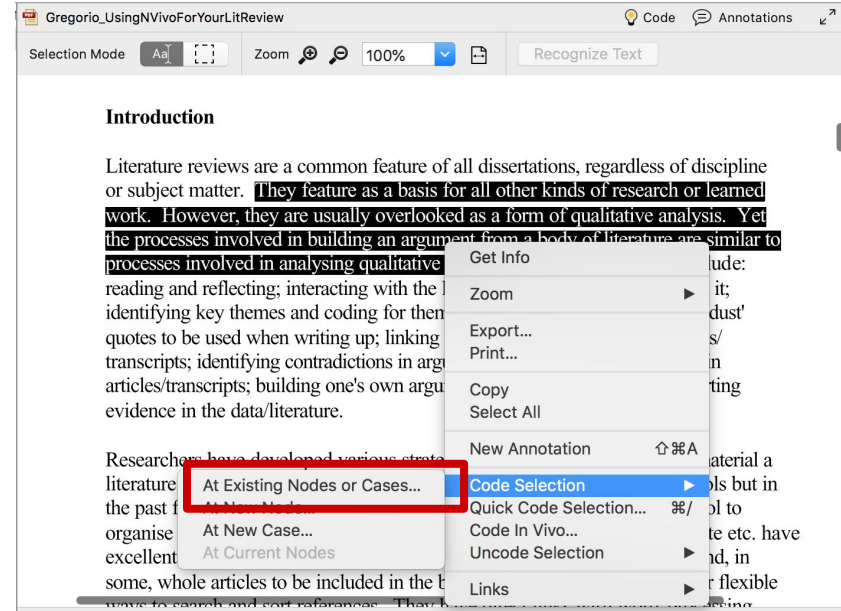
View Your Codes (Windows)

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

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

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 instead click "New Annotation" after you highlight and right click. Find all your annotations in the "Notes/Annotations" section in the left menu

List of annotations

The text from the document you highlighted and are annotating

Where you can find all your annotations listed

Your annotation

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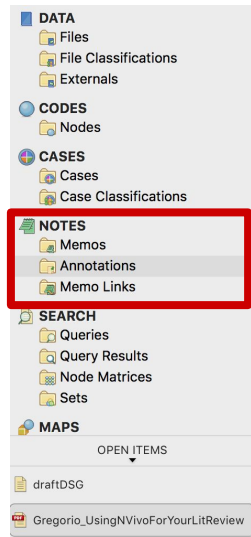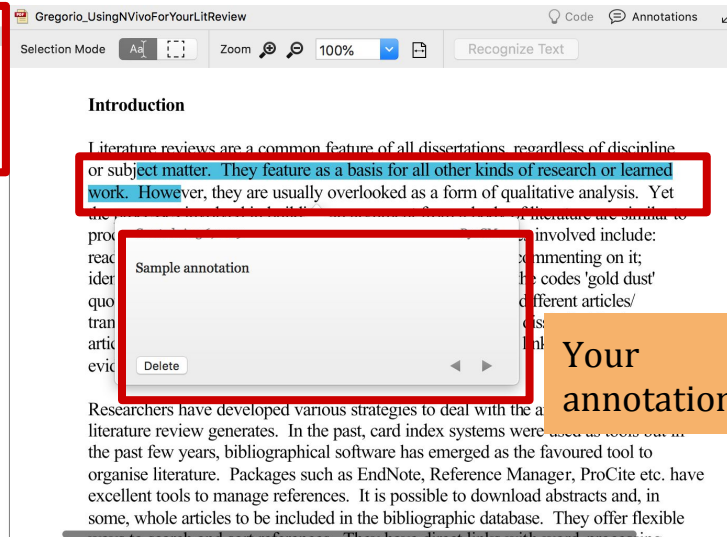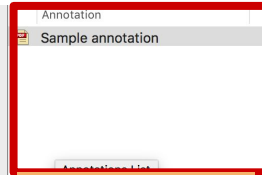
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Where you can find all your annotations listed

List of annotations

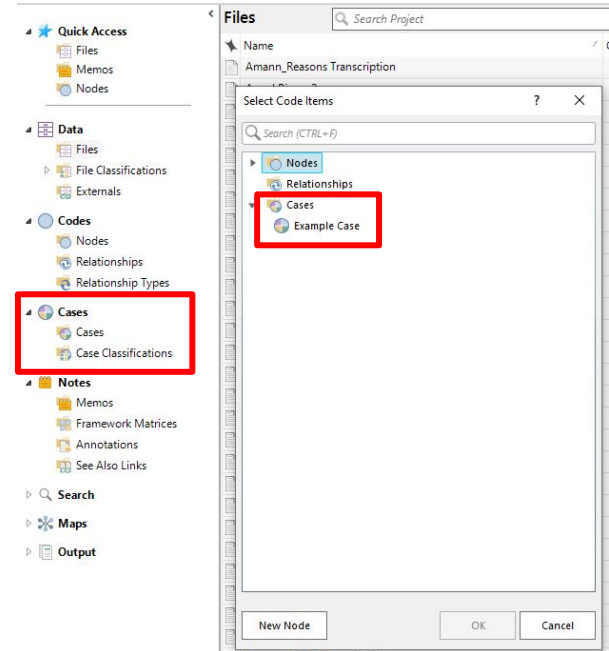The text from the document you highlighted and are annotating

Your annotation

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

Cases (Windows)

Cases are the types of research texts in your project and can be organized based on the user's choice. 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.

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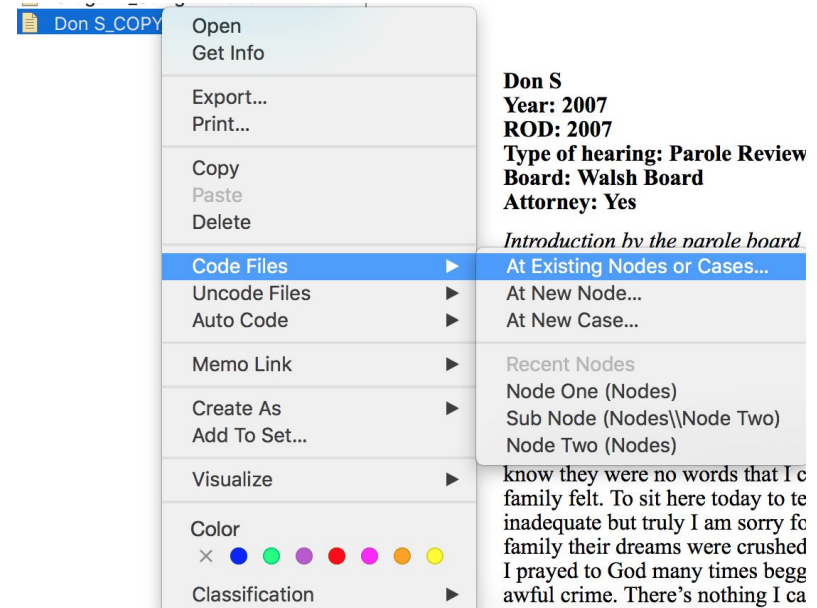
To add a "case" to a file, it's the same method as adding a node, except you choose the "Cases" folder and the proper case.

Don S_COPY

| Open |
| Get Info |
| Export... |
| Print... |
| Copy |
| Paste |
| Delete |
| Code Files ▶ |
| Uncode Files ▶ |
| Auto Code ▶ |
| Memo Link ▶ |
| Create As ▶ |
| Add To Set... |
| Visualize ▶ |
| Color |
| Classification ▶ |

At Existing Nodes or Cases...
At New Node...
At New Case...

Recent Nodes
Node One (Nodes)
Sub Node (Nodes\\Node Two)
Node Two (Nodes)

Don S
Year: 2007
ROD: 2007
Type of hearing: Parole Review
Board: Walsh Board
Attorney: Yes

Introduction by the parole board

know they were no words that I c
family felt. To sit here today to te
inadequate but truly I am sorry fo
family their dreams were crushed
I prayed to God many times begg
awful crime. There's nothing I ca

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Query (Macs)

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

- **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 reference 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 right click on a file and select Query

To querymultiple 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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Cross Tab Example

Select the nodes you would like to cross reference with the cases or attributes, then click "Run Query."

Your results

Selected nodes (click the plus sign)

Selected cases (click the plus sign)

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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

Feel free to ask questions at any point during the presentation!
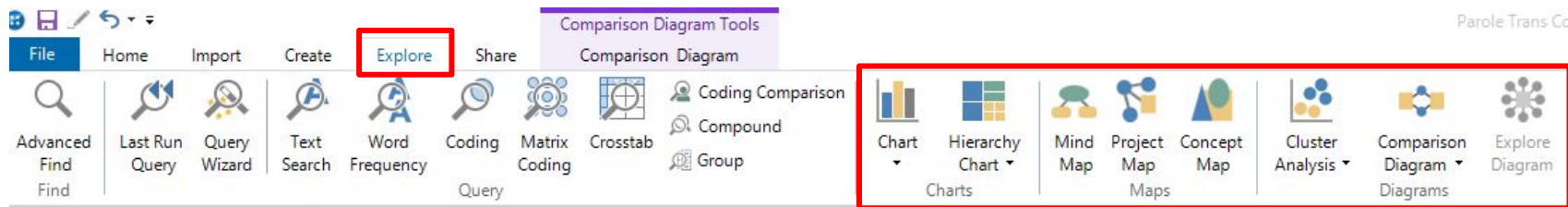
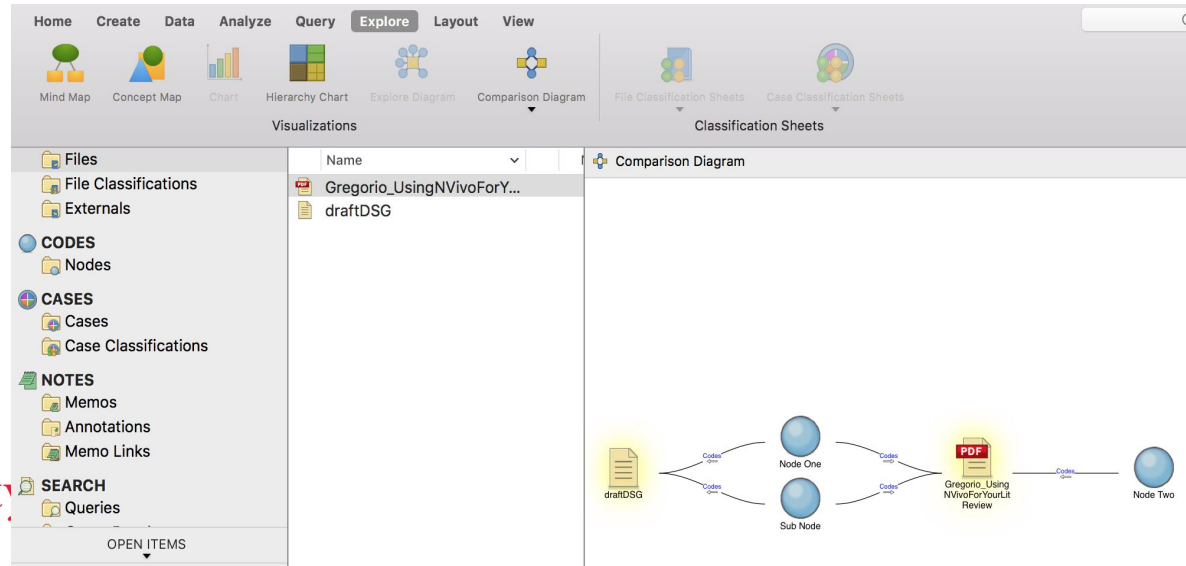# Exploring Codes (Macs)

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

Comparison diagram example

NVivo is <u>NOT</u> crossplatform 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 impact which projects can be opened on which platform

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

Export Your Projects

Since there is a cross-platform problem, **export your projects as .qdpx** files when submitting assignments so they can be opened on both Macs and Windows!

MACS
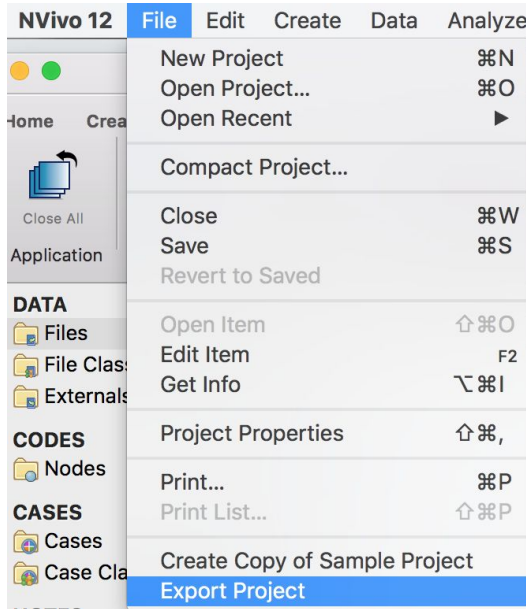
WINDOWS
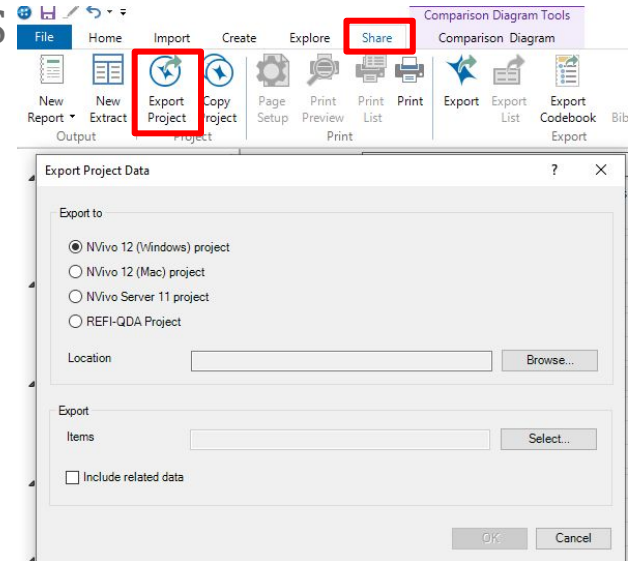
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How to Open .QDPX files

- When the file is downloaded, right click the file, click Open With and choose "NVivo"
- If NVivo is not an option, open NVivo, click Open Project, and navigate to the .qpdx file
- When you go to open the file, you will be prompted to create a new project. Make sure to title the project a memorable name!

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Demonstration of Tool

Using the data (the transcript and the articles) we sent you, we will quickly show you how to input the documents, code, and visualize your codes.

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!

Interpreting Results

This is **really** important. While using particular tools may be easy, the most important part of using most tools is thinking about how to actually analyze these results.

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Your Turn

Using the data (the articles and transcript) emailed to you, practice:

- inputting the documents
- creating nodes/cases
- coding the documents
- visualizing your codes

Find these slides at **http://bit.ly/crim_capstone_singer**

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Post-Exploration 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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Cara Marta Messina
Digital Teaching Integration
DTI Assistant Director
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