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INTRODUCTION TO ATLAS.TI

Basic operations, tips and tricks for coding | 6th Edition



2017





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PREFACE

In this day and age of fast moving technology, it seems a bit odd to produce a text for computer-aided data analysis in paper format. For those of us who are still the digital immigrants, it is however nice to be able to put pen to paper and scribble a few notes in the margin for a more tactile experience.

For those who are more technologically inclined, the text also incorporates QR codes and hyperlinks that allow you access to videos, slideshows and other multimedia to facilitate your process. The book is also available in pdf, mobi, epub and kindle formats under a Creative Commons Attribution license, so you are free to redistribute and use the material in your training and supervision. Some videos might refer to older versions of Atlas.ti, but the functions explained in these videos translates to the newer versions. The QR codes can be read on your mobile device once you have loaded any of the free QR code readers available in your app store.

[Atlas.ti video library](#)



<http://tinyurl.com/pttsabg>

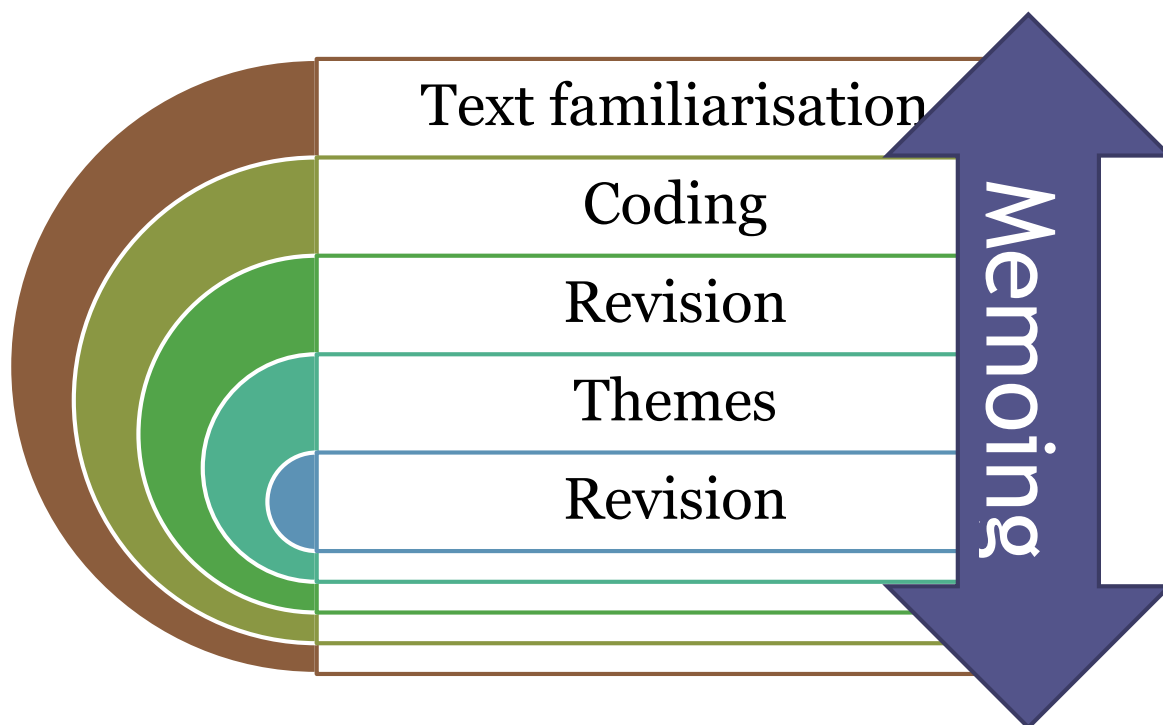
[Atlas.ti 8 Windows Quick Tour manual](#)



<https://tinyurl.com/zlymqw9>

The book and its chapters are structured in the same order that you would approach most research projects. It presents a thematic approach to analysis while being cognisant that each analysis is entrenched in its paradigm or philosophy. You may secure in the knowledge that there is no one right way to conduct an analysis (Bazeley, 2013; Campbell, Quincy, Osserman, & Pedersen, 2013; Chenail, 2012; Denzin & Lincoln, 2011; Eberle, 2014; Flick, 2014a&b; Huberman, 2014; Schurink et al., 2013; Willig, 2014a). Atlas.ti may be employed with any qualitative research design. The most analytical process commences with a thematic analysis, and the examples are framed around this approach.

Multiple authors (Bazeley, 2013; Braun & Clarke, 2006; Saldana, 2013; Vaismoradi, Turunen, & Bondas, 2013) have attempted to map thematic analysis. I present a very simplified version below:



Thematic Analysis (Archer, n.d.)

Computer software to assist with qualitative data analysis (QDA) has become established as an essential tool for many researchers in the last 20 years. One of the most commonly used acronyms for this software, [Computer-Assisted Qualitative Data Analysis] CAQDAS, [was] introduced by Fielding and Lee following a 1989 conference on the programs...

(Gibbs, 2014, p. 277)

CAQDAS software allows for review, sorting, sifting, quantification and visualisation of data, but you as researcher remains the driver of the process, the software only assists. (Bazeley, 2013; Flick, 2014b; Gibbs, 2014; Lacey & Luff, 2007; Saldana, 2013). As a researcher, you must be able to conduct rigorous Qualitative Data Analysis and have a firm grasp of Research Designs and Paradigms, before embarking on the computer assisted route.

There is a vast array of CAQDAS software available of which some of the most commonly employed ATLAS.ti, NVivo, MAXQDA, AnSWR, HyperRESEARCH, QDA Miner, Qualrus, Transana and Weft (Evers, 2016; Flick, 2014a; Gibbs, 2014; Saldana, 2013). There are even free, Open Source Software available such as Weft, Open Code, AnSWR and TAMS Analyzer (Gibbs, 2014; Saldana, 2013). The tool you employ is less important than the researcher's skill and approach to analysis as was illustrated in the Dutch KWALON experiment (Flick, 2014a; Gibbs, 2014)

This book specifically focusses on Atlas.ti, as one of the most popular, established and multi-functional CAQDAS tools. Essential actions will be indicated in the text. Tips appear in text boxes, along with advanced notes for the technologically inclined. Please ignore the tech notes completely if you find them confusing.

Tips

Tech Notes

THE BOOK COVERS

- 🌐 Organising documents and folders;
- 🌐 Different ways of coding text – including automatic coding;
- 🌐 Basic searches;
- 🌐 Creating subgroups (groups) of documents or codes;
- 🌐 creating network diagrams to display relationships;
- 🌐 Generating output reports to inform and support your analysis.

AUTHOR INFORMATION

Elizabeth Archer



Liz Archer is a qualified Educational Psychologist with a PhD in Assessment and Quality Assurance. She started her career in academia as a researcher and project coordinator at the Centre for Evaluation and Assessment at the University of Pretoria. In 2011 she joined the University of South Africa as a Specialist in Institutional Research, where she is currently continuing her work. She has spent 17 years in training and consulting in education and research and particularly Computer Aided Qualitative Data Analysis.

She is a well-published author and a rated researcher with the South African National Research Foundation (NRF). She has been the recipient of some prestigious scholarships including The South African Netherlands Research Programme on Alternatives in Development (SANPAD), Advanced Research Capacity Initiative and National Research Foundation and the SKYE fellowship. She is an active post-graduate supervisor with multiple Doctoral and Masters students under her guidance. She is newly appointed Associate Editor for the journal, *Frontiers in Quantitative Psychology and Measurement*. She regularly reviews articles for national and international journals including International Review of Research in Open and Distributed Learning, South African Journal of Education, South African Journal of Higher Education, Perspectives in Education, African Journal for Research in Mathematics Science and Technology Education, Progressio and School Effectiveness and School Improvement. She has presented conferences and guest lectures all over the world in countries such as New Zealand, Malaysia, Ethiopia, Austria, the Netherlands and Zimbabwe.

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Herman Janse van Vuuren



Herman Janse van Vuuren is currently working in the Department of Psychology at the University of South Africa as a postgraduate student assistant. He recently completed his Masters of Arts in Psychology (Research Consultation), as well as his internship to register as a Research Psychologist. He is currently completing his PhD at the University of South Africa (Unisa) focussing on student-supervisor relationships. His research interest is in student support and throughput in Higher Education and ODeL in South Africa.

Before joining Unisa in 2016, he has gained research experience at the Human Sciences Research Council (HSRC) as well as the Department of Communication Sciences at the University of South Africa as part of the work placement requirements of the Masters of Arts in Psychology (Research Consultation). He has been involved in the research modules of both the MA in Research Consultation and MA in Clinical Psychology coursework degrees. He has presented workshops on Atlas.ti within South Africa, and internationally in Ethiopia. He has assisted as part of the scientific committee of the 5th Southern African Students' Psychology Conference. He has also gained experience as an Independent Research Consultant over the last couple of years, specifically working with Qualitative and Quantitative data analysis, and research designs.

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Hugo van der Walt



Hugo van der Walt is a researcher in the field of psychology and lecturer with the Department of Psychology at the University of South Africa (Unisa). He started his career in academia as a researcher and postgraduate research assistant at the University of South Africa. From the beginning of his career, he has trained and consulted in the field of Research Psychology focussing on the facilitation of Computer Aided Qualitative Data Analysis employing Atlas.ti.

He has completed his Master of Arts in Psychology with Specialisation in Research Consultation and is pursuing his PhD. He has completed an internship to qualify and register as a Research Psychologist. He has gained experience in the field of higher education training and development. He has also presented conferences and guest lectures nationally and workshops in countries such as Ethiopia. Hugo is also a part-time research consultant; his services include co-coding of qualitative data, proposal development, qualitative methodologies and design.

e-mail: hugovanderwalt@yahoo.com

CONVENTIONS USED THROUGHOUT THE TEXT

GENERAL NOTES

Some practical exercises will follow each section. Bulleted comments explain the steps required to accomplish the task at hand, e.g.

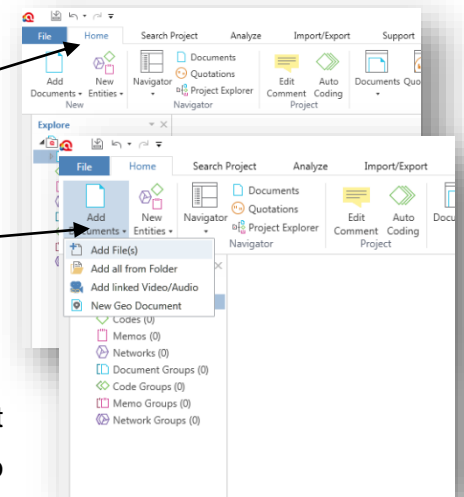
- 🌐 Make sure the document is open in the main Atlas.ti window
- 🌐 Select the text which you wish to code.

MENU SELECTION

Throughout the book, the selection of any menus in Atlas.ti is written in the same format, for example ...

- 🌐 'Select **Home** → **Add Documents** from the menu ribbon'

means that you should first click on the '**Home**' option of the Atlas.ti menu ribbon and then select '**Add Documents**' from the sub-menu that appears. Then select '**Add File(s)**'. Select the files that you wish to import and click '**Open**'.



CODING

To allocate a code to a piece of text, you must first select the relevant piece of text.

- 🌐 Don't just code a word out of context. Select enough text so that if you read that piece of text outside of the original context, you can still follow what it is about.
- 🌐 Do not use very broad codes e.g. don't code everything in a teacher interview as Teacher perception. This will not help you analyse the text. Start with fine codes which indicate specific detail. If they are too fine, they can easily be combined after coding. It is complicated to make broad codes more detailed after the coding is complete.
- 🌐 If you are stuck with a code put down a preliminary name, you can easily rename it.
- 🌐 You can select a quotation from the text by clicking on it and dragging the mouse from the beginning to the end.

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1. PREPARING YOUR DATA






Atlas.ti 8.x is capable of handling textual, graphical, and multimedia formats including rich text format documents, Word documents, most picture formats, most sound formats and most digital video formats, as well as PDF documents.

When uploading PDFs, it is essential to ensure that your version of Atlas.ti is updated, otherwise the latest versions of PDFs may not be compatible. Atlas.ti 8 requests updates automatically when connected to the internet. Previous versions of Atlas.ti can be updated by following these steps:

[Help > Updates and Licenses > Check for Updates Now](#)

Careful editing and naming of all documents is suggested prior to loading your documents into Atlas.ti. This will save a lot of headaches and time later in your work.

The following editing must be done before loading your documents into Atlas.

-  Create a transferable / suitcase file
-  Apply a naming convention
-  If it is an editable document you created:
 -  Check all grammar and spelling (If these are transcription and note taking errors, do not sanitise the words of participants)
 -  Replace all names with pseudonyms (including in your file name)

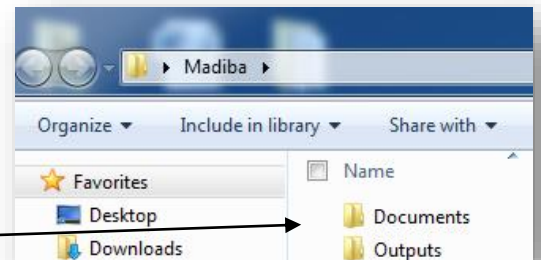
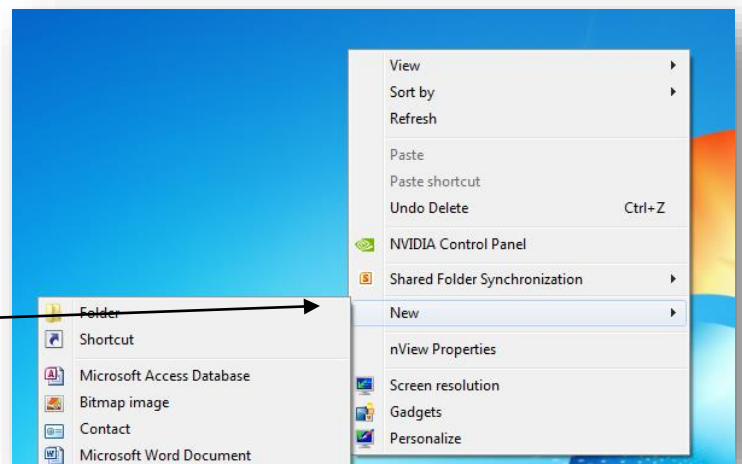
DOING YOUR FILING

Atlas.ti provides easy and intuitive access to your data and analysis process. Most of the documents and media that you use are uploaded into Atlas.ti. However larger files are linked to the programme. Filing your project data properly from the beginning will help you manage your project more effectively. Although this might not be a requirement for running the analysis through Atlas.ti anymore, it is good practice to know where to find relevant project data and outputs. This will additionally assist you to develop a report of your findings at the end of the project to display your audit trail more effectively.

From Atlas.ti version 8, the program will by default request to place and migrate your documents into a library. This book suggests an alternative approach using a folder as a type of suitcase to hold all your audit trail data.

CREATING AN EASY TRANSFER/SUITCASE FOLDER

- 🌐 Make sure your computer is open on the desktop
- 🌐 Right click on an open space on the desktop
- 🌐 Select **New → Folder** from the main menu
- 🌐 Name your folder appropriately for the analysis you are going to do, a descriptive name that is appropriate for your work is preferable e.g. Madiba.
- 🌐 Open the new folder you have created
- 🌐 Using the same procedure create the following subfolders in your new folder:
 - 📁 Outputs
 - 📁 Documents



This folder on your desktop now becomes your suitcase folder in which you can save all your Atlas.ti work from your documents, including the final outputs from your analysis. The file acts as a suitcase with sub-dividers, housing all documents related to your research so that you may easily provide it as an audit trail. You have to ensure that you exported the latest project bundle to move the project without difficulty (This is discussed in a later section).

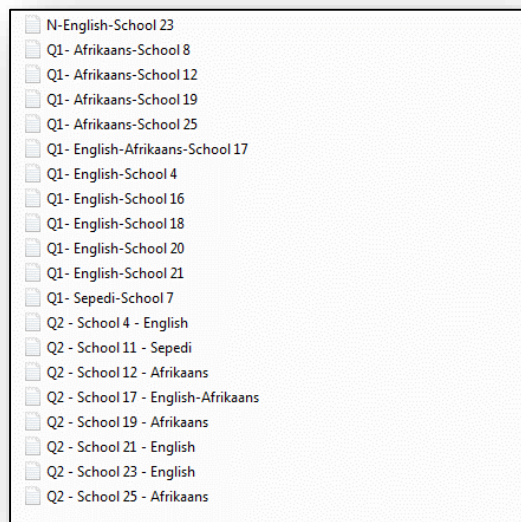
PREPARING YOUR DOCUMENTS

FILE NAMING CONVENTION

When you save the documents, images, videos, sound files you wish to load to Atlas.ti it is important to ensure you save your files with a strong naming convention (the standard way of naming your files). For instance, I-F2-S1 may mean Interview with Female Respondent 2 from School 1.

The file name will be the only thing you see in the document manager when you wish to decide how to group your documents. It is thus important to include any important signifiers in your file name which may be used to group your documents. Some examples of such signifiers may include, but are not limited to:

- 🌐 Demographics: gender, age, race, etc.
- 🌐 Mode of data collection: interview, observation, Whatsapp, Twitter, article, newspaper, survey, etc.
- 🌐 Date, venue, organisation



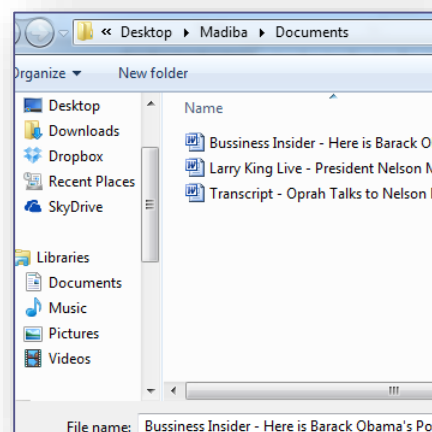
Remember not to use illegal symbols such as . , : \ * in the filename.

The file will not save.

SAVING YOUR WORD-PROCESSED FILE

Once all changes have been made to your document, it is necessary to save the files in the suitcase folder to load it into Atlas.ti.

- 🌐 Select **File → Save as**
- 🌐 Navigate to your suitcase folder directory
Desktop\Name of suitcase file\Documents e.g.
Desktop\Madiba\Documents
- 🌐 Save the file under the new descriptive file name e.g.
Q2-School 19 - Afrikaans
- 🌐 Select Save
- 🌐 Repeat with every document to be loaded into Atlas.



SAVING ITEMS FROM THE WEB

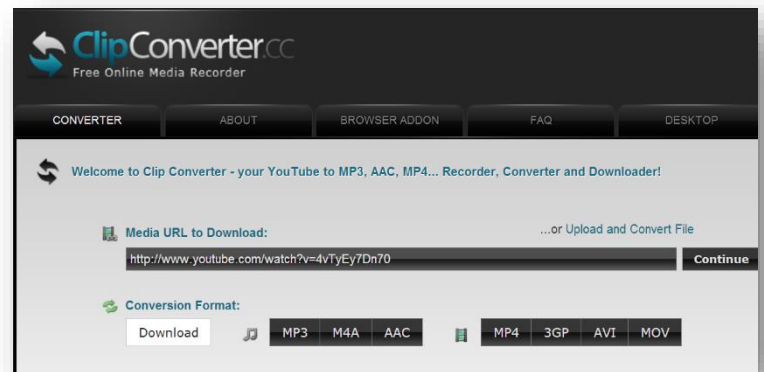
Just about anything on the web can now be loaded into Atlas.ti:

- 🌐 Pictures can be downloaded by right clicking on them and selecting **Save as**
- 🌐 Online videos and podcasts can be downloaded by copying the URL and pasting it into an online programme to download the file for instance:

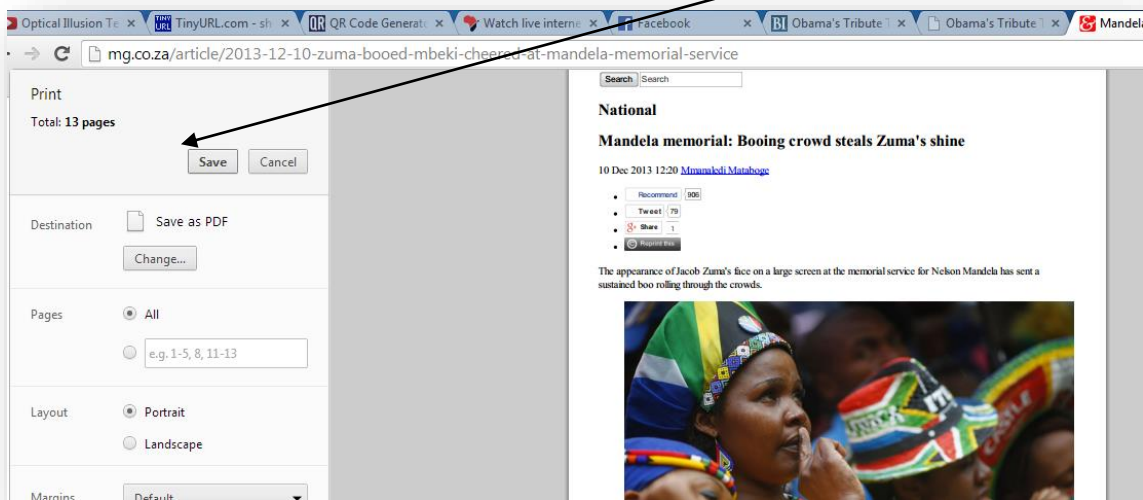
ClipConverter.cc



<http://www.clipconverter.cc>



- 🌐 If it is a scholarly article you wish to analyse, you can merely save it as a pdf.
- 🌐 If it is a blog or online newspaper article you can press **Ctrl+p > Save as PDF** in the printer option box.



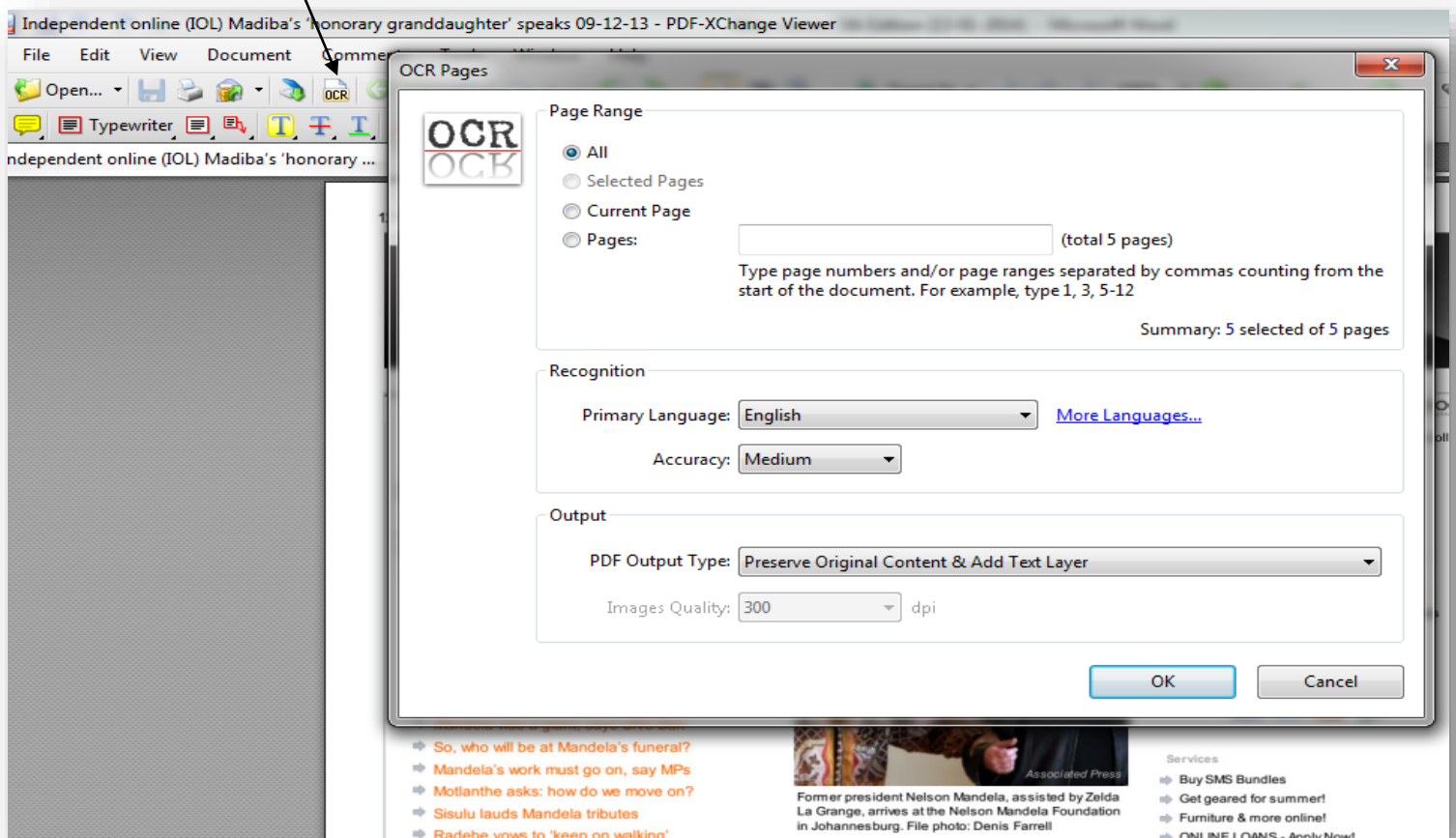
Anything that can be printed as a PDF can be loaded in Atlas.ti. However, if the document is printed to PDF, but not for Optical Character Reading (OCR) it will merely be loaded as a picture, which means the text will not be read by the system.

Some scanned pdf documents were not scanned for Optical Character Reading (OCR). This means that the text is saved as a picture, not text and Atlas will not be able to read the text. If this is the case, you can use free software such as PDF-xChange Viewer which had free OCR support. Run the OCR support and re-save the document.

PDF-xChange Viewer



<http://tinyurl.com/29muks9>



This book only deals with the analysis of textual information. Details on analysis of image data can be found in the official *Atlas.ti v8 Quick Tour manual*, p40-41.

It is also possible to import data from Excel into Atlas.ti. See the link below for a tutorial. The tutorial covers the process of importing Excel data into Atlas.ti 7, this is a similar process to importing in Atlas.ti 8. Alternatively, the official *Atlas.ti v8 Quick Tour manual*, p77-80

Importing survey data from Excel



<http://tinyurl.com/pzv49zb>

EXERCISE 1: PREPARING FILES FOR ATLAS.TI

In this exercise, you will be required to create a filing system. You can work with your material or the exercise material in the Madiba folder which is in your course package or can be accessed from:

Practice material: Madiba



<http://tinyurl.com/mevpa2c>

Prepare the documents to be analysed in Atlas.ti.

This will entail:

- 🌐 Creating a suitcase file folder with the necessary subfolders on your Desktop to allow for easy transfer.
- 🌐 Editing your document and creating pseudonyms where necessary
- 🌐 Saving images, video and sound files from the web.
- 🌐 Saving website info as pdf files by using the **Print > Save as PDF** options.
- 🌐 Employing descriptive file name for the documents in the form of a naming convention
- 🌐 Saving all your documents under the *Documents* subfolder in the transferable suitcase file.

2. GETTING TO KNOW THE ATLAS.TI WORKSPACE

Projects in Atlas.ti are known as Projects (In previous additions these were referred to as Hermeneutic Units). It is a project file, which contains your coding, groups, memos and networks along with the paths to find the documents you are working with. In the next section, we explore the Atlas.ti workspace.

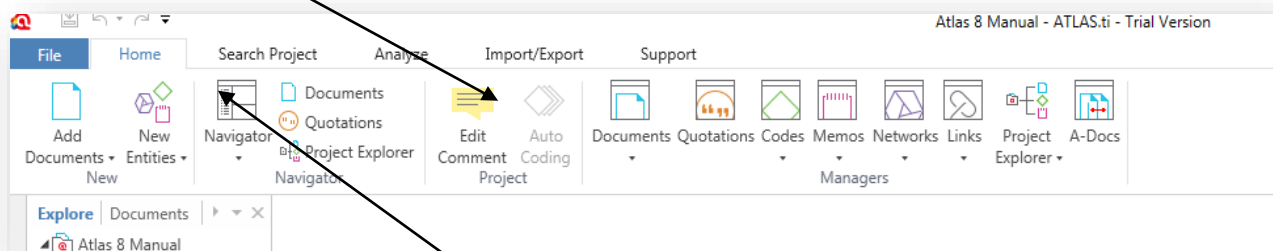
THE ATLAS.TI WORKSPACE

When you open Atlas.ti you are confronted with the Atlas.ti Welcome menu. You may select which action you wish to take from this window. The options that you are likely to use most often is creating a new project (discussed again later) or opening a saved project. To create a new project you can click on the *Create New Project* button and will be prompted to enter a name for the project. Opening an existing project can be done by selecting the relevant project at the bottom of the list, or from the recent menu.



THE MAIN MENU

The menu ribbon is situated at the top of the screen and contains sub menu options for each of the different objects within a project. The menu ribbon and its **tabs** (Home, Search Project, Analyse, Import/Export, Support) are the central repository for all the commands found in the Atlas.ti workbench.



THE TOOL BARS

Many of the commands found on the toolbars (icons) are also available as options from the menus or can be accessed by right-clicking the mouse where you wish to act.

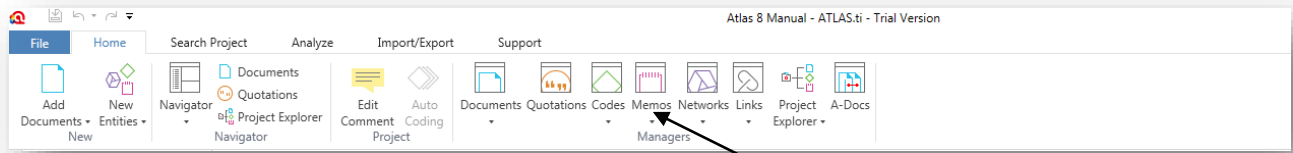
To find out what function a tool on a toolbar has, you can:

- 🌐 Point the mouse and rest it on a tool button – this displays a short decryption in the grey area at the bottom of your Atlas.ti window.

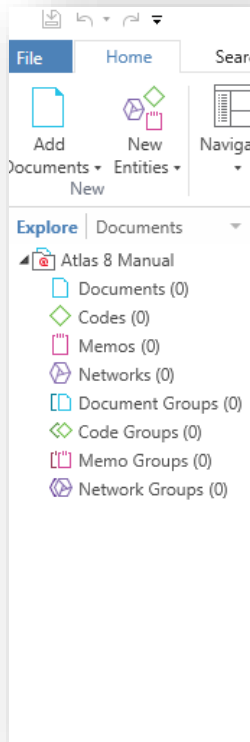
The Magic Button!

Almost everything in Atlas.ti can be done in a number of ways. In most cases you can accomplish what you wish to do by right-clicking where you wish to do something in order to access the context sensitive help.

THE MAIN TOOL BAR



Within the menu, the ribbon is the object managers, which contains the documents manager, codes manager, memo manager, networks manager and groups concerned with the project (see below Object Managers). Including the tools used to import material, analyse the documents, and navigate the project. To see what each button is used for hover over the button and a tool tip will appear.



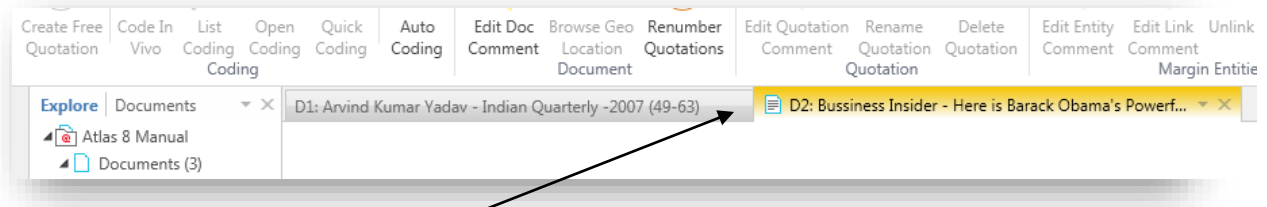
THE LEFT SIDE NAVIGATOR TOOLBAR

The navigator toolbar is on the left side of your screen. This toolbar contains the links to the different managers used to organise your activities in Atlas.ti (Documents, Codes, Memos Networks and Groups).

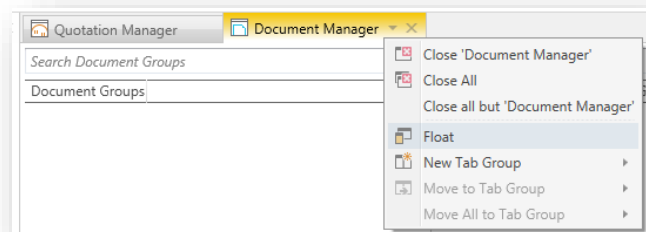
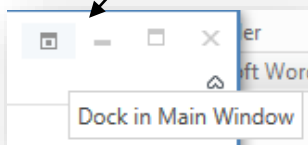
OBJECT MANAGERS

Within the menu ribbon or left side navigator toolbar, you will find the following five options (object managers); Documents, Quotes, Codes, Memos, and Networks. The object managers are active as soon as you open a new project. If you click (in the menu ribbon), or double click (in the left side navigator) on the button of an object list, it opens the manager in a new window. In the left side navigator, if you click on the downward pointing triangle next to the relevant manager, it opens as a drop-down list of the objects that you have added or created. When opening a manager, ensure that the Atlas.ti manager's window is large enough for the sub menus to display properly. If not, the submenus are cut-off from the screen.

TABS



Atlas.ti 8 includes tabs below the menu ribbon which includes the documents that you are actively working on. These tabs do not include all the documents contained within the project. It does, however, make working with Atlas.ti more flexible when analysing across documents without losing your place. An additional function of the tabs is that both documents and the object managers can be pinned to a tab (Dock in main window), open a tab group (view two tabs open next to one another), or 'float' (opening a tab as a new window that can be moved independently of the main window). Docking a 'floating window' to the main window can be done by clicking on the button in the top right corner, next to the minimise button. Opening a tab group, or detaching a tab can be done by selecting the downward arrow next to the document name in the tab.



More information on the Atlas.ti Main Workspace can be accessed in the [Atlas.ti v8 Quick Tour manual](#), p 10 - 13.

Multi-document View



<https://tinyurl.com/jfku52s>

CREATING A NEW PROJECT

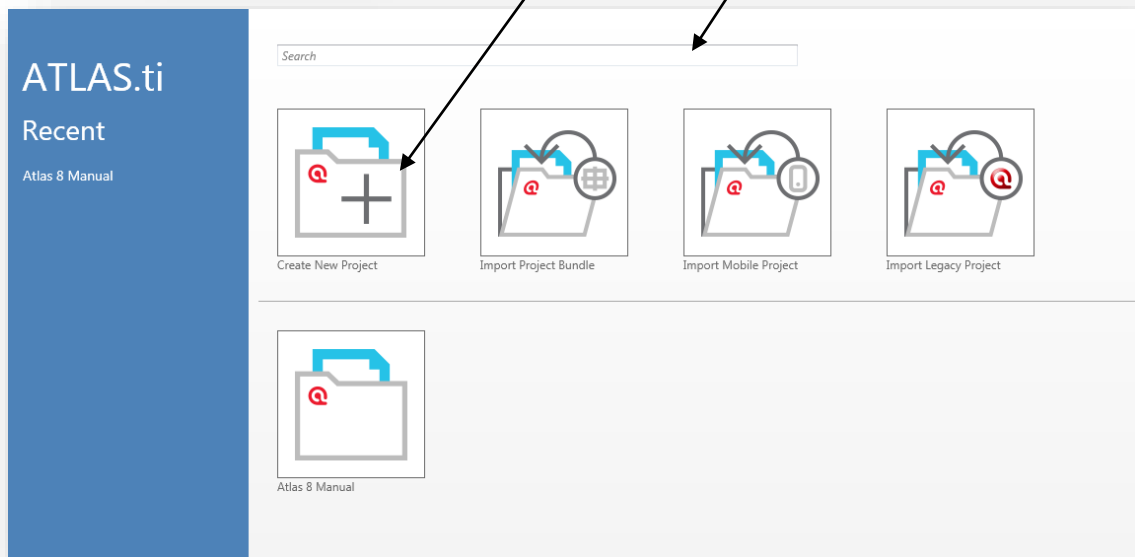
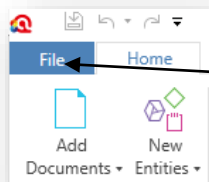
Creating a Project



<http://tinyurl.com/h23yo62>

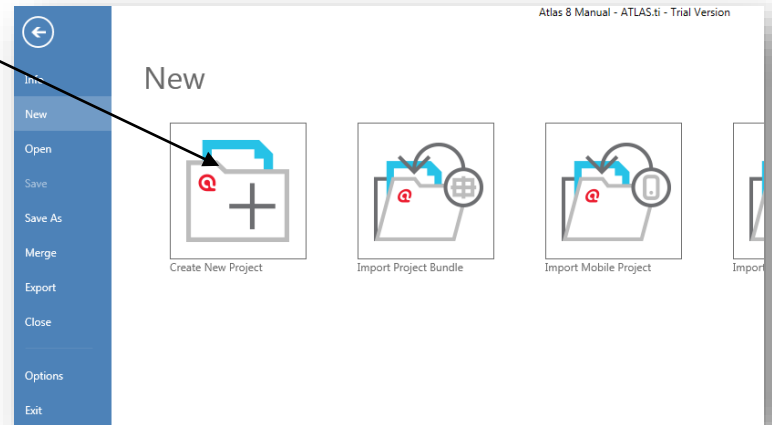
The Welcome Wizard opens by default when opening Atlas.ti 8. You can create a new Create a new Project by following the instructions in the Welcome Wizard or from the main Atlas.ti workspace. This will require you to enter a name for your project. From the wizard, you can also open an existing project to continue working.

To create a new project from the menu ribbon, click on File to open the 'file' menu.



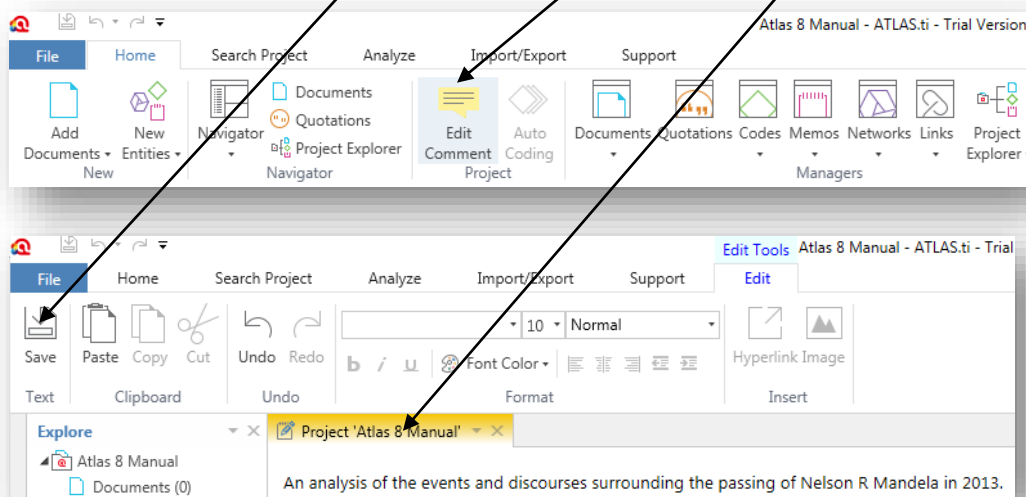
New → Create New Project.

You will be asked to type in a name for your project. The name must be short and descriptive of the project e.g. Madiba This name will appear at the top of your Atlas.ti window.



PROJECT COMMENTS

You can add a project description (comment) by clicking on the Edit Comment option in the Home menu ribbon after creating the project. This will open the comments manager where additional descriptions for the project can be added. After adding the text e.g. '*An analysis of the events and discourses surrounding the passing of Nelson R Mandela in 2013*', you can save the comment by clicking on the save button.



ASSIGNING DOCUMENTS

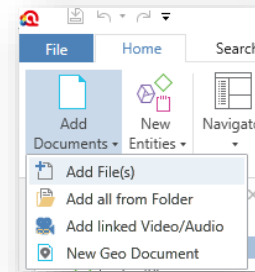
Now that you have opened your Project it is necessary to tell Atlas.ti which documents you will be working with. This is called adding documents.

- 🌐 In the **Home** ribbon → **Add Documents** → **Add Files**.

This will open a file selection window.

- 🌐 Use the Browser to find your suitcase folder in which your source files are stored e.g. Desktop\Madiba\Documents.

- 🌐 Use your mouse to select all the files you want to assign to the project or press **ctrl + a** to select all the files.

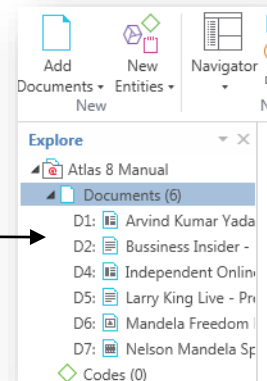


You can use the shift key or the Ctrl key to select multiple files, this will work the same in all other windows and Microsoft software.

- 🌐 Once selected, click on **Open** to assign the documents Atlas.ti will show a message that the documents have been added.

Once documents have been assigned, they will appear in the document drop-down list, in the left side navigator.

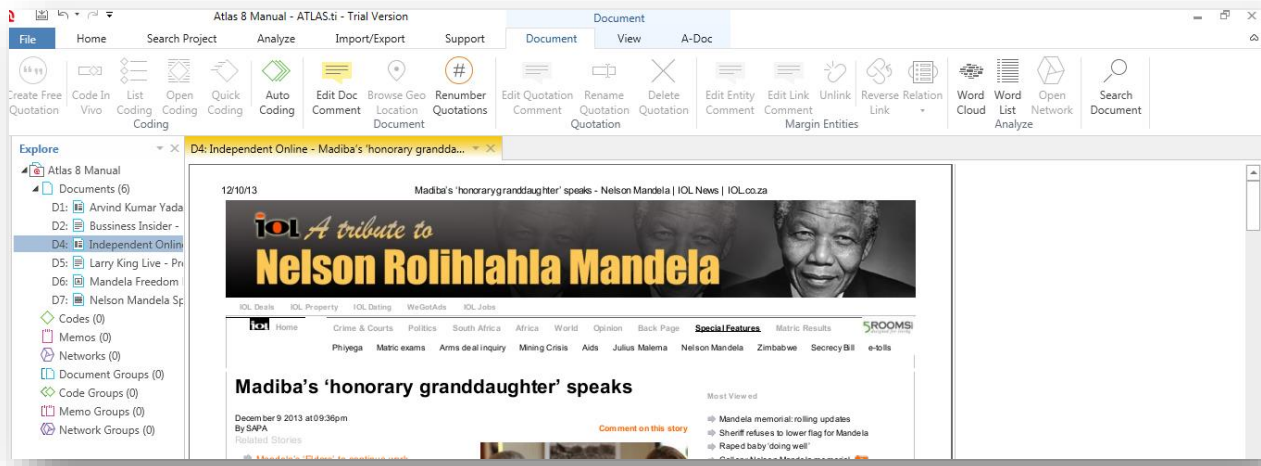
Selecting a document (double click) from the list will cause it to be displayed in the main window as a new tab.



You can assign new documents at any time. The same document can be assigned multiple times. Every document will receive a new number e.g. D1, D2, D3, etc. Documents can also be disconnected and re-numbered (all on the document menu)

Tip: You can also open your File Browser on your desktop ('My Computer'). Browse to open the folder in which your files are saved, and simply 'Drag & Drop' files into the Atlas.ti Document Manager window. This will automatically assign the files to the current project.

Once you have selected a document, your workspace looks like this: the left-hand pane shows the text you are working with while the codes you allocate will be indicated in the right-hand pane.



Assigning Documents



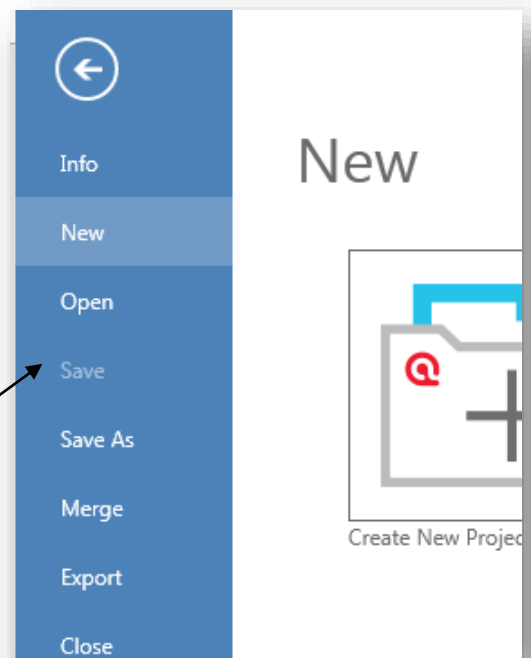
<https://tinyurl.com/juxqhpc>

SAVING YOUR PROJECT

When saving your Project remember that Atlas.ti 8 projects saves to an internal windows file (AppData), this file is not meant to be accessed, and thus the save file can only be accessed through the Atlas.ti 8 interface.

🌐 Select **File** → **Save** from the main window.

🌐 If you want to save the project under a different project name or create drafts of the project you are working on, you can select the Save As option. Atlas.ti will ask you to enter a new name for the project on which you can then continue to work.



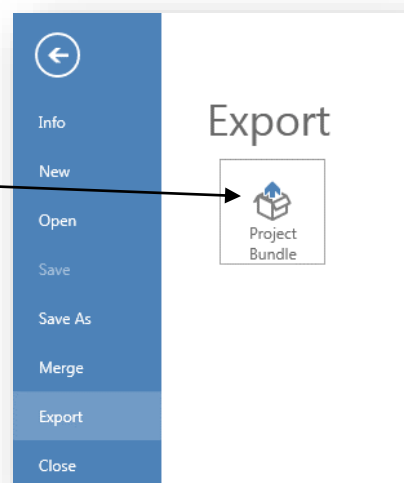
Older versions of Atlas.ti had accessible save files that could be placed in the project suitcase file: The project will automatically have the file extension *.hpr7, i.e. the default filename will be 'projectname.hpr7' e.g. Madiba.hpr7. (For Atlas. Ti 6.x the extension is *.hpr6; Atlas.ti 5.x - *.hpr5 ; Atlas.ti 4.x - *.hpr. All old units open and work in newer version of Atlas.ti but new units cannot be opened in older versions of Atlas.ti)

Older versions of Atlas.ti created backup files that were accessible in the saved folder: Atlas will automatically create a backup file e.g. backup of Madiba.hpr7 always make sure you are working on the original document and not the backup.

BACKUP AND MIGRATION PROCEDURES

It is essential to back up your work after each session. Saving your unit is not sufficient, especially as your laptop can be stolen or your computer may crash. The safest way to achieve this is by creating a copy bundle.

- 🌐 First **Save** your Unit
- 🌐 Then select **File** → **Export** → **Project Bundle**
- 🌐 Select a location to save the Copy Bundle (Atlas .atlproj file), make sure it is not just in your suitcase file and preferably on an external drive (email it to your Gmail account or save it in a cloud-based system such as www.dropbox.com). This file can also easily be e-mailed as an attachment to your supervisor to be viewed as long as they have Atlas installed.



Creating a Copy Bundle



<https://tinyurl.com/h3sgmzfh>

Make sure you make a Copy Bundle each day you work on Atlas. You can add the date to the file name so that you have a number of backups to fall back on.

e.g. Madiba(05-12-13).atproj

EXERCISE 2: YOUR PROJECT

In this exercise, you will be required to open your own Project, assign documents and save it as well as generate a Copy Bundle. You will utilise the documents found in the Madiba folder we formatted in the previous section.

Tasks:

- 🌐 Create and name a new Project.
- 🌐 Give a description (comment) to your Project.
- 🌐 Assign all the documents to your unit.
- 🌐 Select and view one of your documents in the Atlas.ti window.
- 🌐 Save your Unit.
- 🌐 Create a Copy Bundle and save it in an alternate location.

3. ALL ABOUT CODING

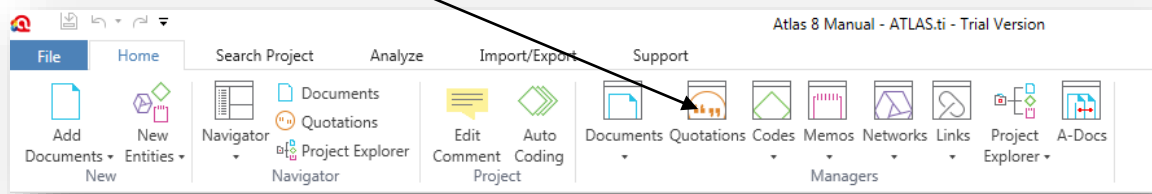
In order to allocate a code to a piece of text, you must first select the relevant piece of text. Remember:

- 🌐 Don't just code a word out of context; select enough text so that if you read that piece of text outside of the original text, you can still follow what it is about.
- 🌐 Do not use very broad codes e.g. don't code everything in a teacher interview as Teacher perception. This will not help you analyse the text. Use fine codes which indicate specific detail. If the codes are too specific they can easily be combined after coding. It is challenging to make broad codes more detailed after the coding is complete.
- 🌐 If you are stuck with a code employ a preliminary name, you can easily rename it.
- 🌐 You can select a quotation out of the text by clicking on it and dragging the mouse from the beginning to the end. You can change the size of the selected text by dragging the markers at the beginning or end of the text to increase or decrease the scope.
- 🌐 You can also click on the start of a text and hold down shift and click at the end of the text to select the specific text
- 🌐 You can use semi-automatic selection:
 - 📄 Double click on a word once = selects the word
 - 📄 Double click on the word again = selects the sentence/line
 - 📄 Double click on the word a third time = selects a paragraph (if you used double hard returns)
 - 📄 Double click on the word a fourth time = selects the whole document
 - 📄 Double click again and the text is unselected

CREATING FREE QUOTATIONS

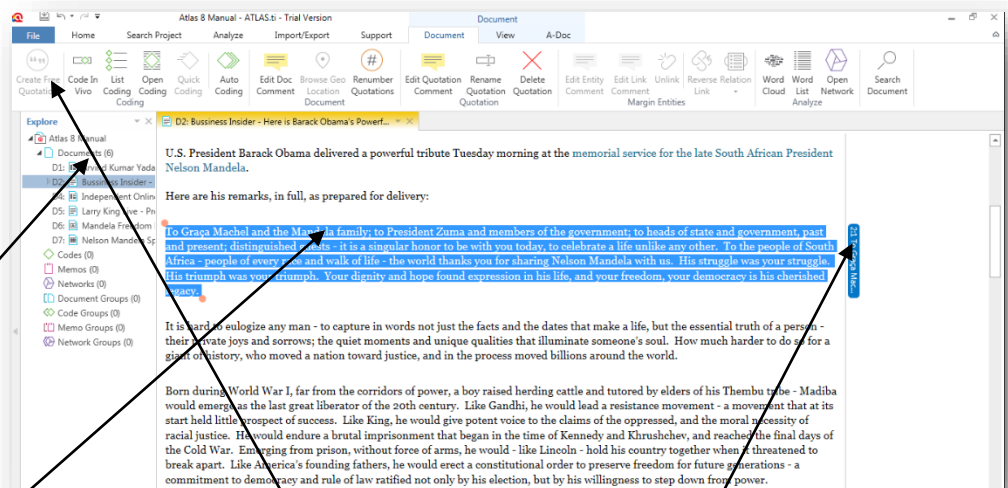
Upon occasion, you might find a piece of text in your preliminary readings which you find significant, but you do not know how you wish to code it yet. Atlas.ti gives you the opportunity to select and highlight these pieces of text without having to allocate a code. This is called creating a free quotation.

Any selected text from your documents is known as a quotation. All quotations are indicated in the second combo box in Atlas.ti.




When no code is allocated to the piece of text, it is known as a free quotation. In order to create a free quotation, follow these steps:

1. Make sure the content of one of your documents is displayed in the main window Atlas.ti. (You will have to select it from the document manager.)



2. Choose the piece of text using any of the methods discussed above.

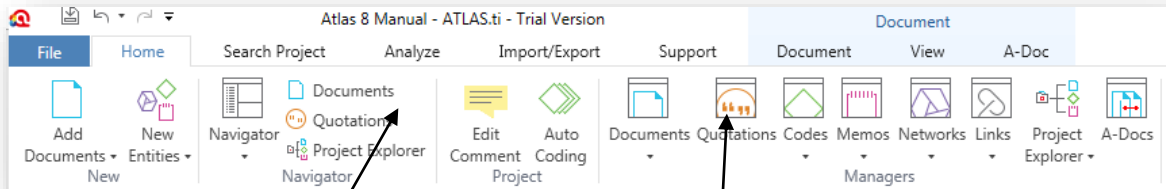
3. Next, you have to tell Atlas.ti to recognise the text as a free quotation. There are two ways of doing this:

- 1. Click on the  button on the Documents toolbar.
- 2. Right click on the selected text and select **Create Free Quotation**.

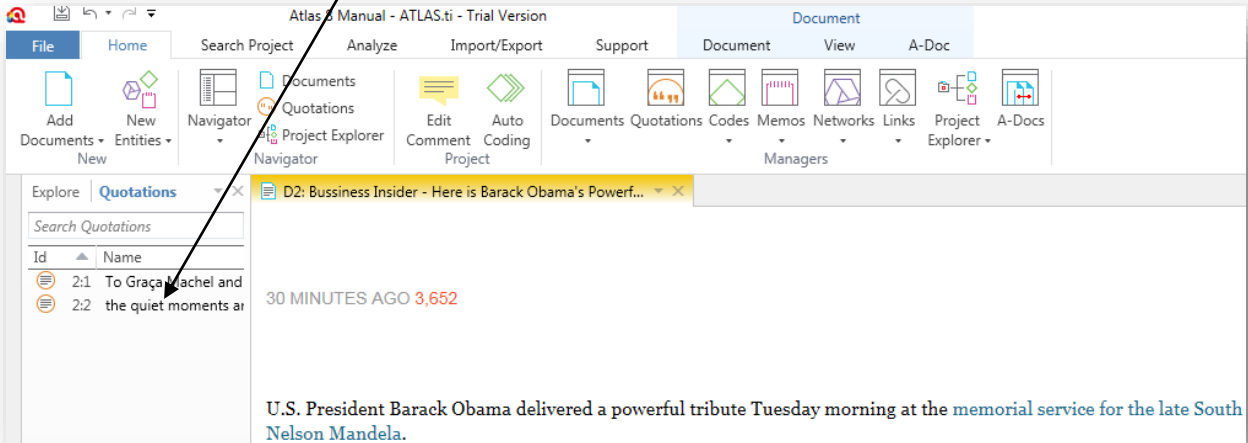
Your free quotation will appear in the quote manager. A bar will appear in the margin to indicate the quotation.

Tip: When you want to select or amend an existing code or quote, click on the bar to select it to prevent choosing a slightly different piece of text.

QUOTATION DESCRIPTIONS

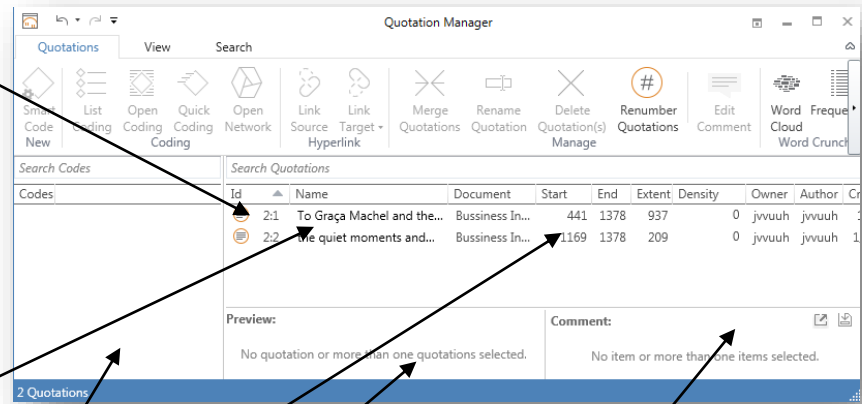


If you open the quotation manager (click on the quotation combo box) a list of quotations with descriptions and information is displayed within the quotations manager window. If you click on the Quotations button, the quotations will appear in a list format to the left of the screen.



The following page provides an overview of the Quotation Manager, and the relevant information provided within the manager. This additionally provides a brief outline regarding where to find pertinent information about a specific quotation.

The first number indicates which document the quotation is from, in this case, document 2, the second number indicates when this quotation was created, and in this case, it was the first quotation in document 2.



The text indicates the first part of the quotation.

The start number indicates which character the quotation starts at. The extent indicates how many characters are included in the quotation.

The bottom section allows you to write a comment on the specific quotation.

The Space on the left allows you to filter the quotations; this is rarely used.

The Preview section shows the full quotation when selected.

Quotations



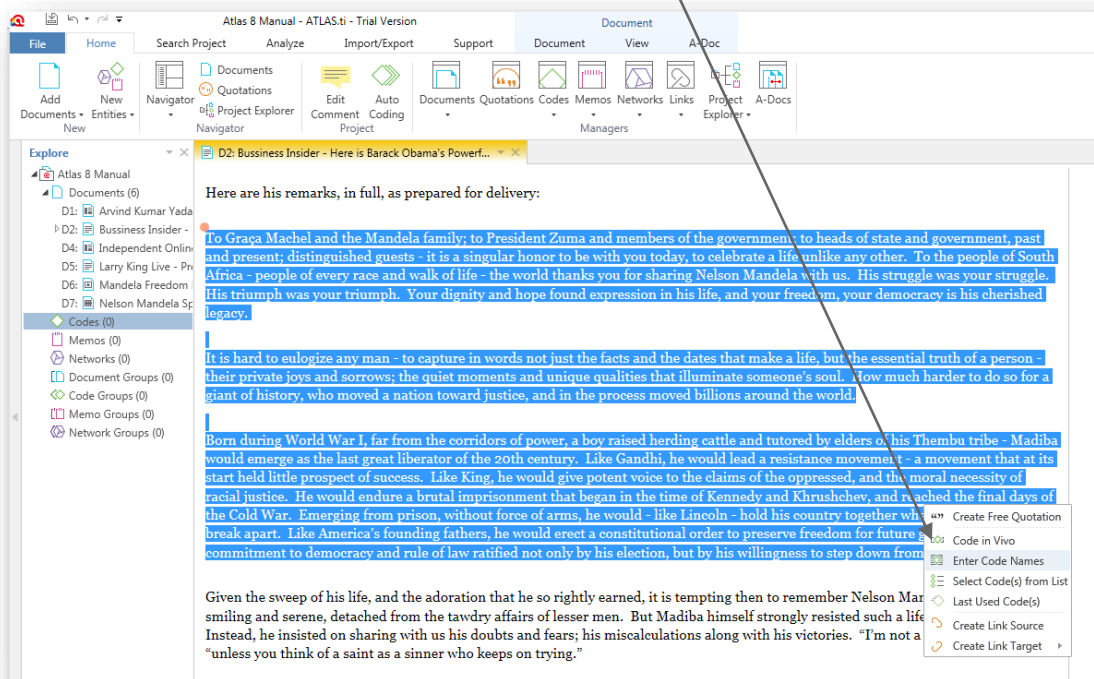
<https://tinyurl.com/znlzw9uh>

CREATING CODES

Codes can be allocated in several ways. These are listed in the table below:

TYPE OF CODING	DESCRIPTION
Free codes	Codes created without being associated with specific text
Open coding	(Enter Code Name) Creating a code for a specific piece of text.
Coding by list	Assigning a code to a piece of text from a list of already existing codes
In-Vivo coding	Assigning a code to a piece of text utilising the actual text as the code
Quick coding	(Last used Code) Assigning one specific code to multiple-pieces of text
Drag & Drop coding	Assigning a code to a piece of text by dragging and dropping the code from a list to the selected piece of text
Auto-coding	Codes are automatically allocated to specified sections of text

Tip: There are several ways to assign codes. Generally, it is easiest to select the relevant text and then right-click to access the coding menu. You have to right-click on the highlighted text as it is context specific.

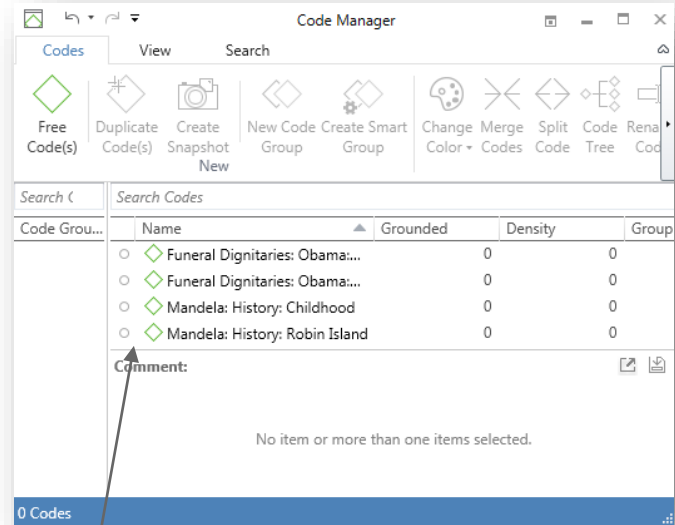


ALLOCATING CODE NAMES

Usually, you will already have some ideas about some codes you might want to assign to the texts you are analysing before formally beginning the process. It is possible to create these codes independently of the text to which they refer. This allows you to select only the necessary code later during coding (using coding by list or drag and drop coding). If all codes are created prior to analysis, it is usually known as deductive coding as the coding framework is imposed or applied to the data. Generating codes during the coding process is generally known as inductive coding.

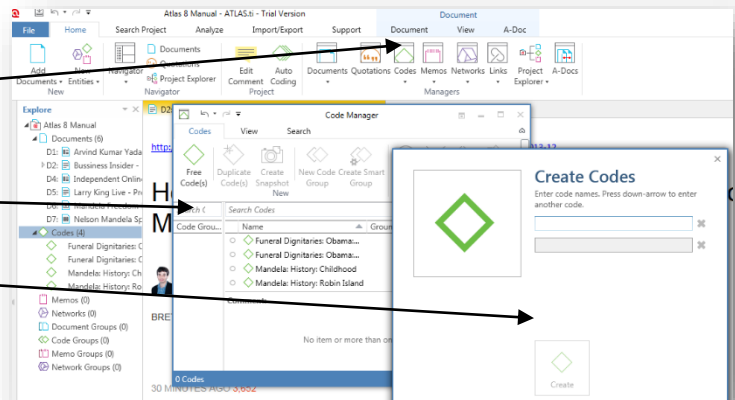
When coding, always use detailed, specific codes e.g. Mandela: History: Childhood; Mandela: History: Robin Island | Funeral Dignitaries: Obama: Selfie | Funeral Dignitaries: Obama: Speech.

Coding in this way means that all the codes relating to Mandela's History will be placed after each other in the coding manager. If you open the code manager, you will see that the codes are sorted alphabetically.



GENERATING FREE CODES

- 🌐 To create free codes (Codes created without being associated with specific text), open the code manager
- 🌐 Click on the first button from the left **Free Code(s)**
- 🌐 Enter the name(s) of the code you wish to create.
- 🌐 Click on **Create** to create the code(s).

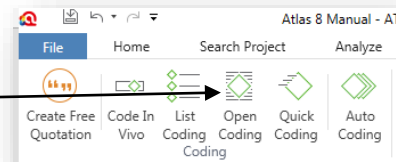


CREATING OPEN CODES

Open coding is utilised when you want to create a new code for a selected piece of text. You are therefore not only creating a free code but also immediately associating it to a piece of text or quotation. The new code created is now available in your code manager to associate to other quotes.

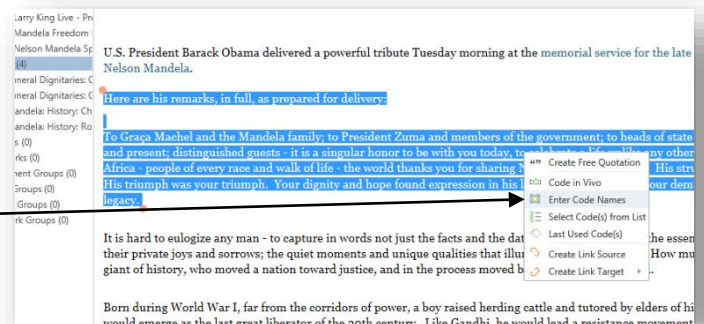
Open coding can only be done if the relevant text is already selected. An open code can then be created by:

- 🌐 using the button on the documents toolbar (similar to free coding)
- 🌐 right clicking



The right click approach is discussed here.

- 🌐 Select the relevant piece of text
- 🌐 Right click, select **Enter Code Names**
- 🌐 Enter the code name
- 🌐 Select **Create**



CODING BY LIST

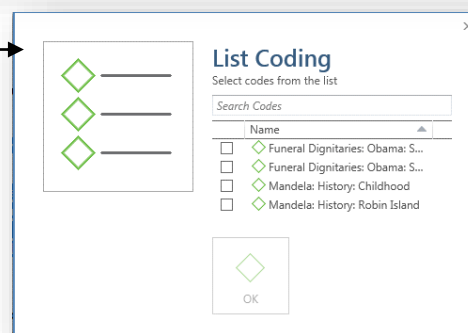
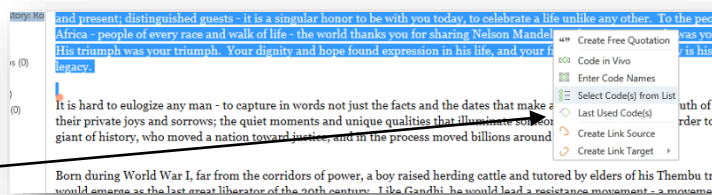
Coding by list associates an existing code to a selected piece of text by selecting the code from a list. The codes on the list may have been created earlier as free codes or open codes.

Coding by list can only be done if the relevant text is already selected. Coding by list can be accomplished in 2 ways:

- 🌐 using the codes menu on the documents toolbar (similar to free coding)
- 🌐 right clicking

The right click approach is discussed here.

- 🌐 Select the relevant piece of text
- 🌐 Right click **Select Code(s) from List**
- 🌐 Select the relevant code to associate from the list
- 🌐 Select **OK**



IN-VIVO CODING

In-vivo coding utilises the piece of the text itself as a code. A maximum number of 40 characters (with spaces) can be used for this.

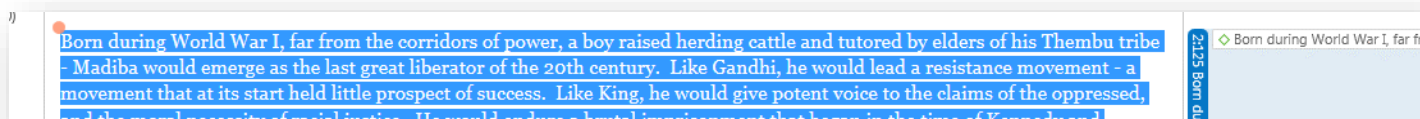
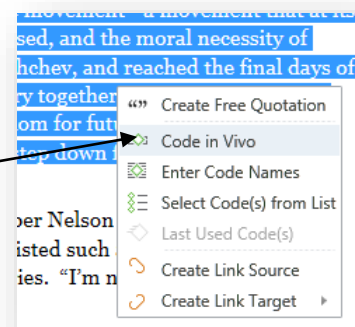
In-vivo coding follows the theoretical idea of “allowing the participants’ voices to speak for themselves”. This type of coding usually takes a particularly relevant part of the quotation as the code name, using the words of the participant. Unfortunately, this idea does not translate well to the computer world as the computer cannot identify the section of quote you wish to use as the code name. The functionality thus only takes the first few characters as the code name. To employ this approach it is better to use the enter code name (open-coding) function and type in the section of the quote you wish to use as the code name.

In-vivo coding can only be done if the relevant text is already selected. In-vivo can be accomplished in 2 ways:

- 🌐 using the codes menu on the main toolbar (similar to free coding)
- 🌐 right clicking.

The right click approach is discussed here.

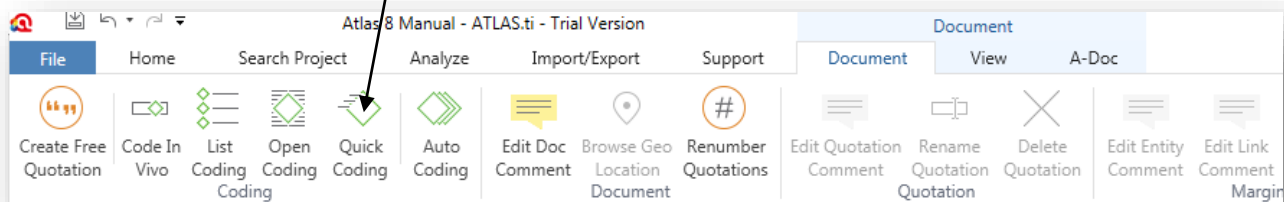
- 🌐 Select the relevant piece of text
- 🌐 Right click, select **Code in Vivo**
- 🌐 The in-vivo code is also placed in the code manager and can be used in the same way as the other codes in the coding manager.



QUICK CODING

Quick coding is utilised when only focussing on one code which you wish to associate to several pieces of text. This approach is only quick if you use the Quick coding button.

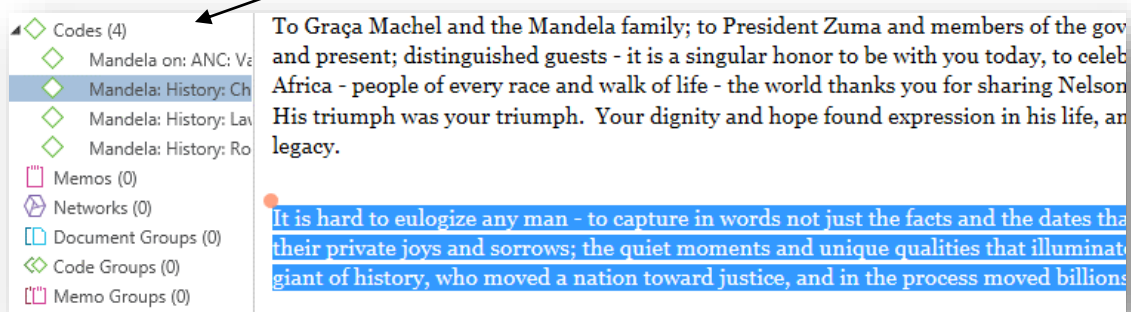
- 🌐 The code used for quick coding must already exist and be the last code you used.
- 🌐 Select the passage or passages which you wish to associate with the code.
- 🌐 Click on the *quick coding button* on the Document menu ribbon
- 🌐 The last code used is repeated and associated with the selected piece of text



DRAG AND DROP CODING

Drag and drop coding is utilised to associate existing codes from the code manager to a piece of text. The code for drag and drop coding must already exist in the code manager.

- 🌐 Select the passage or passages which you wish to associate with the code.
- 🌐 Click on the relevant code in the coder manager or left side bar.
- 🌐 Hold down the left mouse button.
- 🌐 Drag the code onto the right-hand pane (the cursor becomes an arrow with a plus).
- 🌐 Release the left mouse button.



AUTO-CODING

Auto-coding allows you to search for a specific string of text throughout one or all of your documents. Once the specific string is located, Atlas.ti can allocate the code to either just the word, string, sentence, paragraph or the entire document.

Auto-coding works on a similar principal as the Find and Replace function in Microsoft Office Word. It can only find the words you specify so if you specify the word children, it will not find instances of child or kid.

🌐 On the coding menu select **Document (ribbon) → Auto Coding**.

🌐 The auto-coding dialogue box appears.

🌐 Select the code you wish to associate from the drop-down box or create a new code.

🌐 Enter the search expression, in other words, the text string.

🌐 The tick box for case sensitive can be clicked or un-clicked as required.

🌐 If the confirm matches box, Atlas.ti will ask you whether the code should be assigned for each string found, this is generally the safest option.

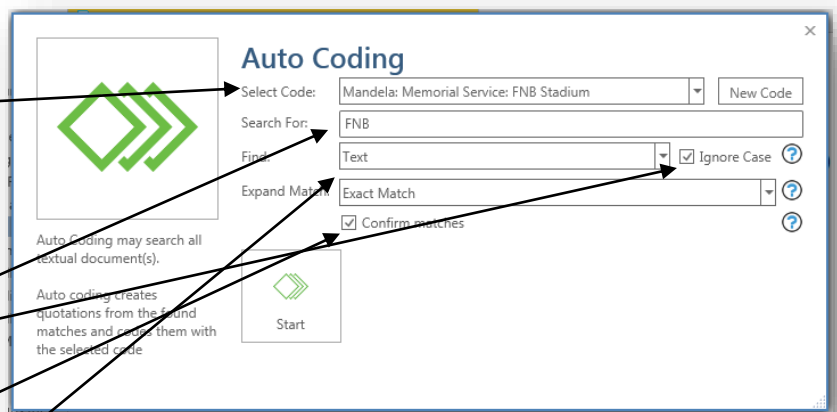
🌐 Select the scope for the coding.

🌐 Select which part of the text should be chosen as the quotation for this code when the string is found.

🌐 Click **Start**.

🌐 If you have selected confirm matches you will have to indicate if each piece of text found should be coded or skipped.

🌐 When complete, the auto coding dialogue box will disappear.



Coding Text Documents



<https://tinyurl.com/gr4p9v7>

Coding Graphics



<https://tinyurl.com/z4fyqwn>

The Code Manager



<http://tinyurl.com/plect7w>

CODE DESCRIPTIONS

- ④ In the code manager, each code is accompanied followed by information in columns. The first number (Grounded) indicates how many quotations have been associated with the specific code.
- ④ The second number (Density) indicates how many other objects have been linked to this code (in a network).
- ④ The open space at the bottom allows for the addition of comments; here it is used to describe the code
- ④ The space on the left allows you to filter the code list according to groups.
- ④ If no groups are selected, then no filter has been applied (discussed later).
- ④ The number of codes is also indicated in this case 5.

Code Group	Name	Grounded	Density	Groups	Owner	Author	Created	Modified
	Mandela on: ANC: Values	0	0		jvuuuh	jvuuuh	1/23/2017 9:34 AM	1/23/2017 9:...
	Mandela: History: Childhood	2	0		jvuuuh	jvuuuh	1/23/2017 9:34 AM	1/23/2017 9:...
	Mandela: History: Lawyer	0	0		jvuuuh	jvuuuh	1/23/2017 9:34 AM	1/23/2017 9:...
	Mandela: History: Robin Island	0	0		jvuuuh	jvuuuh	1/23/2017 9:34 AM	1/23/2017 9:...
	Mandela: Memorial Service: FNB Stadium	0	0		jvuuuh	jvuuuh	1/23/2017 9:41 AM	1/23/2017 9:...

Comment:

No item or more than one items selected.

5 Codes

EXERCISE 3: CODING

In this exercise, you will be required to open your existing Project and to create quotations and codes. You will use the Madiba Project set up in the previous task.

Tasks:

- 🌐 Select an interesting piece of text and create a free quotation for it.
- 🌐 Create free codes (codes in the manager you have not yet assigned to quotes).
- 🌐 Click on the quotation bracket, right-click and assign an appropriate code to the quotation.
- 🌐 Do some open coding on the documents.
- 🌐 You can utilise drag and drop, coding by list and quick coding if the codes are repeatedly used.
- 🌐 Use the auto-coding tool to code for a certain concept.
- 🌐 Complete coding the rest of your documents in the fashion most comfortable for you.

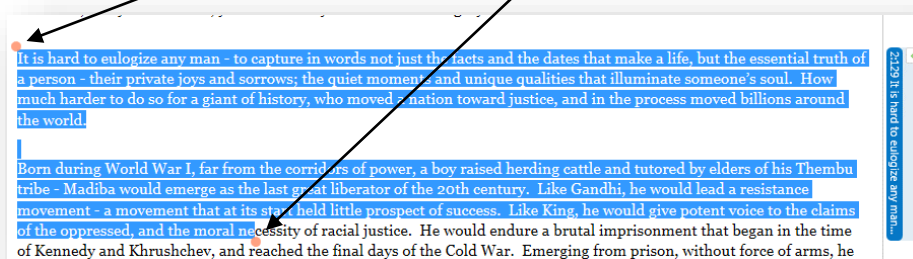
4. FIXING MISTAKES, CREATING COMMENTS AND MEMOS

In this section, we examine how to rectify any mistakes concerning codes and quotes, as well as limited editing of documents. Comments and memos are also introduced.

CHANGING THE QUOTE LENGTH

Sometimes you wish to change the text allocated to a quote such as extending or shortening it.

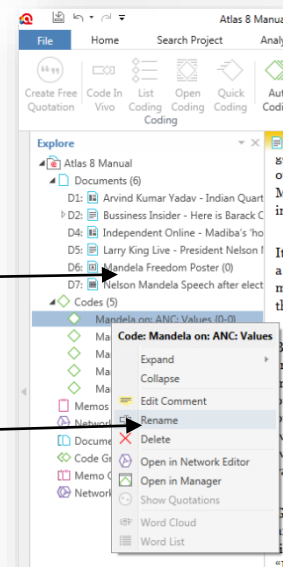
- 🌐 Select the code bracket for the text you want to change.
- 🌐 The text in the quotation will be highlighted.
- 🌐 Drag the highlighted bracket at the beginning or end of the text to fit the section that you want to change.
- 🌐 The code bracket will automatically resize appropriately.



RENAMING CODES

In order to rename a code, the code manager or code list on the left side menu must first be opened.

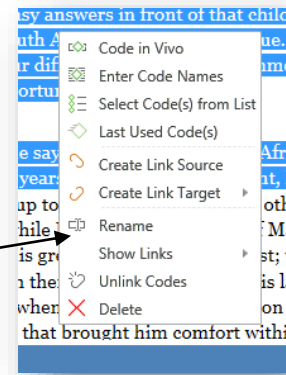
- 🌐 Select the code to be renamed so that it is highlighted.
- 🌐 Right-click on the code.
- 🌐 Select **Rename**
- 🌐 Enter the new name for the code
- 🌐 Select **Rename**.



UNLINKING QUOTES FROM CODES

Unlinking quotes will leave the quotation chosen as a free quote, but remove the association with the specific code.

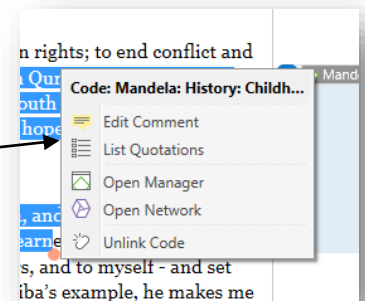
- 🌐 Select the quote by selecting the bar in the right-hand pane.
- 🌐 The text will be highlighted.
- 🌐 Right click on the text.
- 🌐 Select **Unlink Codes**.
- 🌐 This will unlink all associated codes.



This functionality is most useful when you wish to determine inter-coder reliability (Kappa or Krippendorff's Alpha). First make sure you save a copy of your unit and then save the new unit under another name. You can then unlink the codes and change the author ownership to that of your co-coder. The two projects are then re-merged. Once you have completed this you can determine inter-coder reliability using the free Open Source tool known as the [Coding Analysis Toolkit \(CAT\)](http://cat.texifter.com/) <http://cat.texifter.com/>. The site has documents illustrating all the steps.

To unlock a specific code:

- 🌐 Select the quote by selecting the bar in the right-hand pane.
- 🌐 The text will be highlighted.
- 🌐 Right click on the Specific code.
- 🌐 Select **Unlink Code**.



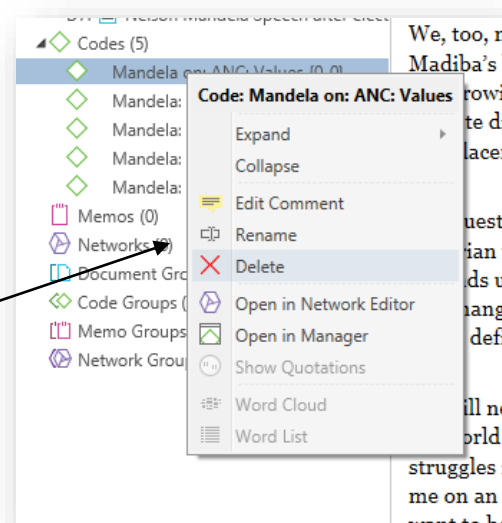
DELETING QUOTES

Deleting quotes will not remove the text from the document. It will unlink the code and remove the quote bar indicating a free quote in the right-hand margin as well. Exactly the same procedure as above is followed except the option Delete is selected from the right-click menu instead of Unlink Codes.

DELETING CODES

Deleting codes will completely remove the code from the Project. This is done from the code manager or left side menu.

- 🌐 Open the code manager or left menu options.
- 🌐 Select the code to be deleted so that it is highlighted.
- 🌐 Right-click and select **Delete**.



Remember: Deleting a code is permanent (in older versions of Atlas.ti), there is an undo button (Keyboard shortcut: Ctrl + Z) in Atlas.ti 8.x. You can, however, only undo a small number of steps. In addition, the code will not only be removed from 1 place in the document, but throughout all the documents. Be sure you never want to use a code again before you delete it.

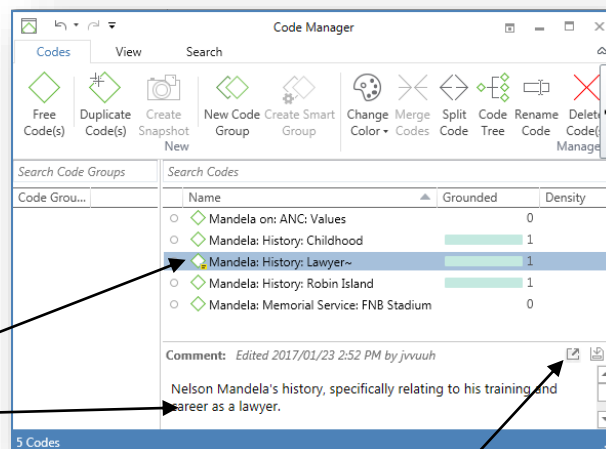
COMMENTS AND MEMOS

Atlas.ti allows you to store any notes that you may have within a project. This can be done through using comments or memos. Comments are directly linked to objects such as a document, code or quotation. Memos are usually not linked to an object and are saved under a name in the memo-object manager in the left side pane.

COMMENTS

Creating comments is very easy. The same procedure is used for creating comments for documents, quotations, codes, memos, networks, and other functions within Atlas.ti 8. Comments are set up in the relevant manager e.g. the code manager. Alternatively, by right clicking on the specific document, code, quote (etc.) in the left-hand pane and select **Edit Comment**.

Within the code manager: The bottom part of the manager is designed for comments or descriptions about the objects in your project.



- 🌐 Click on the code or object you want to comment on to highlight it.
- 🌐 Type the comment for that object in the bottom section.
- 🌐 If you select another code or object, the comment is saved automatically, and a tilde ~ appears next to the object.
- 🌐 For longer comments, you can use the comment editor by selecting the first button on the codes manager (the callout). In this case, you must save the comment in the editor before exiting.

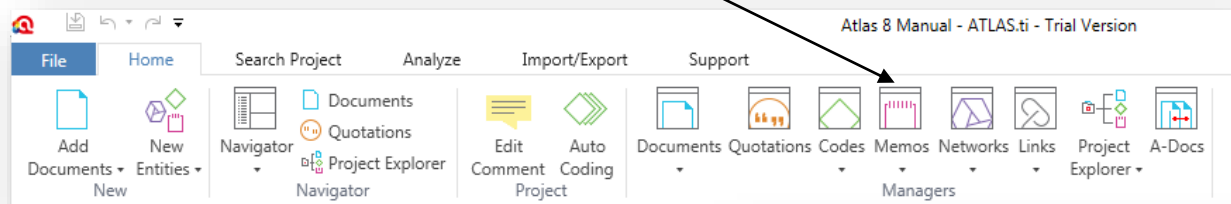
MEMOS

Memos are like comments which are not automatically linked to a specific object, although memos may later be associated with specific objects.

Memos may be used:

- 🌐 As a journal to allow other people coding on the same project to know what you have done, or as a reminder to yourself of what is done and still needs to be done in a later session.
- 🌐 As a research journal. These days a lot of emphases is placed on researcher reflexivity in qualitative research. If your research diary is part of the project, your reader can have full access to your diary entries.
- 🌐 To write notes to yourself about a specific piece of text or code.

🌐 Memos are located in the fourth object manager next to the code manager in the Home ribbon.

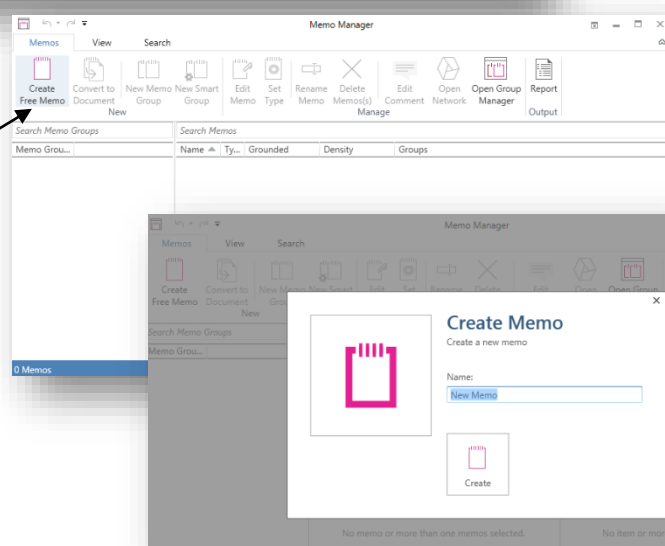


If you select the Memo manager button, the memo manager is displayed

You can create a memo by opening the Memo manager:

🌐 By clicking the **Create Free Memo** button

You will then be prompted to enter the name for the memo. You must select the memo from the manager or Left side menu in order to start typing.



A memo can be linked to a code or quote in the Network Manager (discussed later).
Memos may also be analysed as primary documents

EXERCISE 4: FIXING MISTAKES, COMMENTS AND MEMOS

In this exercise, you will be required to open your existing Project and to add comments to your codes. You will also have to create a diary memo and make some changes to your codes and quotations. Utilise the Madiba Project used in the previous task.

Tasks:

- 🌐 Select a quote and shorten it. Change it back to its original length again.
- 🌐 Click on the quotation bar with a code and right-click to unlink the code. This leaves the quotation bar but removes the code association.
- 🌐 Delete the coding bar completely by right clicking.
- 🌐 Code the text again with the original code.
- 🌐 Create a made-up code and code some text throughout your documents with it.
- 🌐 Select the made-up code from the code-list, right-click it and select delete.
- 🌐 Create a comment to describe each of your allocated codes in the code list by entering text into the bottom part of the code manager. Notice the ~ that appears next to each commented code.
- 🌐 Create a research diary memo for yourself. You can either create a general diary memo or a diary entry connected to a specific date.
- 🌐 Delete the made-up memo again.

5. SIMPLE QUERIES, CREATING GROUPS AND FILTERING

Now that your documents are all coded it is time to start organising the codes into themes and creating output documents from which to write your report, dissertation or thesis. You will now also be able to do queries and searches.

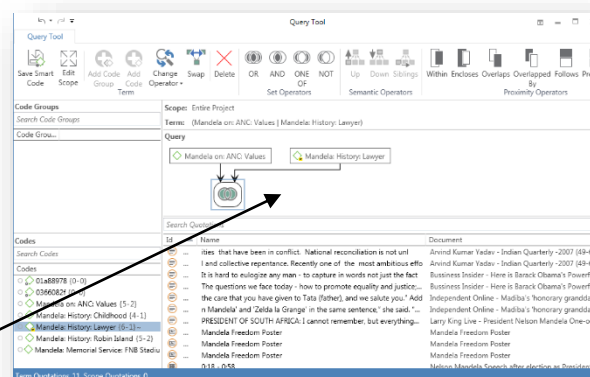
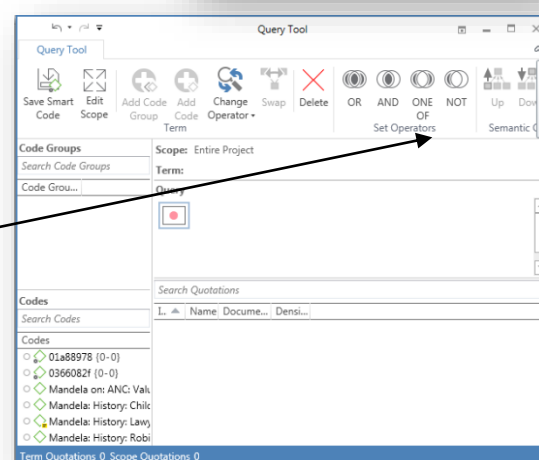
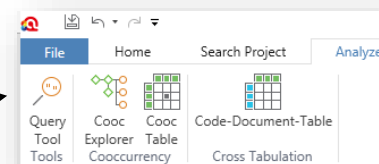
QUERIES

Queries allow you to find specific codes within the text so that you can read the specific documents.

- 🌐 The query tool can be accessed by clicking on the *query button* in the Analyse ribbon.
- 🌐 This will open the query tool window which allows you to do complex searches of the text using various operators to define relationships.
- 🌐 The relationship between codes can be defined through, Boolean, Semantic and Proximity operators.
- 🌐 These queries are however more advanced and will not be discussed here. These queries can be learnt by using the Atlas.ti Help menu.

A simple text query can be done by double-clicking on any code in the code list. This will open a list of quotations associated with this code. Clicking on any of these quotes will allow you to view this quote within the context of the document.

Queries are often redundant as creating groups and filtering will allow you to access all the data you need accordingly, neatly grouped together. This is discussed in the section below. However, the Query Tool helps you to filter codes and code groups by visually presenting their connections, as well as the quotes relating to these specific connections.

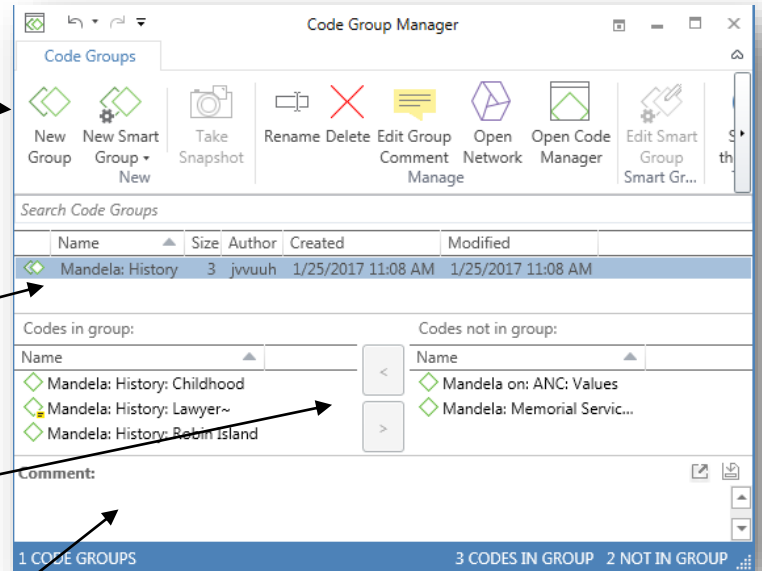


CREATING CODING GROUPS

When codes are meaningfully grouped together, the groupings are known as themes (patterns) in qualitative research. Codes which are related to each other are thus clustered together and given a descriptive name. In Atlas.ti themes are known as groups.

To create coding groups:

- 🌐 Select **Codes** → **Code Groups**.
- 🌐 Click on the first button in the Code Group Manager, to create a New Group.
- 🌐 You will be asked to enter the name of the new group.
- 🌐 Select the created group.
- 🌐 In the middle of the window, there are two panes - one on the left for *Codes in the group* and one on the right for *Codes not in the group*.
- 🌐 All the codes used in the project are displayed in the *Codes not in group* window.
- 🌐 You may now select any of the codes you wish to group together in this group and make them a member of the group by clicking <
- 🌐 Codes can be removed from the group again by clicking >
- 🌐 Comments for the groups can be assigned in the bottom part of the window
- 🌐 The number in the size column after the code group name indicates how many codes are associated with this code group.



A single code may be included in more than one code group. Multiple codes can be selected by using the shift and ctrl keys as discussed previously.

Document groups can also be created to group your documents together. Exactly the same procedure is utilised as for codes. The Document Group Browser is, however accessed through the Document menu.

Document Groups



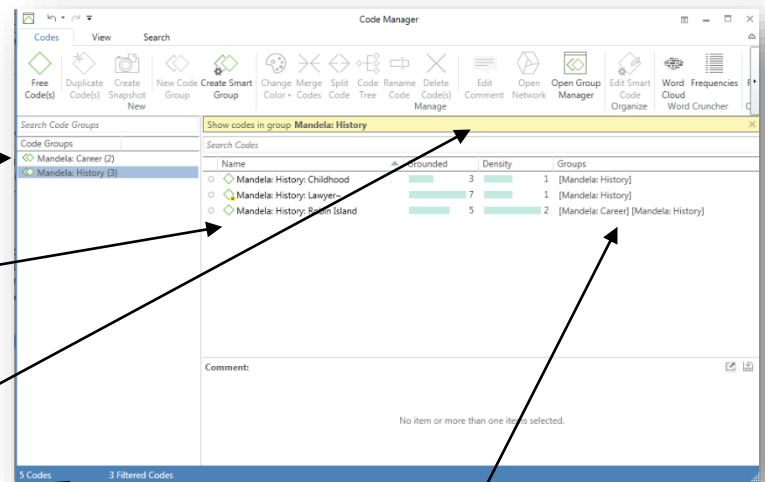
<https://tinyurl.com/jub5qgm>

FILTERING

Now that we have our groups defined, it is possible for us to filter out the codes from a particular theme to focus on writing about this specific theme. Filtering can be done within any one of the object managers.

To filter according to code groups, open the Code Manager:

- 🌐 Select the code group in the left-hand margin.
- 🌐 See that all codes not related to the code group are removed from the main window.
- 🌐 A yellow text box will appear informing you that a filter has been applied.
- 🌐 In the bottom left corner you will see the number of codes you have, and the number of codes that have been filtered.








To filter according to document group, follow the same procedure within the **Documents Manager**.

When a filter is in place, the Groups column will show which codes belong to more than one group.

EXERCISE 5: SIMPLE QUERIES, CREATING GROUPS AND FILTERING

In this exercise you will be required to use your existing Project, which has been fully coded, to create document and code groups. The exercise also includes a section on utilising filters. You can use the Madiba Project employed in the previous task.

Tasks:

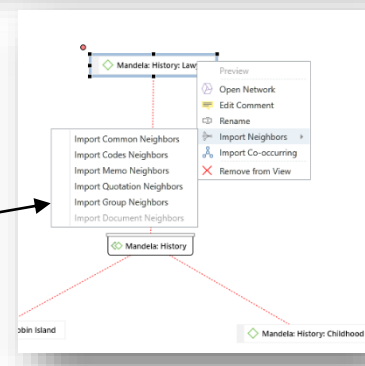
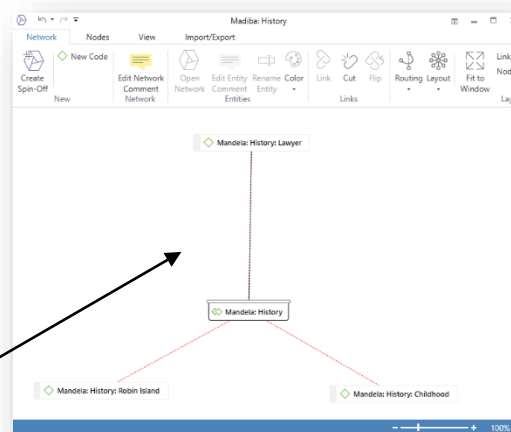
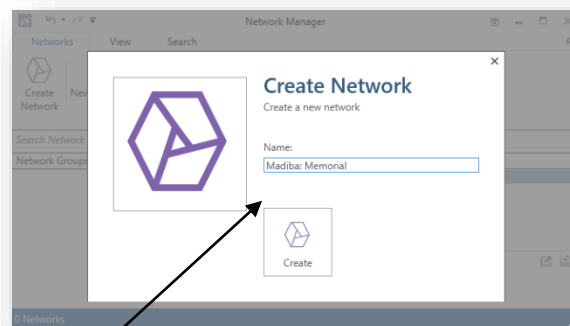
-  Create document groups for your Documents e.g. Videos, Newspaper articles and transcripts.
-  Create code groups by grouping your codes together into meaningful units.
-  Filter your documents according to the document group Transcripts in the Document Manager, and see which documents are displayed.
-  Filter the document according to All and recheck your manager.
-  Practice filtering and un-filtering according to code groups.

6. NETWORK VIEWS

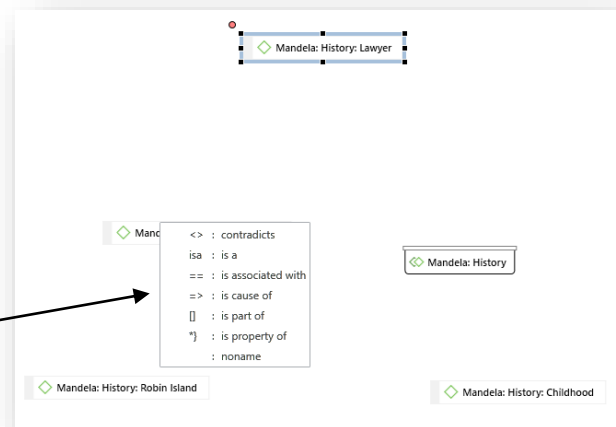
Relationships can be graphically represented using network views. Any of the previously mentioned objects can be incorporated into networks. These include documents, quotes, codes, memos, other networks, and the groups of each. Although connections cannot be made between any object. For example, a code cannot just be linked to a document, because this would require a specific section to be linked (as a quote). However, if you go to the document and make use of that code, this connection would show in the Network viewer. Through these graphic representations, complex interactions can be clarified for the readers. Some researchers (Denzin and Lincoln, 2017) see these networks (and the groups generated) as the themes of the research. Not all analysis projects will require networks to be generated.

To create a network:

- 🌐 Select **Networks** in the Home menu ribbon
- 🌐 By selecting the *Create new network button*, you create a new network and are prompted to name it.
- 🌐 If you click on the newly created network name, the network window opens, and you can start creating and editing your network (the number in the Degree column indicates how many objects are in the network).
- 🌐 The objects in this window are known as nodes, and their relationships are defined by links.
- 🌐 First, you have to import the nodes you want to use.
- 🌐 Select and drag any object from the Left plane, or from one of the Object manager into the Network window.
- 🌐 Next, you can import the codes, quotes, memos or groups by right clicking and selecting *Import Neighbours*, and selecting the appropriate option.
- 🌐 In the Import Neighbours menu, you can select which type of nodes you wish to import from the drop-down list.



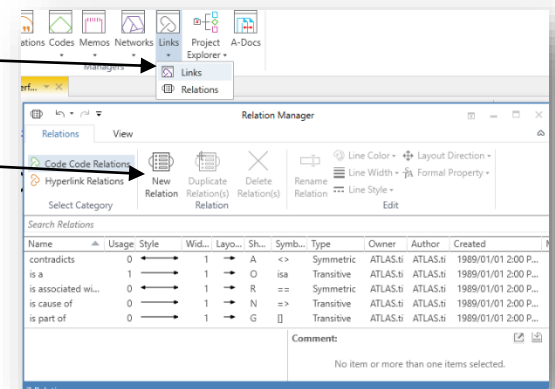
- 🌐 Now that the nodes are imported you can drag and drop them from the window and place them where you wish.
- 🌐 You can now create links between the nodes to define relationships.
- 🌐 Click on the Node a box with a red dot appears
- 🌐 Drag the dot to the next node.
- 🌐 Left click
- 🌐 A relationship menu will now pop up
- 🌐 Select the correct relationship from the list.
- 🌐 If the relation you wish to use is not shown, you can define your own in the Relation Manager found under the *Links Object Manager* in the Home menu ribbon.



The newly created relations will appear in the drop down menu, but the only way of adding relations is to go through the relations manager

In the Home menu ribbon: Select **Links** → **Relations** to open the relations manager. In the relations manager, click on **New Relation**.

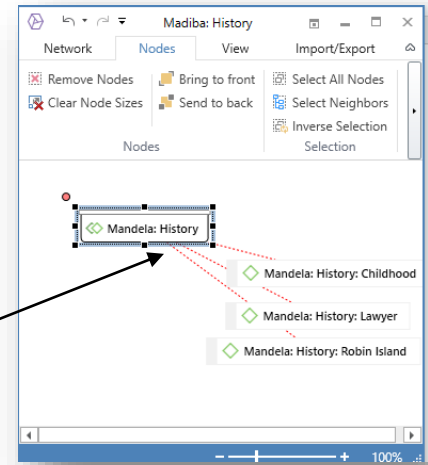
- 🌐 You can then merely fill in the required fields
- 🌐 Click on **Apply**
- 🌐 The new relation will appear in the list, click on Create Relation



You can use the relation table and columns as a guide of what to fill in, in each field. The table will also show which labels, symbols and code names are already in use.

To import a code group along with all the codes in the group:

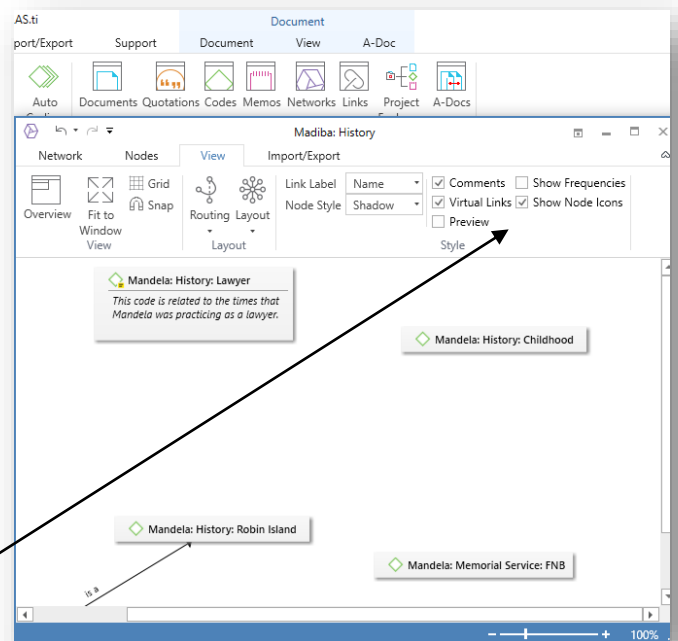
- 🌐 Open a new network with the group name you wish to employ.
- 🌐 Drag and drop the code group into the network window.
- 🌐 Right click on the group node which is now in the network and select **Import Neighbours** → **Import Common Neighbours**
- 🌐 All the codes in that group will appear as nodes in the network linked with a red dotted line to the group name



The network can now be edited and formatted as you would like to. To change the colour of a code, click the colour button in the Network menu ribbon.

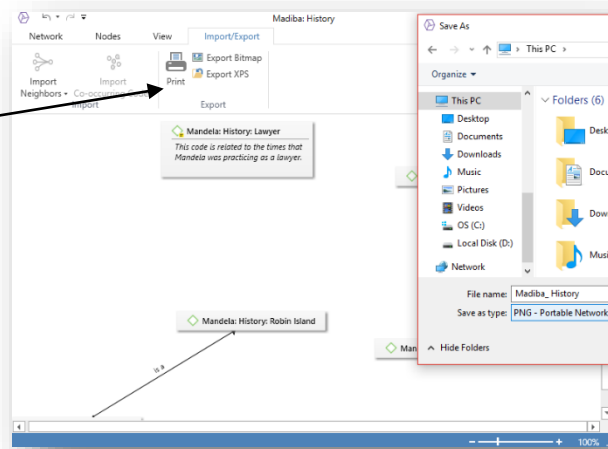
You can also change what labels are used to describe the codes and relations:

- 🌐 In the View menu ribbon: Go to the Style subsection containing the Link information
- 🌐 You can now change the link display, whether to include an extended label of the relations, only the symbol, comments on the codes, or frequencies, etc.



Remember! Creating or deleting codes will create or remove them from the entire unit, not just the network. There are a limited number of times that you are able to undo a mistake, so make sure that you are making the changes that you want to make.

- Once you have your network select the **Import / Export menu ribbon** → **Export Bitmap, Export XPS or Print**.
- Save the graphic file in your transferable file on the Desktop in the suitcase folder under *Outputs*.
- This network picture can now be inserted into your Word document (Same as inserting any picture or clip-art).



Networks







<https://tinyurl.com/jhhvuen>

EXERCISE 6: NETWORKS

In this exercise, you will be required to use your existing Project to create a network view. You will utilise the Madiba Project employed in the previous task.

Tasks:

-  Choose some codes with relationships you wish to clarify
-  Generate a network.
-  Save the network.
-  Save the network as a graphic file in your transferable file under outputs.

7. CREATING OUTPUTS

In this section, we start to see the products of our labours. We learn how to build reports of our project, Word documents containing all the codes and quotes for a specific theme / group and Excel documents with frequencies.

CREATING OUTPUTS OR REPORTS

On the menu ribbon for each of the Atlas.ti object managers there is an option for **Reports**. It is through this that we access most of the reports automatically generated by Atlas.ti.

CREATING OUTPUTS FOR CODE FREQUENCIES

As will be discussed it is possible to quantify some qualitative data through the use of Atlas.ti. This can be misleading if the data is not highly structured and should be interpreted with caution. Atlas.ti can generate an output report in Excel, which notes the frequencies of the use of all the codes, or groups, as related to each document.

🌐 Select **Analysis** → **Code-Document-Table**

🌐 This opens the CPD menu which allows you to select which codes and documents you wish to have in your cross tabulation.

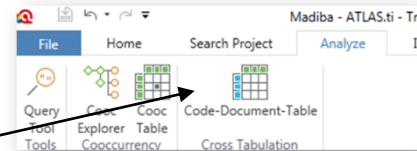
🌐 In the left top window, all your codes are reflected, in the left bottom, all the documents.

🌐 Select the codes and documents, or code and document groups, you wish to include by marking the relevant boxes next to each.

🌐 You are able to preview the results in the window to the right.

🌐 You can change the options by navigating relevant setting in the ribbon.

🌐 You can create several outputs, either as graphic, text, or Excel file by clicking the **Export** option.



	Mandela on A...	Mandela Hito...	Mandela Hito...	Mandela Hito...	Mandela Mem...	Totals
Business Insider - Here is B...	3	2	3	1	1	10
Independent Online - Mand...	1	2	1	0	0	6
Larry King Live - Preside...	2	1	0	1	1	5
Mandela Freedom Poster	0	1	0	0	0	3
The Guardian - FW De Klerk...	1	1	0	2	1	5
Arvind Kumar Yadav - Inda...	1	1	1	1	1	5
Totals	10	7	8	5	4	34

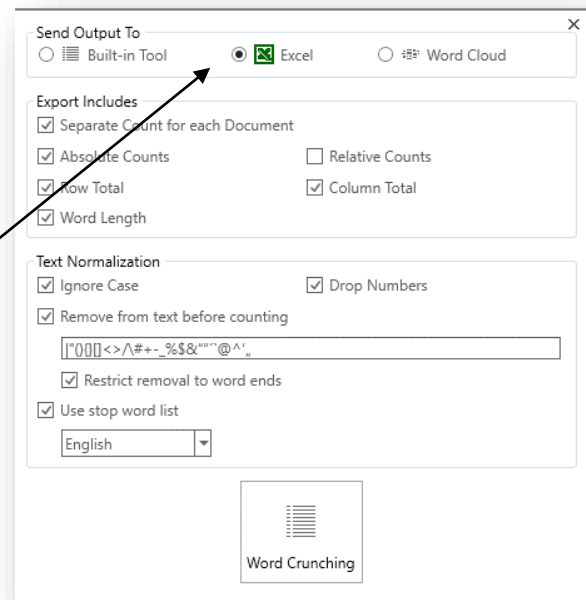
Each export option provides a perspective of the preview above. The graphic file shows a snapshot of the preview box, whereas the text options provide the code document organisation in Windows Notepad. The Excel option can be viewed below; this provides the reader with the possibility of navigating the table if manipulation of the information is needed. In this example, the row indicates the document in question and each column relates to a code. The numbers indicate the frequency of the specific code in that specific document. However, these options can be changed in the analysis ribbon before export.

	Mandela c	Mandela:	Mandela:	Mandela:	Mandela:	Totals
6 Bussiness	3	2	3	1	1	10
7 Independ	2	1	2	1	0	6
8 Larry King	1	2	1	0	1	5
9 Mandela f	2	0	1	0	0	3
10 The Gaurd	1	1	0	2	1	5
11 Arvind Ku	1	1	1	1	1	5
12 Totals	10	7	8	5	4	34

CREATING OUTPUTS FOR WORD FREQUENCIES

Atlas.ti can also generate tables that indicate the frequency of words per document, code, or quote. This is done through the word cruncher's Frequencies function. Creating a Frequency word list for all the documents will be described here.

- 🌐 In the Documents Manager, Documents menu ribbon: Select **Frequencies** (Make sure an individual document is not selected, this will only create a frequency for that document).
- 🌐 Select **Excel**
- 🌐 Select a stop word list if appropriate
- 🌐 Click **Word Crunching**



Save the file as an Excel file in your output subfolder in your suitcase file on the Desktop.

The word cruncher function is found in almost every Object Manager's main ribbon, but does slightly different work in each. In the Documents Manager it provides an overview of a single document, or multiple documents. In the code manager it provides a frequency count of all the words in the coded quotations.

Make sure that you are in the correct manager when creating frequency counts.

Each column indicates the document in question (if the *Separate count for each Document* was selected) and each row relates to a different word. The numbers indicate the frequency of the specific word in that specific document.

Word	Length	Doc 1	Doc 2	Doc 3	Doc 6	Total
196 answers	7	2				2
197 antiapartheid	13				1	1
198 anticipation	12			1		1
199 antipass	8				1	1
200 antirid	7				1	1

Word Cruncher



<https://tinyurl.com/zgt29cy>

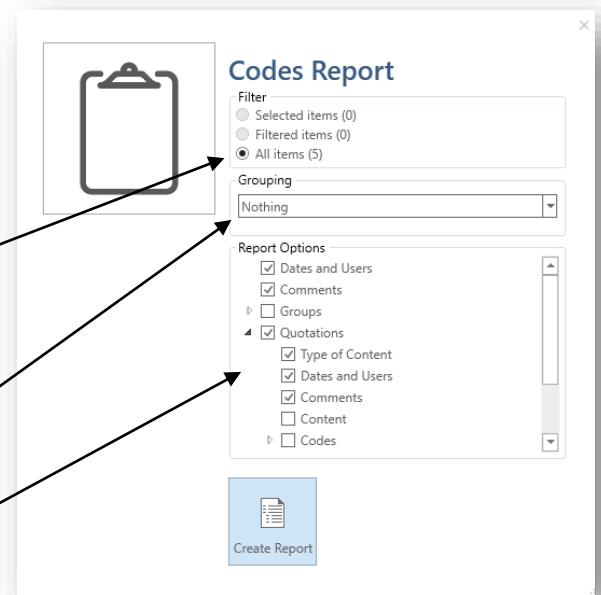
For a quick format select the entire table with headings, select Insert →

Table tick *My table has headings* and click OK

 ALL CODES WITH QUOTATIONS:

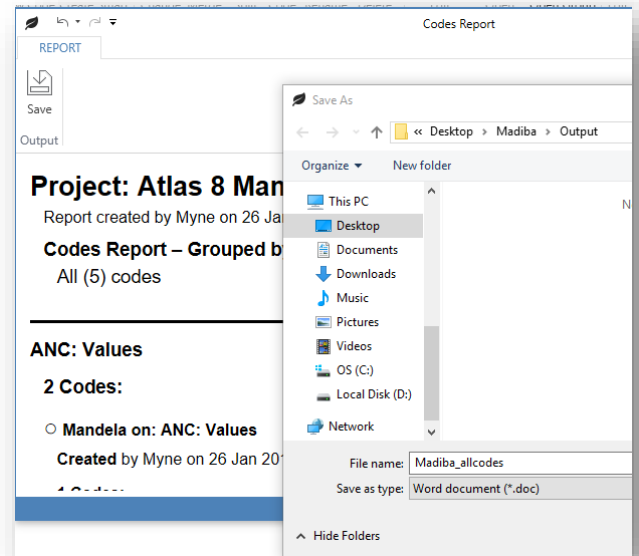
While the quantification of qualitative data (as shown in the three preceding sections) may have value, this is not the basis of qualitative analysis. The primary outputs are the codes with all the associated quotations. In the Codes Manager:

- 🌐 Select **Report**, this can be found in the Codes ribbon.
- 🌐 This will open the Code Reports menu
- 🌐 Select **All items**
- 🌐 Select Grouping according to Nothing.
- 🌐 Choose the information that you believe that you will need. Select an option only once working on a hierarchical system. The default usually suffices.
- 🌐 Click on **Create Report**
- 🌐 Select **Save**
- 🌐 Navigate to the transferable folder you created on the desktop and select the Outputs subfolder
- 🌐 Change the save as type to *.doc.
- 🌐 Click Save



VIEWING YOUR WORD PAGE:

- 🌐 Navigate to your **Desktop → Transferable Folder (Whatever you named your project folder) → Outputs sub-folder.**
- 🌐 Open the Madiba_allcodes.doc document.
- 🌐 The page will open, and you can now format it any way you wish. We will discuss this later
- 🌐 All the text relating to a specific code is provided below each code
- 🌐 The document is noted by the first number next to each quote.
- 🌐 The second number refers to the code number for that document. E.g (6:1) refers to the first code from document 6

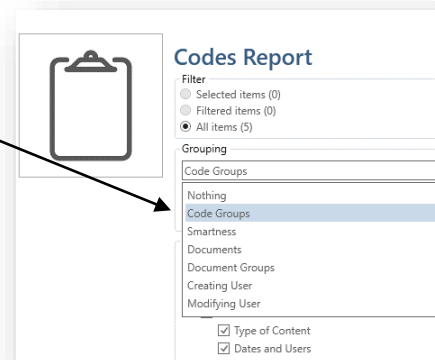


The direct quotes can be copied from this document into any document on which you are working. Now we are going to look at how we can produce similar documents for each of our groups.

CREATING OUTPUTS FOR CODE GROUPS

Creating grouped outputs for only the group codes and texts relating to those codes is very useful. If you are writing, this allows you to have one document to work from that includes all your analysed data about that specific theme. You can then easily see the full range of issues relating to that theme and can copy and paste it from the created document.

The procedure for creating output for code groups is very similar to creating output for all your codes. The only added step is that the Code Report needs to be grouped. This grouping can actually be applied across several options, but the Code Groups will be focused on here. In the Code Manager, again select **Report:**



- 🌐 The same menu will appear
- 🌐 Select **All items**
- 🌐 Select Grouping according to Code Groups.

- 🌐 Ensure that you select the Comments as well. This will assist with your write up, as the comments would define your themes already.

- 🌐 Select the information that you believe that you will need. Select an option only once working on a hierarchical system. The default usually suffices.

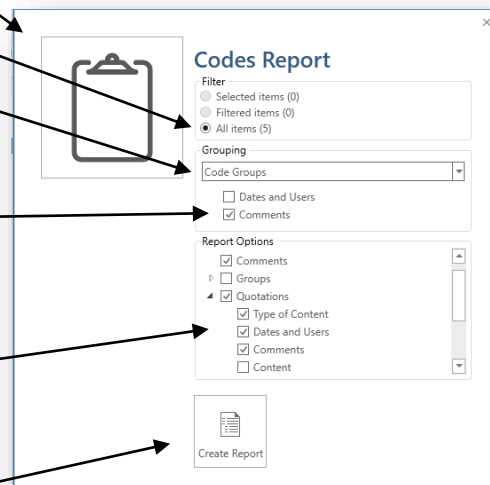
- 🌐 Click on **Create Report**

- 🌐 Select **Save**

- 🌐 Navigate to the transferable folder you created on the desktop and select the Outputs subfolder

- 🌐 Change the save as type to *.doc.

- 🌐 Click Save.









Working from a single document could be confusing to some. Alternatively, you can create a Code Group report, in a similar way as the above, and save each document under the name of the theme. In the Code Manager select a Code Group, while selected run the report. Note that the Filter section changes to **Selected items**. Repeat until each theme was exported to a document.

EXERCISE 7: CREATING OUTPUTS

In this exercise, you will be required to use your existing Project to create an Excel output and Word outputs for the groups. You will utilise the Madiba Project employed in the previous task.

Tasks:

-  Use the Code Manager to create a Frequency count of the words used within each code.
-  Use the Code Document Table to count the number of times each code, or code group, was used in each document
-  Use the Word Cloud tool to create a word cloud for a specific code group.
-  Create a report for the codes and their quotations organised according to the code groups. This can be done for the specific code groups by filtering the groups in the code manager before reporting.
-  Save the reports in the outputs subfolder on your transferable file on the desktop
-  Make sure each file is stored under a unique file name, which should be the same as the function that was used, or the group name allocated to the codes (if reporting by filtering groups individually).








8. PUTTING TOGETHER THE FINAL PRODUCT:

This section deals with the formatting of outputs. Essentially this is the dotting of the I's and the crossing of the T's of your work. It may take a few hours, but ultimately gives a look of professionalism to your work and will definitely make a good impression on your reader. Your work in Atlas.ti itself is, however, finished.

EDITING YOUR WORD DOCUMENTS

At this stage, you will have several word documents saved in your outputs folder, one for all the codes and a document for each of your themes. You might have decided to create a single document for all codes according to the theme, however, it provides some structure to divide the themes between different documents. It is now possible to edit these documents to have an interactive index to support navigation. This is accomplished in four steps: formatting the text, inserting headings, inserting page breaks and inserting an index. It is then suggested that the document is saved in pdf format for ease of navigation for your readers.

STEP 1 - FORMATTING YOUR DOCUMENT

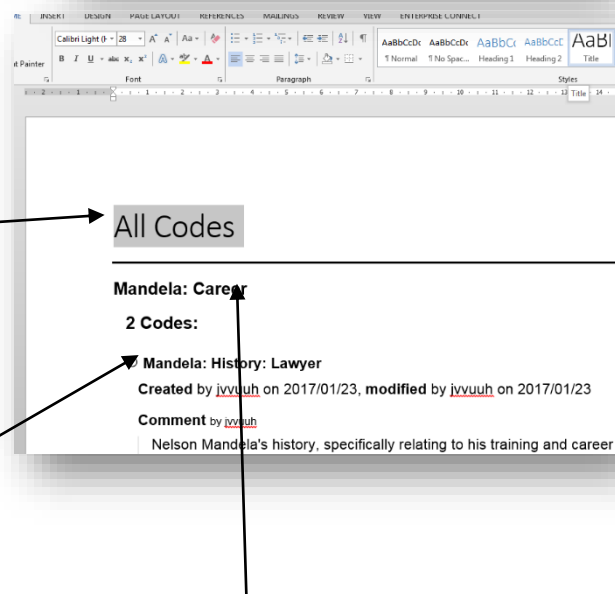
-  Navigate to the outputs folder in your suitcase folder on the Desktop
-  There should be a number of Word files in the folder, one for all the codes and then one for each one of your themes (code groups)
-  Open the first document you wish to edit
-  If you are confronted with a warning, just accept it and open the document in any case
-  Press **ctrl + A** to select the whole document and set your line-spacing, font and font size to your preference. (It is suggested you use the same specifications as the text in the article or thesis you are writing)
-  Select **File → Save As** and change the file type to Word or else all formatting will be lost if it reverts to a text file.
-  Repeat for each Word Document in the outputs folder

STEP 2 - INSERTING HEADINGS

It is essential to use the built-in Headings in Word to facilitate navigation. This step should be considered alongside step 3 (Inserting Page Breaks).



- 🌐 Delete the top section of information up to the line _____
- 🌐 Write the title of the document, e.g. All Codes or the name of the particular theme
- 🌐 Highlight the title and click on Title
- 🌐 If you examine the document, you will see that each time a new code starts with all its associated quotations, it starts with the code's name.
- 🌐 When organised according to groups, it starts with the code's theme.
- 🌐 The code name should include the name of the theme / group if you have followed the naming convention described in this book.
- 🌐 Press **ctrl + h / select find and replace** this will open the find and replace dialogue box, shown below.
- 🌐 In the find dialogue box enter your theme name i.e. 'Mandela: Career' and in the replace with dialogue box enter 'Mandela: Career' (The colon is necessary, you are in essence replacing 'Mandela: Career' with itself). Make sure that you copy / write the code names exactly as it is found in the Word document.



🌐 Click on the **More** button and **make sure your cursor is in the replace with dialogue box**

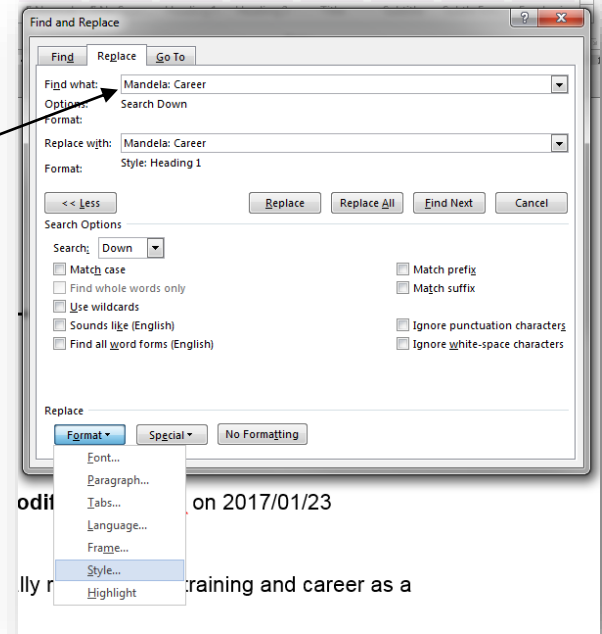
🌐 Select **Format → Style → Heading 1**

🌐 It should now say **Style: Heading 1** under your replace with dialogue box.

🌐 Click **Replace All**

🌐 Repeat for each Theme / Code within each Document in the outputs.

🌐 In this manner, you can create a list of the themes on heading 1 using the above method, and specific codes on heading 2, for a more manageable hierarchy (provided that you are working with the single document organised according to theme).



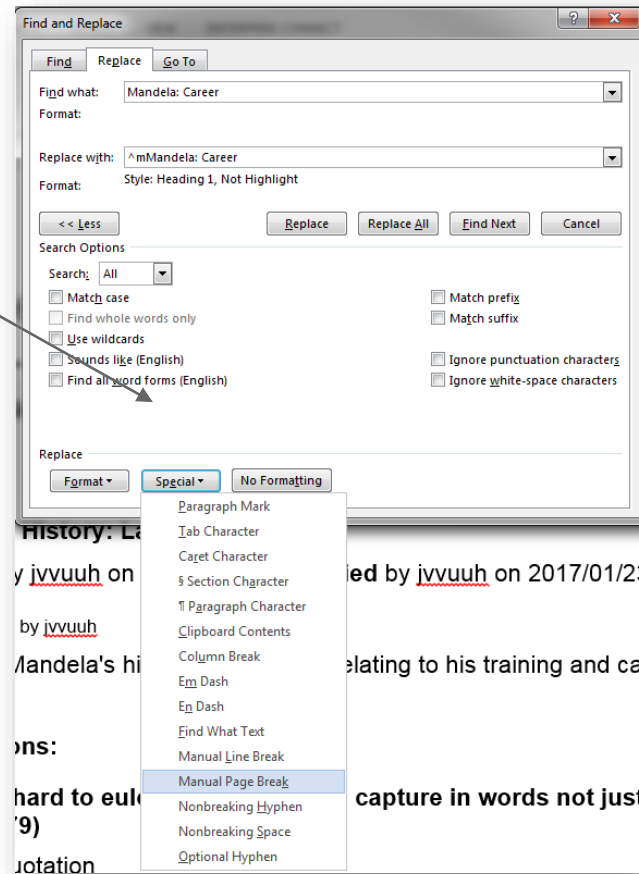
STEP 3 - INSERTING PAGE BREAKS

If you would like to see each theme / code start with its own page, you can add page breaks with this method of creating headings above. While replacing the Theme / Code names ensure that a Page Break symbol is in front of every Theme / Code name. This will make sure that each Theme / Code will be moved to a new page, in addition, that the first page of the document will only contain the Title, which is necessary for the final step. To insert a Page Break:

🌐 As with the previous step, open the find and replace dialogue box, by pressing **ctrl + h / select find and replace**.

🌐 Copy / write the Theme / Code name as it appears within the document exactly into both dialogue boxes ('Find what' and 'Replace with').

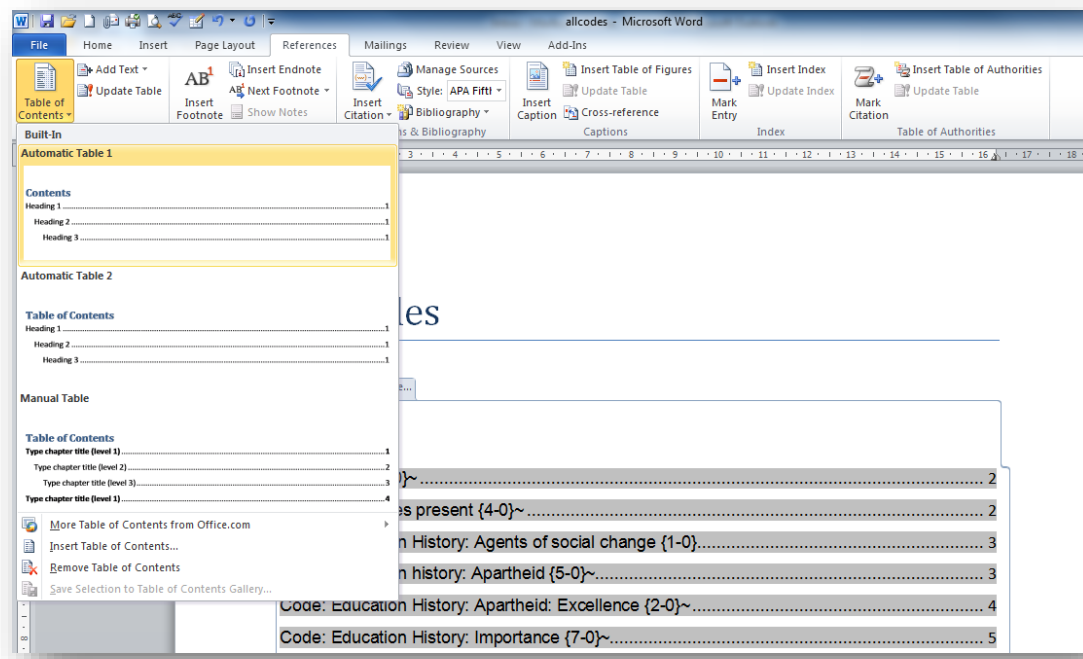
- 🌐 Click on the **More** button and **make sure your cursor is in the replace dialogue box in front of the Theme / Code name.**
- 🌐 Select **Special → Manual Page Break**
- 🌐 This will insert ‘^m’ in front of the text.
- 🌐 Click **Replace All**
- 🌐 Repeat for each Theme / Code within each Document in the outputs.
- 🌐 Check your document to make sure that every Theme or Code has been replaced as required.



Make sure that the dialogue box presents the correct style, if it isn't click format, style, no style to remove and replace with the correct styling.

STEP 4 - INSERTING THE INDEX

- 🌐 Go to the first page of your document. This page should be blank because of the page break inserted in the previous step.
- 🌐 Put your cursor under the title
- 🌐 Select **Reference** → **Table of Contexts** and choose the automatic table of contents you would prefer.






- 🌐 Repeat for each document in the outputs folder
- 🌐 You can alter your styles on the Home tab by selecting **Change styles** → **Style sets**
- 🌐 Save the file as a document and again as a pdf document.

You are now able to send your suitcase file to your reader / examiner as evidence of the work that you have completed.

EXERCISE 8: PUTTING TOGETHER THE FINAL PRODUCT

In this exercise, you will be required to use your existing Project to create reports of all the codes and groups. You can utilise the Madiba Project employed in the previous task.

Tasks:

-  Format all the output documents
-  Include headings, page-breaks and an index in each word document
-  Save as pdf documents

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