



STATISTICS AND METHODS

SAM LAB

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Introduction to NVivo

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What is NVivo?

- Software program designed to help organize and analyze qualitative data
- Used for text, audio, video, and images
- Available for Windows and Mac



Qualitative Research

A brief overview

Data

- Categorical and descriptive
 - Text-based but can include audio and images.
-

Analysis

- Thematic
 - Content
-

Coding

- Code: summarizes portions of the data

NVivo Functions

- **Organization**
 - Folders and subfolders
 - Assigning attributes to participants
- **Coding**
- **Multiple transcripts at once**
- **Allows for editing**
- **Transcribe within program**
- **Search function**

NVivo Term	Description
Annotations	Text linked to specific content in a source
Attributes	Aspects of a classification
Cases	Virtual container that represents your participants
Classifications	A way to add descriptive information to your sources and cases
Codes	A virtual container that lets you collect content across sources to group related material together
Coding	The action of assigning source content to a node or case
Files	Term for your research materials
Nodes	Collection of references from your files about a specific theme, topic, concept, idea or experience.

¹ QSR International (n.d.).

Home Page

The image shows a software interface with a sidebar on the left and a main workspace on the right. The sidebar contains several categories, each with a red arrow pointing to it:

- DATA**: A category containing folders like 'Files', 'Area and Township', 'Interviews', 'Literature', 'News Articles', 'Social Media', 'Survey', 'File Classifications', and 'Externals'. A red arrow points to the 'Name' column header in the table below.
- CODES**: A category containing a 'Nodes' folder. A red arrow points to the '0 item selected' status text.
- CASES**: A category containing folders like 'Cases', 'People', 'Places', and 'Case Classifications'. A red arrow points to the 'DATA' category.
- NOTES**: A category containing folders like 'Memos', 'Annotations', and 'Memo Links'. A red arrow points to the 'CASES' category.
- SEARCH**: A category containing folders like 'Queries', 'Query Results', 'Node Matrices', and 'Sets'. A red arrow points to the 'NOTES' category.

The main workspace displays a table with the following columns: Name, Files, Referen..., Created On, Created..., Modified On, Modified By, and Color. The table is currently empty, and the text '0 item selected' is displayed above it. The text 'No Item Open' is displayed in the center of the workspace.

The top of the interface features a menu bar with options: Home, Create, Data, Analyze, Query, Explore, Layout, and View. Below the menu bar are various toolbars for editing and formatting, including a search bar, a text input field, and icons for Copy, Paste, Cut, and Merge.

Importing Data

The screenshot displays the NVivo software interface. The top menu bar includes 'Home', 'Create', 'Data', 'Analyze', 'Query', 'Explore', 'Layout', and 'View'. The 'Data' menu is highlighted with a red circle. Below the menu bar are icons for 'Project', 'Documents', 'PDFs', 'Dataset', 'Picture', 'NCapture', 'Codebook', 'OneNote Data', 'Bibliographic Data', 'Classification Sheets', 'Attribute Values', 'Codebook', 'Maps', 'List', and 'Classification Sheets'. A search bar is located on the right side of the menu bar.

The main area shows a table of data items. The table has columns for 'Name', 'Nodes', 'Referen...', 'Created On', 'Created By', 'Modified On', 'Modified By', and 'Color'. The table contains two rows of data:

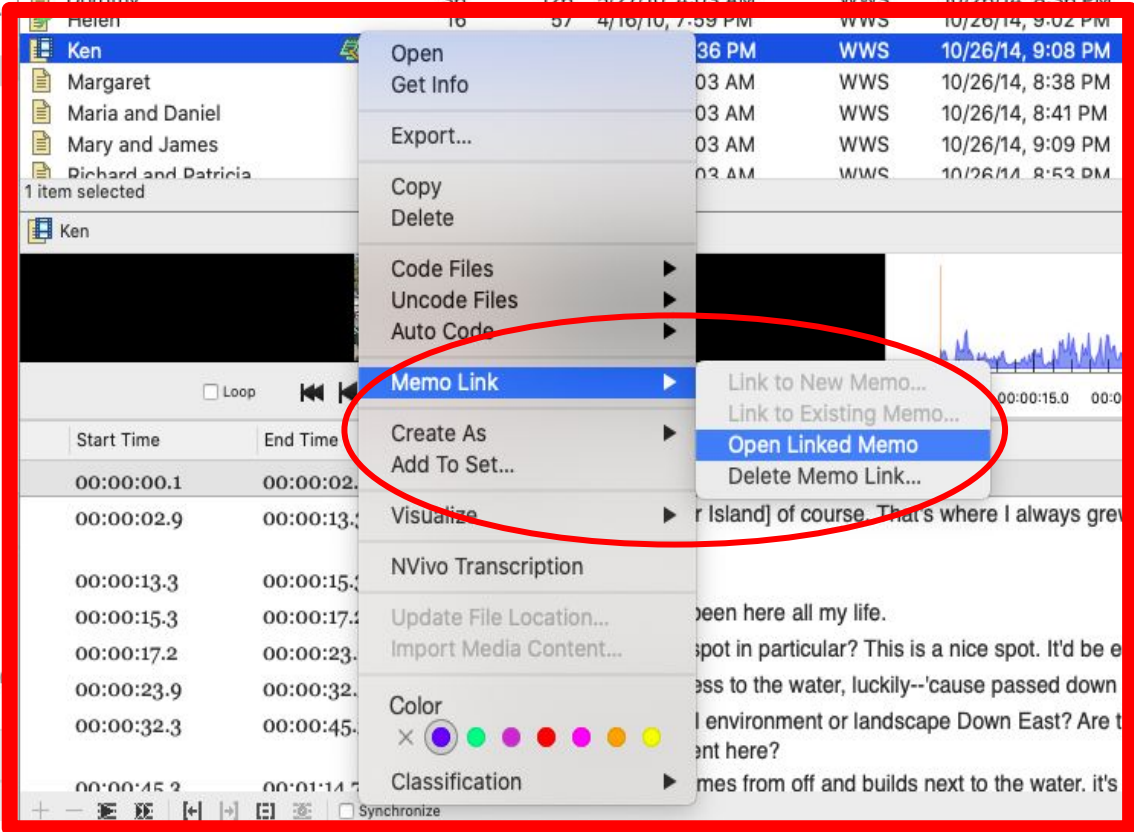
Name	Nodes	Referen...	Created On	Created By	Modified On	Modified By	Color
About the NVivo for Mac...	0	0	8/9/15, 9:17 PM	WWS	8/9/15, 9:17 PM	WWS	
Overview of Sample Proje...	0	0	7/21/10, 12:37 PM	WWS	11/9/15, 8:40 PM	WWS	











Below the table, it says '0 item selected'. At the bottom of the main area, it says 'No Item Open'. At the bottom left, there is a button labeled 'OPEN ITEMS'.

- DATA**
 - Files
 - Area and Township
 - Aerial
 - Area and Townshi..
 - GIS output
 - Interviews
 - Literature
 - News Articles
 - Social Media
 - Survey
 - File Classifications
 - Externals
- CODES**
 - Nodes
- CASES**
 - Cases
 - People
 - Places
 - Case Classifications
- NOTES**
 - Memos
 - Literature
 - Progress Reports
 - Project Administratio
 - Team Memos


Name	Nodes	Referen...	Created On	Created By	Modified On	Modified By	Color
Barbara	43	200	5/27/10, 4:03 AM	WWS	10/26/14, 8:34 PM	WWS	Green
Betty and Paul	16	46	5/26/10, 8:49 PM	WWS	10/22/14, 10:05 PM	WWS	Purple
Charles	32	133	5/27/10, 4:03 AM	WWS	10/26/14, 9:09 PM	WWS	Yellow
Dorothy	36	126	5/27/10, 4:03 AM	WWS	10/26/14, 8:36 PM	WWS	Purple
Helen	16	87	4/18/10, 7:59 PM	WWS	10/26/14, 9:02 PM	WWS	Purple
Ken				WWS	10/26/14, 9:08 PM	WWS	Purple
Margaret				WWS	10/26/14, 8:38 PM	WWS	Purple
Maria and Daniel				WWS	10/26/14, 8:41 PM	WWS	Yellow
Mary and James				WWS	10/26/14, 9:09 PM	WWS	Purple
Richard and Patricia				WWS	10/26/14, 8:53 PM	WWS	Purple




Start Time	End Time	Speaker
00:00:00.1	00:00:02.9	Henry
00:00:02.9	00:00:13.3	Ken
00:00:13.3	00:00:15.3	Henry
00:00:15.3	00:00:17.2	Ken
00:00:17.2	00:00:23.9	Henry
00:00:23.9	00:00:32.3	Ken
00:00:32.3	00:00:45.2	Henry
00:00:45.2	00:01:14.5	Ken



Name	Nodes	Referen...	Created On	Created By	Modified On	Modified By	Color
 Barbara	44	201	5/27/10, 4:03 AM	WWS	10/26/14, 8:34 PM	WWS	●
 Betty and Paul	16	46	5/26/10, 8:49 PM	WWS	10/22/14, 10:05 PM	WWS	●
 Charles	32	133	5/27/10, 4:03 AM	WWS	10/26/14, 9:09 PM	WWS	●
 Dorothy	36	126	5/27/10, 4:03 AM	WWS	10/26/14, 8:36 PM	WWS	●
 Helen	16	57	4/16/10, 7:59 PM	WWS	10/26/14, 9:02 PM	WWS	●
 Ken	19	52	5/26/10, 8:36 PM	WWS	10/26/14, 9:08 PM	WWS	●
 Margaret	31	83	5/27/10, 4:03 AM	WWS	10/26/14, 8:38 PM	WWS	●
 Maria and Daniel	37	139	5/27/10, 4:03 AM	WWS	10/26/14, 8:41 PM	WWS	●
 Mary and James	33	111	5/27/10, 4:03 AM	WWS	10/26/14, 9:09 PM	WWS	●
 Richard and Patricia	28	87	5/27/10, 4:03 AM	WWS	10/26/14, 8:52 PM	WWS	●

1 item selected

 Noisy dogs and other field recording challenges

 Code  Annotations Edit 

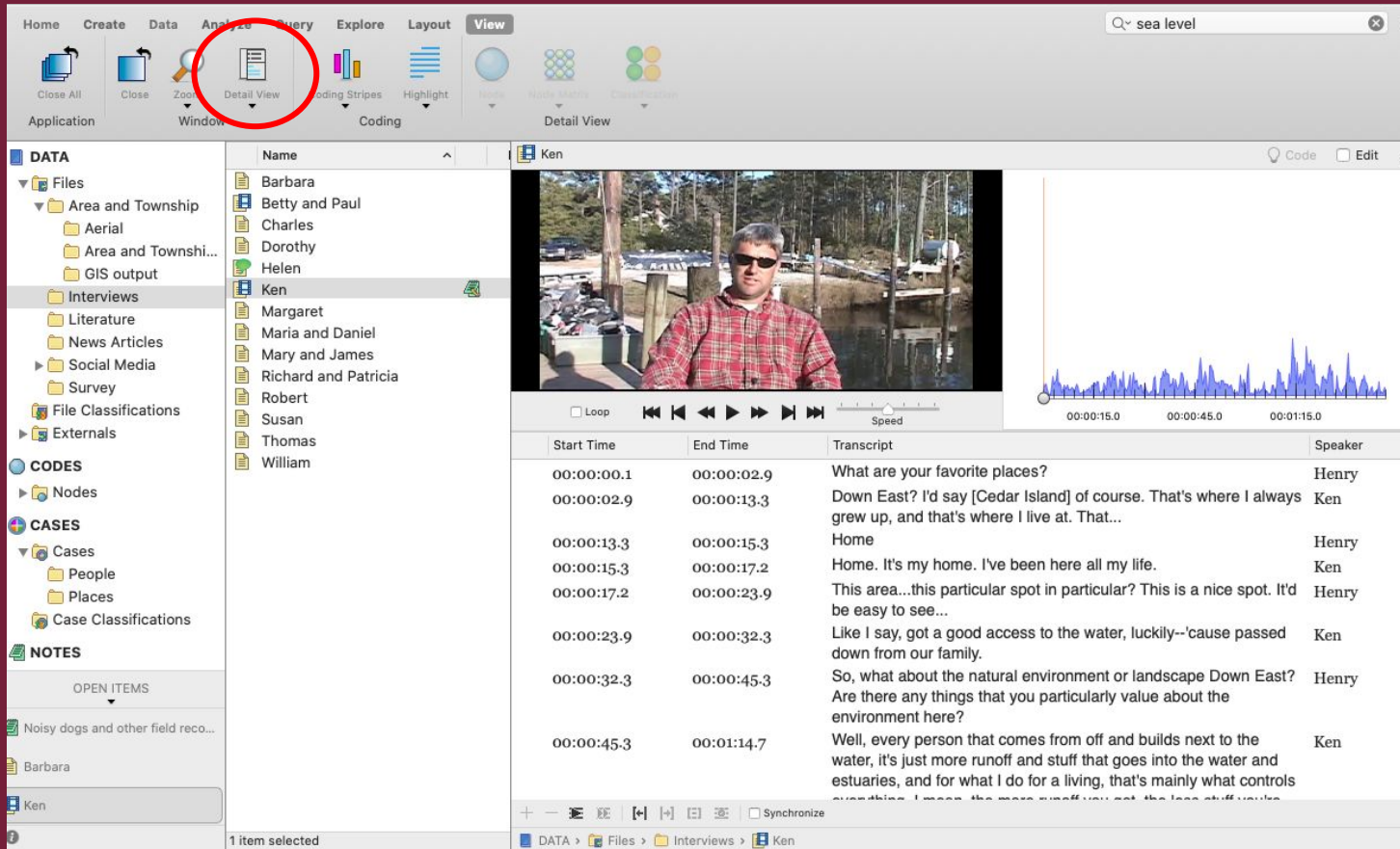
6/28/2010 6:43 PM

Ken's dogs play a noisy role in this video clip, clattering excitedly up and down the wooden-planked dock. Sometimes their noises interfere with the clarity of the recording. Their presence is indicative of both the limitations and advantages of field recordings like the ones we conducted for this project.

On the one hand, when recording in the field--especially outdoors--it is hard to predict what conditions might arise that will affect the quality of the recording. Some recording adjustments can be made on the fly to minimize distractions, but a certain number of auditory and visual intrusions are inevitable. In the face of such unpredictability, some researchers or film producers opt for a more "controlled" interview setting.

On the other hand, recording interviewees 'in situ' endows footage with a kind of "authenticity" not found in a recording studio; after all, this clip not only informs us about Ken, but also provides some insight into the world he inhabits. Moreover, field recording is often the only practical option--it is easier to secure interviewees' participation if one is willing to travel to them, rather than the other way around. Interviewees also tend to be more comfortable on their own turf.

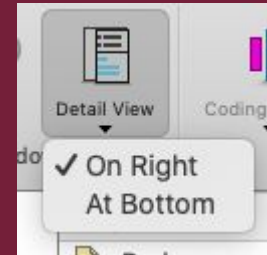
Layout



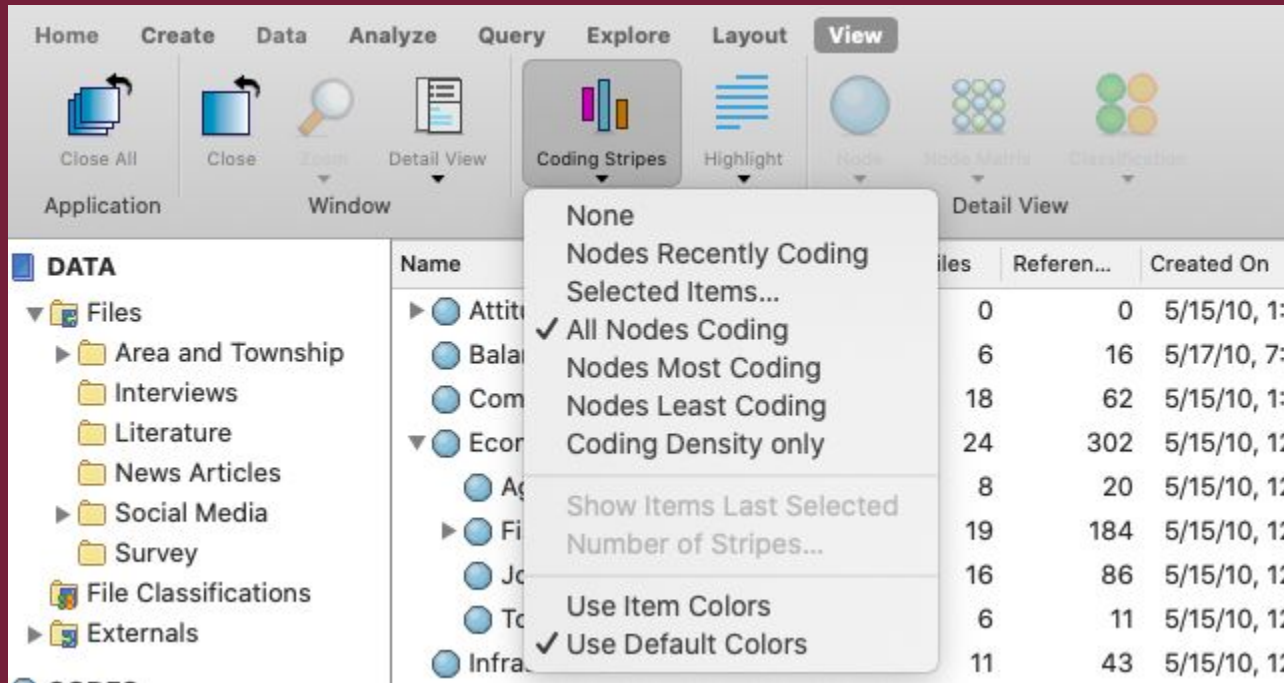
The screenshot shows a software interface with a menu bar at the top. The 'Detail View' icon is circled in red. The main window is divided into several sections:

- Left Panel:** A sidebar with a tree view showing a hierarchy of folders and files under 'DATA', 'CODES', 'CASES', and 'NOTES'. The 'Interviews' folder is selected.
- Top Panel:** A list of files under the 'Interviews' folder, with 'Ken' selected.
- Center Panel:** A video player showing a man in a red plaid shirt and sunglasses standing on a dock. Below the video is a playback control bar with a 'Speed' slider.
- Right Panel:** A line graph showing a blue waveform over time, with markers at 00:00:15.0, 00:00:45.0, and 00:01:15.0.
- Bottom Panel:** A transcript table with columns for Start Time, End Time, Transcript, and Speaker.

Start Time	End Time	Transcript	Speaker
00:00:00.1	00:00:02.9	What are your favorite places?	Henry
00:00:02.9	00:00:13.3	Down East? I'd say [Cedar Island] of course. That's where I always grew up, and that's where I live at. That...	Ken
00:00:13.3	00:00:15.3	Home	Henry
00:00:15.3	00:00:17.2	Home. It's my home. I've been here all my life.	Ken
00:00:17.2	00:00:23.9	This area...this particular spot in particular? This is a nice spot. It'd be easy to see...	Henry
00:00:23.9	00:00:32.3	Like I say, got a good access to the water, luckily--'cause passed down from our family.	Ken
00:00:32.3	00:00:45.3	So, what about the natural environment or landscape Down East? Are there any things that you particularly value about the environment here?	Henry
00:00:45.3	00:01:14.7	Well, every person that comes from off and builds next to the water, it's just more runoff and stuff that goes into the water and estuaries, and for what I do for a living, that's mainly what controls everything. I mean, the more runoff you get, the less stuff you...	Ken



Code Visibility



The screenshot shows a software interface with a 'View' menu open. The 'Coding Stripes' option is selected, and a dropdown menu is displayed with the following options:

- None
- Nodes Recently Coding
- Selected Items...
- All Nodes Coding
- Nodes Most Coding
- Nodes Least Coding
- Coding Density only
- Show Items Last Selected
- Number of Stripes...
- Use Item Colors
- Use Default Colors

The background interface includes a navigation bar with tabs: Home, Create, Data, Analyze, Query, Explore, Layout, and View. Below the navigation bar are icons for 'Close All', 'Close', 'Zoom', 'Detail View', 'Coding Stripes', 'Highlight', 'Node', 'Node Matrix', and 'Classification'. The main content area shows a 'DATA' sidebar with a tree view of folders like 'Files', 'Area and Township', 'Interviews', 'Literature', 'News Articles', 'Social Media', 'Survey', 'File Classifications', and 'Externals'. A table with columns 'Name', 'Files', 'Referen...', and 'Created On' is visible in the background.

Coding View

Home Create Data Analyze Query Explore Layout View

Close All Close Detail View Coding Detail View

Name	Files	Referen...	Created On	Created...	Modified On	Modified By	Color
Attitude	0	0	5/15/10, 1:05 PM	WWS	11/9/15, 7:58 PM	WWS	Yellow
Balance	6	16	5/17/10, 7:57 AM	WWS	10/22/14, 9:43 PM	WWS	Yellow
Community change	18	62	5/15/10, 1:20 PM	WWS	10/22/14, 9:43 PM	WWS	Yellow
Economy	24	302	5/15/10, 12:38 PM	WWS	3/15/11, 8:16 PM	WWS	Yellow
Agriculture	8	20	5/15/10, 12:38 PM	WWS	10/22/14, 9:43 PM	WWS	Green
Fishing or aquaculture	19	184	5/15/10, 12:39 PM	WWS	10/22/14, 9:43 PM	WWS	Green
Jobs and cost of living	16	86	5/15/10, 12:39 PM	WWS	10/22/14, 9:43 PM	WWS	Green
Tourism	6	11	5/15/10, 12:58 PM	WWS	10/22/14, 8:58 PM	WWS	Green
Infrastructure	11	43	5/15/10, 12:38 PM	WWS	11/9/15, 7:41 PM	WWS	Red
Memorable quotes	5	16	6/1/10, 4:47 AM	EDR	7/22/10, 7:22 AM	WWS	Red

DATA

- Files
 - Area and Township
 - Interviews
 - Literature
 - News Articles
 - Social Media
 - Survey
 - File Classifications
 - Externals
- CODES**
- Nodes**

CASES

- Cases
- Case Classifications

NOTES

- Memos
- Annotations
- Memo Links

SEARCH

- Queries
- Query Results
- Node Matrices
- Sets

OPEN ITEMS

- Barbara
- North Carolina Commercial Fis...
- Sharing in the sea's bounty - W...
- Survey Responses
- Karen Beasley Sea Turtle Resc...

Q4. Community and Environmental Change

Henry
Talk about changes that you've seen in this area.

Barbara
The biggest change that I'm aware of is the sense – I think that now there's the sense the commercial fishing as a livelihood is dying as a viable option. And I know – I think that that is a change since 30 years or 35 years ago. I don't remember that being sort of this sense of doom. For me that's the most profound. That's a huge thing that I think is very sad. And that has to do with – that's such a complex situation -- the water quality and also the overharvesting and tearing up of the bottom – all these different things that are factors.

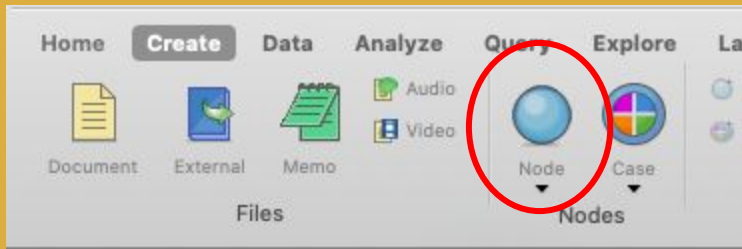
Imported seafood is so much cheaper. And the little sea-side restaurants around here don't sell local shrimp on their shrimp burgers. The fancy restaurants have local seafood. Even if the stocks are fine, it's that you can't make a living spending backbreaking work getting paid – earning nothing, very little.

Henry
Yeah. So it's a combination of environmental factors and market forces?

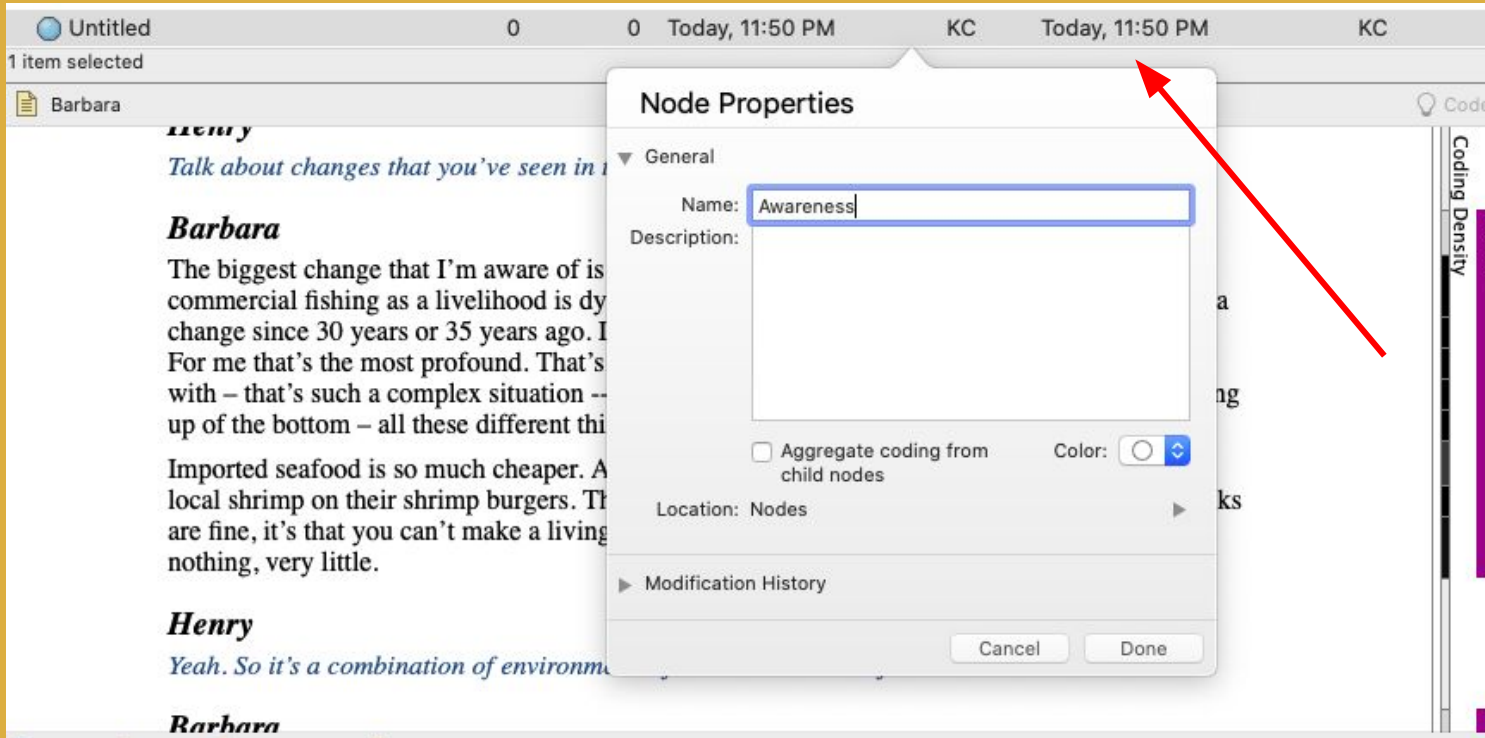
Barbara
Or pressure on water quality and market forces. And then also the complicated relationship between the methods of trawling or methods that destroy habitat– just several factors. A lot of

Code Annotations Edit

Q5. Vision of the future of Down East
Positive
Jobs and cost of living
Fishing or aquaculture
Environmental change
Fishing industry decline
Q4. Community and Environmental Change
Natural environment
Q3. Professional perspective on Down East
Economy
Q2. Connection to Down East
Local connection
Infrastructure
Q1. Connection to Down East



Creating a New Node



Coding

Name	Files	Referen...	Created On	Created...	Modified On	Modified By	Color
▶ Attitude	0	0	5/15/10, 1:05 PM	WWS	11/9/15, 7:58 PM	WWS	Orange
● Awareness	1	1	Yesterday, 11:50 PM	KC	Yesterday, 11:51 PM	KC	Blue
● Balance	6	16	5/17/10, 7:57 AM	WWS	10/22/14, 9:43 PM	WWS	Yellow
● Community change	18	62	5/15/10, 1:20 PM	WWS	10/22/14, 9:43 PM	WWS	Green
▶ Economy	24	302	5/15/10, 12:38 PM	WWS	3/15/11, 8:16 PM	WWS	Red
● Infrastructure	11	43	5/15/10, 12:38 PM	WWS	11/9/15, 7:41 PM	WWS	Blue
● Memorable quotes	5	16	6/1/10, 4:47 AM	EDR	7/22/10, 7:22 AM	WWS	Orange
▶ Natural environment	23	327	5/15/10, 12:39 PM	WWS	11/9/15, 7:41 PM	WWS	Green

1 item selected

Barbara

Henry
Talk about changes that you've seen in this area.

Barbara
The biggest change that I'm aware of is the sense – I think that now there's the sense the commercial fishing as a livelihood is dying as a viable option. And I know – I think that that is a change since 30 years or 35 years ago. I don't remember that being sort of this sense of doom. For me that's the most profound. That's a huge thing that I think is very sad. And that has to do with – that's such a complex situation -- the water quality and also the overharvesting and tearing up of the bottom – all these different things that are factors.

Imported seafood is so much cheaper. And the little sea-side restaurants around here don't sell local shrimp on their shrimp burgers. The fancy restaurants have local seafood. Even if the stocks are fine, it's that you can't make a living spending backbreaking work getting paid – earning nothing, very little.

Henry
Yeah. So it's a combination of environmental factors and market forces?

Code Annotations Edit

Coding Density

Barbara

Real estate development

Natural environment

Economy

Q. 4. Community and Environmental Change

Q. 3. Professional perspective on Down East

Local connection

Q. 1. Connection to Down East

DATA > Files > Interviews > Barbara

Code References

Name	Files	Referen...	Created On	Created...	Modified On	Modified By	Color
▶ Attitude	0	0	5/15/10, 1:05 PM	WWS	11/9/15, 7:58 PM	WWS	●
● Awareness	1	1	Yesterday, 11:50 PM	KC	Yesterday, 11:51 PM	KC	●
● Balance	6	16	5/17/10, 7:57 AM	WWS	10/22/14, 9:43 PM	WWS	●
● Community change	18	62	5/15/10, 1:20 PM	WWS	10/22/14, 9:43 PM	WWS	●
▶ Economy	24	302	5/15/10, 12:38 PM	WWS	3/15/11, 8:16 PM	WWS	●
● Infrastructure	11	43	5/15/10, 12:38 PM	WWS	11/9/15, 7:41 PM	WWS	●
● Memorable quotes	5	16	6/1/10, 4:47 AM	EDR	7/22/10, 7:22 AM	WWS	●
▶ Natural environment	23	327	5/15/10, 12:39 PM	WWS	11/9/15, 7:41 PM	WWS	●

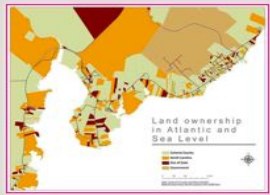
1 item selected

● Community change

Summary **Reference**

[Files\\Area and Township\\GIS output\\property ownership detail](#)
1 reference coded, 100.00% coverage

Reference 1: 100.00% coverage



The map shows a geographical area with various colored regions representing land ownership. The colors include shades of orange, yellow, and brown. A legend is visible in the bottom right corner of the map area.

[Files\\Interviews\\Barbara](#)
2 references coded, 5.94% coverage

Reference 1: 4.75% coverage


The biggest change that I'm aware of is the sense – I think that now there's the sense the commercial fishing as a livelihood is dying as a viable option. And I know – I think that that is a change since 30 years or 35 years ago. I don't remember that being sort of this sense of doom. For me that's the most profound. That's a huge thing that I think is very sad

CODES > Nodes > Community change

Coding Images

1 item selected

Competing water uses



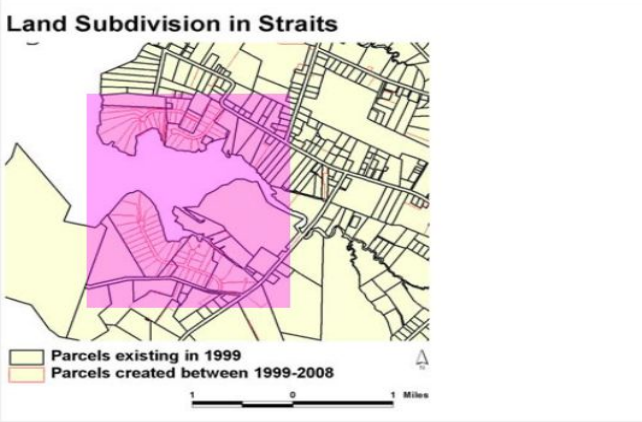
Region

Content

- Large waterfront homes. These are not indicative of typical homes of those who engage in commercial fishing, but more indicative of second or vacation homes.
- Commercial fishing boats. These are likely shrimping trawlers. Note that they have large "booms" that can be lowered laterally from the boat to hold the trawling net behind the boat as it travels.
- Recreational fishing boats

1 item selected

property subdivision in Straits



Land Subdivision in Straits

Parcels existing in 1999
Parcels created between 1999-2008

1 0 1 Miles

Region

Content

- Note that most of the new parcels created since 1999 are waterfront and are relatively small.

Coding Images

The screenshot displays a software interface for coding images. The main window shows a landscape image with a purple overlay. A central panel titled "Existing" contains a search bar and a list of codes: "Nodes\\Attitude", "Nodes\\Attitude\\Mixed", "Nodes\\Attitude\\Negative", "Nodes\\Attitude\\Neutral", "Nodes\\Attitude\\Positive", and "...Autocoded Responses\\Autocoded Interview Questions". To the right, a "Code at New..." panel offers options: "Node" and "Case". Below this is a "Recent" section with "Nodes\\Awareness". The top-right corner features a "Code" button (circled in red) and an "Edit" button. The bottom toolbar includes a "+" button (circled in red) and other navigation icons. A red arrow points to the top-left corner of the image viewer, another to the "Code" button, a third to the "Code at New..." panel, and a fourth to the "+" button. The background text on the right side of the image is partially visible, mentioning "ized by populations of", "grass that is well", "example, it accumulates", "shellfish such as mussels", "nursery grounds, where", "predators. The grass is", and "source for many".

Search

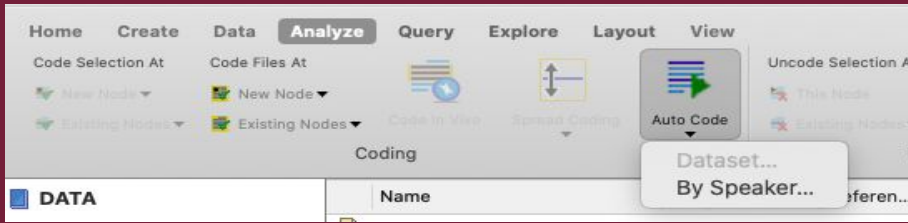
The screenshot displays the software interface with the following elements:

- Navigation Bar:** Home, Create, Data, Analyze, **Query** (circled), Explore, Layout, View.
- Tools:** Text Search (circled), Word Frequency, Coding, Matrix Coding, Crosstab, Coding Comparison, Last Run Query, Add to Stop Words List, Run Query, Store Query Results, Other Actions.
- Left Sidebar:** CODES (Nodes), CASES (Cases, People, Places, Case Classifications), NOTES (Memos, Literature, Progress Reports, Project Administration, Team Memos, Annotations, Memo Links), **SEARCH** (Queries, Attitude, Development, Geographical text qu..., Queries by community, Query Results, Node Matrices, Sets).
- Table:** A table listing queries with columns: Name, Created On, Created By, Modified On, Modified By.
- Text Search Criteria Panel:** Search in: Files and Externals, Selected Items, Items in Selected Folders. Search for: fishing. Finding matches: Exact match only (e.g. "talk"), Include stemmed words (e.g. "talking").
- Buttons:** Run Query (circled), Save Results..., Save Query... (indicated by a red arrow).
- Summary Table:** A table showing search results with columns: File Name, In Folder, References, Coverage.

Name	Created On	Created By	Modified On	Modified By
Attitudes towards develo...	10/22/14, 7:52 PM	WWS	10/22/14, 7:56 PM	WWS
Attitudes towards environ...	10/22/14, 8:00 PM	WWS	10/22/14, 8:00 PM	WWS
Coding comparison by ch...	11/15/15, 9:06 PM	WWS	11/15/15, 9:06 PM	WWS
Coding comparison by pa...	11/15/15, 9:07 PM	WWS	11/15/15, 9:08 PM	WWS
Coding comparison by se...	11/15/15, 9:04 PM	WWS	11/15/15, 9:08 PM	WWS
Comments on water quali...	7/22/10, 8:18 AM	WWS	8/9/15, 11:08 AM	WWS
Crosstab of economic iss...	1/15/18, 3:54 PM	WWS	1/15/18, 3:54 PM	WWS
Negative opinions about r...	10/22/14, 5:30 PM	WWS	10/22/14, 5:30 PM	WWS
Negative Tweets	5/8/12, 6:48 PM	WWS	8/10/15, 4:28 PM	WWS
Delay text query	6/27/10, 8:27 AM	WWS	8/10/15, 8:08 PM	WWS

File Name	In Folder	References	Coverage
2010 02 Cooper present...	Externals	4	0.59%
A Social and Economic...	Externals\\Literature	1	4.09%
Area and Township Infor...	Files\\Area and Township	2	0.40%
Barbara	Files\\Interviews	4	0.30%
CarteretCounty on Twitter	Files\\Social Media	16	0.57%
Charles	Files\\Interviews	5	0.39%
Competing water uses	Files\\Area and Township	3	49.51%
Crossroads marks 30 ye...	Files\\News Articles	1	0.07%
Dorothy	Files\\Interviews	5	0.53%

Autocoding



Auto Code by Speaker

Enter the names of the speakers. These will become your cases

Type speaker names here...

<input type="radio"/> Linda	13
<input type="radio"/> Charles	13

+ -

Create cases in

Cases ...

What would you like to classify your cases as?

Existing classification
 New classification

Person

Interview with Charles on May 14th, 2009, in Atlantic, North Carolina. Charles is a real estate developer.
Q.1. Connection to Down East

Linda
How long have you been living Down East?

Charles
I've been living here for about six years.

Linda
So what attracted you to come here as opposed to the other places you could've picked?

Charles
I've lived all over the country over the years, but I missed the salt water. And I've been in other places where I haven't been in that salt water but for some reason there was just this very strong urge. I had friends who lived in Harkers Island and went to visit them. First thing I did, I didn't go in and say hello. I just walked straight and walked right out in

References

QSR International. (n.d.). *Glossary of key terms*. Help-Nv.Qsrinternational. Retrieved March 8, 2021, from <https://help-nv.qsrinternational.com/12/win/v12.1.98-d3ea61/Content/about-nvivo/key-terms.htm>

Questions?