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Preface

ATLAS.ti 9 Quick Tour

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Please always update to the latest versions of ATLAS.ti when notified during application start.
About this Quick Tour

This Quick Tour describes the main functions of ATLAS.ti 9, so that you get a quick overview of how to use the software and get started with your analysis. If you need more detail or information about functions that are not described in this manual, you can always use the online help by pressing the F1 key.

It is not required that you read the manual sequentially from the beginning to the end. Feel free to skip sections that describe concepts you are already familiar with, jump directly to sections that describe functions you are interested in, or simply use it as a reference guide to look up information on certain key features.

The sequence of the chapters follows the steps that are necessary to start and work on an ATLAS.ti project. At first, we introduce you to the main concepts and give an overview of the main steps when analysing data with ATLAS.ti. Then we walk you through step-by-step:

- How to create a project and add documents.
- How to code you data.
- How to explore your data and write memos and comments.
- How to analyse your data and build conceptual networks.
- How to create reports.

Some general familiarity with concepts and procedures relating to the Windows operating system and computing in general (e.g., files, folders, paths) is assumed.

This is largely a technical document. You should not expect any detailed discussion of methodological aspects of qualitative research other than cursory statements from this manual.

Useful Resources for Getting Started

To those seeking in-depth instruction on methodological aspects, the ATLAS.ti Training Center offers a full complement of dedicated ATLAS.ti training events worldwide, both through online courses and face-to-face seminars in nearly all parts of the world. Visit the ATLAS.ti Academy for more information.
Introduction

ATLAS.ti is a powerful workbench for the qualitative analysis of large bodies of textual, graphical, audio, and video data. It offers a variety of tools for accomplishing the tasks associated with any systematic approach to unstructured data, i.e., data that cannot be meaningfully analyzed by formal, statistical approaches. In the course of such a qualitative analysis, ATLAS.ti helps you to explore the complex phenomena hidden in your data. For coping with the inherent complexity of the tasks and the data, ATLAS.ti offers a powerful and intuitive environment that keeps you focused on the analyzed materials. It offers tools to manage, extract, compare, explore, and reassemble meaningful pieces from large amounts of data in creative, flexible, yet systematic ways.

The VISE Principle

The main principles of the ATLAS.ti philosophy are best encapsulated by the acronym VISE, which stands for

- Visualization
- Immersion
- Serendipity
- Exploration

Visualization

The visualization component of the program means directly supports the way human beings (this includes researchers!) think, plan, and approach solutions in creative, yet systematic ways.

Tools are available to visualize complex properties and relations between the entities accumulated during the process of eliciting meaning and structure from the analyzed data.

The process is designed to keep the necessary operations close to the data to which they are applied. The visual approach of the interface keeps you focused on the data, and quite often the functions you need are just a few mouse clicks away.
Immersion

Another fundamental design aspect of the software is to offer tools that allow you to become fully immersed in your data. No matter where you are in the software, you always have access to the source data. Reading and re-reading your data, viewing them in different ways and writing down your thoughts and ideas while you are doing it, are important aspects of the analytical process. And, it is through this engagement with the data that you develop creative insights.

Serendipity

Webster's Dictionary defines serendipity as a seemling gift for making fortunate discoveries accidentally. Other meanings are: Fortunate accidents, lucky discoveries. In the context of information systems, one should add: Finding something without having actually searched for it.

The term serendipity can be equated with an intuitive approach to data. A typical operation that relies on the serendipity effect is browsing. This information-seeking method is a genuinely human activity: When you spend a day in the local library (or on the World Wide Web), you often start with searching for particular books (or key words). But after a short while, you typically find yourself increasingly engaged in browsing through books that were not exactly what you originally had in mind - but that lead to interesting discoveries.
Examples of tools and procedures ATLAS.ti offers for exploiting the concept of serendipity are the Search & Code Tools, the Word Clouds and Lists, the Quotation Reader, the interactive margin area, or the hypertext functionality.

Exploration

Exploration is closely related to the above principles. Through an exploratory, yet systematic approach to your data (as opposed to a mere bureaucratic handling), it is assumed that especially constructive activities like theory building will be of great benefit. The entire program's concept, including the process of getting acquainted with its particular idiosyncrasies, is particularly conducive to an exploratory, discovery-oriented approach.

Areas of Application

ATLAS.ti serves as a powerful utility for qualitative analysis of textual, graphical, audio, and video data. The content or subject matter of these materials is in no way limited to any one particular field of scientific or scholarly investigation.

Its emphasis is on qualitative, rather than quantitative, analysis, i.e., determining the elements that comprise the primary data material and interpreting their meaning. A related term would be "knowledge management," which emphasizes the transformation of data into useful knowledge.

ATLAS.ti can be of great help in any field where this kind of soft data analysis is carried out. While ATLAS.ti was originally designed with the social scientist in mind, it is now being put to use in areas that we had not really anticipated. Such areas include psychology, literature, medicine, software engineering, user experience research, quality control, criminology, administration, text linguistics, stylistics, knowledge elicitation, history, geography, theology, and law, to name just some of the more prominent.

Emerging daily are numerous new fields that can also take full advantage of the program's facilities for working with graphical, audio, and video data. A few examples:

- Anthropology: Micro-gestures, mimics, maps, geographical locations, observations, field notes
- Architecture: Annotated floor plans
- Art / Art History: Detailed interpretative descriptions of paintings or educational explanations of style
- Business Administration: Analysis of interviews, reports, web pages
- Criminology: Analysis of letters, finger prints, photographs, surveillance data
- Geography and Cultural Geography: Analysis of maps, locations
- Graphology: Micro comments to handwriting features
- Industrial Quality Assurance: Analyzing video taped user-system interaction
- Medicine and health care practice: Analysis of X-ray images, CAT scans, microscope samples, video data of patient care, training of health personal using video data
- Media Studies: Analysis of films, TV shows, online communities
- Tourism: Maps, locations, visitor reviews

Many more applications from a host of academic and professional fields are the reality. The fundamental design objective in creating ATLAS.ti was to develop a tool that effectively supports the human interpreter, particularly in handling relatively large amounts of research material, notes, and associated theories.

Although ATLAS.ti facilitates many of the activities involved in qualitative data analysis and interpretation (particularly selecting, tagging data, and annotating), its purpose is not to fully automate these processes. Automatic interpretation of text cannot succeed in grasping the complexity, lack of explicitness, or contextuality of...
everyday or scientific knowledge. In fact, ATLAS.ti was designed to be more than a single tool—think of it as a professional workbench that provides a broad selection of effective tools for a variety of problems and tasks.
ATLAS.ti Account and Licence Activation

For further information on Multi-User License Management, see our Guide for License Holders & Administrators.

Requesting a Trial Version

1. Go to https://my.atlasti.com/ to create an account.
2. Confirm your email address.
3. Request a trial license by clicking on Trial Desktop.

This brings you to the Cleverbridge Website.

4. Enter the required information and download the software.

If you do not want to download the software immediately, you can always do this later in your ATLAS.ti account. To do so, select My Applications.

The trial version can be used for 5 active days by one person on one computer within a period of 3 months.

You can initiate the purchase of a full licence from your ATLAS.ti account. After activating the licence, and the program can be used again at full capacity.

You cannot install a trial version again on the same computer.

Activating a Licence

You need to make an online connection at least once to activate your licence. Once the account it activated, you can work offline and no further online connection is required. Please note, if you are using a seat that is part of a multi-user licence, you will blog the seat if you are offline.

If you have purchased an individual license from the ATLAS.ti web shop, your license has been added to your account. The next step is to activate it.

Similarly, if you are a member of a team of users under a multi-user license, you have received a license key, an invitation code, or invitation link from the person or office that manages the license.
The ATLAS.ti License Management System allocates seats of multi-user license dynamically. This means, you are assigned the first free seat under your license. If all seats are occupied, you will be allocated the next seat that opens up.

Log in to your ATLAS.ti account.

Navigate to License Management (the default page) and enter either the license key, or the invite code that you were given by the license owner/license manager.

Click Activate License.

Start ATLAS.ti on your PC and click Check For Updated License and follow the on-screen instructions to complete a few easy steps to activate your license.

Your installation is now activated, and you can start using ATLAS.ti.

Accessing Your Account from within ATLAS.ti

On the opening screen, click on the user avatar. If you have not added a picture yet, it will show the first two letters of your account name.

Click on Manage Account. This takes you to the login screen. Enter your log in information (email and password) to access your account.
Logging Out

It is important to understand that the installation of ATLAS.ti is independent of the licencing of the software. You can have ATLAS.ti installed on as many computers as you want. A single-user licence gives you the right to use it on two computers, e.g. your desktop computer at the office and your laptop at home; or your Windows computer and your Mac computer; or the Cloud version and a desktop version. If you want to use ATLAS.ti on a third computer, or if you get a new computer, make sure you log out at the computer that you do no longer want to use. If you have been invited to use a multi-user license, you will have one seat for the time when using ATLAS.ti.

There are two ways how to log out to free a seat:

1. Click on the user avatar in the welcome screen and click Log Out.

If you forgot to log out in ATLAS.ti, you can always access your user account via a web browser:

2. Go to https://login.atlasti.com/. Enter your email address and password to log in.
3. Select the Log Out option at the bottom left above your avatar in your ATLAS.ti account.

Limited Version after Licence Expiration

Once the trial period or a time limited licence expire, the program is converted into a limited version. You can open, read and review projects, but you can only save projects that do not exceed a certain limit (see below). Thus, you can still use ATLAS.ti as a read-only version.

You cannot install a trial version again on the same computer.

Restrictions of the Limited Version

- 10 primary documents
- 50 quotations
- 25 codes
- 2 memos
- 2 network views
• auto backup is disabled
ATLAS.ti -- The Knowledge Workbench

The image of ATLAS.ti as a knowledge workbench is more than just a lively analogy. Analytical work involves tangible elements: research material requires piecework, assembly, reworking, complex layouts, and some special tools. A well-stocked workbench provides you with the necessary instruments to thoroughly analyze and evaluate, search and query your data, to capture, visualize and share your findings.

Some Basic Terms

To understand how ATLAS.ti handles data, visualize your entire project as an intelligent container that keeps track of all your data. This container is your ATLAS.ti project.

The project keeps track of the paths to your source data and stores the codes, code groups, networks, etc. that you develop during your work. Your source data files are copied and stored in a repository. The standard option is for ATLAS.ti to manage the documents for you in its internal database. If you work with larger audio or video files, they can be linked to your project to preserve disk space. All files that you assign to the project (except those externally linked) are copied, i.e., a duplicate is made for ATLAS.ti’s exclusive use. Your original files remain intact and untouched in their original location.

Your source data can consist of text documents (such as interview or focus group transcripts, articles, reports, observational notes); images (photos, screen shots, diagrams), audio recordings (interviews, broadcasts, music), video clips (audiovisual material), PDF files (papers, brochures, reports), also geo data (locative data using Open Street Map).

Once your various documents are added or linked to an ATLAS.ti project, your real work can begin. Most commonly, early project stages involve coding different data sources.

Selecting interesting segments in your data and coding them is the basic activity you engage in when using ATLAS.ti and it is the basis of everything else you will do. In practical terms, coding refers to the process of assigning categories, concepts, or codes to segments of information that are of interest to your research objectives. We have modeled this function to correspond with the time-honored practice of marking (underlining or highlighting) and annotating text passages in a book or other documents.

In its central conceptual underpinnings, ATLAS.ti has drawn deliberately from what might be called the paper and pencil paradigm. The user interface is designed accordingly, and many of its processes are based on---and thus can be better understood by---this analogy.

Because of this highly intuitive design principle, you will quickly come to appreciate the margin area as one of your most central and preferred work space---even though ATLAS.ti almost always offers a variety of ways to accomplish any given task.

General Steps when Working with ATLAS.ti

The following sequence of steps is, of course, not mandatory, but describes a common script:

Create a project, an idea container, meant to enclose your data, all your findings, codes, memos, and structures under a single name. See Creating a New Project.
Next, add documents, text, graphic, audio and video files, or geo documents to your ATLAS.ti project. See Adding Documents.

Organize your documents. See Working With Groups (see the main manual).

Read and select text passages or identify areas in an image or select segments on the timeline of an audio or video file that are of further interest, assign key words (codes), and write comments and memos that contain your thinking about the data. Build a coding system. See Working With Comments And Memos (see the main manual) and Working With Codes.

Compare data segments based on the codes you have assigned; possibly add more data files to the project. See for example Retrieving Coded Data.

Query the data based on your research questions utilizing the different tools ATLAS.ti provides. The key words to look for are: simple retrieval, complex code retrievals using the Query Tool, simple or complex retrievals in combination with variables via the scope button, applying global filters, the Code Co-occurrence Tools (tree explorer and table), the Code Document Table, data export for further statistical analysis (see Querying Data and Data Export For Further Statistical Analysis (see the main manual).

Conceptualize your data further by building networks from the codes and other entities you have created. These networks, together with your codes and memos, form the framework for emerging theory. See Working With Networks.

Finally, compile a written report based on the memos you have written throughout the various phases of your project and the networks you have created. See Working With Comments And Memos (see the main manual) and Exporting Networks.

For additional reading about working with ATLAS.ti, see The ATLAS.ti Research Blog and The ATLAS.ti conference proceedings.
Supported File Formats

In principle, most textual, graphical, and multimedia formats are supported by ATLAS.ti. For some formats, their suitability depends on the state of your Windows system. Before deciding to use an exotic data format, you should check if this format is available and if it is sufficiently supported by your Windows system.

Textual Documents

The following file formats are supported:

<table>
<thead>
<tr>
<th>Format</th>
<th>File Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Word</td>
<td>.doc; .docx; .rtf</td>
</tr>
<tr>
<td>Open Office</td>
<td>.odt</td>
</tr>
<tr>
<td>HyperText Markup Language</td>
<td>.htm; .html</td>
</tr>
<tr>
<td>Plain text</td>
<td>.txt</td>
</tr>
<tr>
<td>other</td>
<td>.ooxml</td>
</tr>
</tbody>
</table>

Text documents can be edited in ATLAS.ti. This is useful to correct transcription errors, to change formatting, or to add missing information. When adding an empty text document to an ATLAS.ti project, you can also transcribe your data in ATLAS.ti. We however recommend using a dedicated transcription tool or use automated transcriptions. You can add transcripts with timestamps and synchronize them with the original audio or video file. For this you use Multimedia Transcripts.

Multimedia Transcripts

If you have a transcript with time marks linked to an audio or a video file, you can add the two documents to your ATLAS.ti project and view the transcript synchronized with the associated audio or video file.

If you want to work with multimedia transcripts, you first enter the audio or video file to your project. Next you load the audio or video file and add the transcript. See Working with Multimedia Transcripts (see the main manual) for further information.

The following timestamp formats are supported:

<table>
<thead>
<tr>
<th>Format</th>
<th>Transcription Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>#hh:mm:ss-x#</td>
<td>Easytranscript, f4 &amp; f5transcript</td>
</tr>
<tr>
<td>[hh:mm:ss]</td>
<td>Transcribe</td>
</tr>
<tr>
<td>[hh:mm:ss.xx]</td>
<td>HyperTRANSCRIBE, Inqscribe, Transcriva</td>
</tr>
<tr>
<td>[hh:mm:ss.xxx]</td>
<td>HyperTRANSCRIBE, Inqscribe, Transcriva</td>
</tr>
<tr>
<td>(h:mm:ss.xx)</td>
<td>Transana</td>
</tr>
<tr>
<td>hh:mm:ss</td>
<td>Transcriber Pro</td>
</tr>
</tbody>
</table>

You can also prepare your transcripts in ATLAS.ti directly by linking an empty text file to an audio or video file entering time stamps while you type the text.
**PDF files (Text and Graphic)**

PDF files are perfect if you need the original layout. When PDF was invented, its goal was to preserve the same layout for onscreen display and in print.

If the PDF file has annotations, they are displayed in ATLAS.ti. However, they cannot be edited.

When preparing PDFs, you need to pay attention that you prepare a text PDF file and not a graphic PDF. If you do the latter, then ATLAS.ti treats it as a graphic file, and you cannot search it or retrieve text.

When scanning a text from paper, you need to use character recognition software (OCR, frequently provided with your scanner) in order to create a text PDF file. Another option is to apply character recognition in your PDF reader/writer software.

When you retrieve text from a coded PDF segment the output will be rich text. Thus, you may lose the original layout. This is due to the nature of PDF as mentioned above. It is a layout format and not meant for text processing.

**Images**

Supported graphic file formats are: bmp, gif, jpeg, jpg, png, tif and tiff.

**Size recommendation:** Digital cameras and scanners often create images with a resolution that significantly exceeds the resolution of your screen. When preparing a graphic file for use with ATLAS.ti, use image-processing software to reduce the size so that the graphics are comfortably displayed on your computer screen. ATLAS.ti does resize the images if they are too big. But this requires additional computer resources and unnecessarily uses space on your computer hard disk.

To resize and image manually, you can use the zoom function via the mouse wheel or the zoom button in ATLAS.ti.

**Audio- and Video Documents**

Supported audio file formats are: aac, m4a, mp3, mp4.

Supported video file formats are: avi, m4v, mov, mp4.

For audio files, our recommendation is to use *.mp3 files with AAC audio, and for video files *.mp4 file with AAC audio and H.264 video. These can be played both in the Windows and in the Mac version.

As video files can be quite sizable, we recommend to link video files to an ATLAS.ti projects rather than to import them. See **Adding Documents** for further information.

**Geo Documents**

When you want to work with Geo data, you only need to add a new Geo Document to your ATLAS.ti project. This opens Apple Maps.

To navigate to a specific region or location on the map, enter an address or location name in the search field. For more information, see **Working With Geo Docs** (see the main manual).
Survey Data

The survey import option allows you to import data via an Excel spreadsheet (.xls or .xlsx files). Its main purpose is to support the analysis of open-ended questions. However, this option can also be used for other case-based data that can easily be prepared in form of an Excel table.

In addition to the answers to open-ended questions, data attributes (variables) can also be imported. These will be turned into document groups in ATLAS.ti. For more information, see Working With Survey Data (see the main manual).

Reference Manager Data

In order to support doing a Literature Review with ATLAS.ti, you can import articles from reference managers. The requirement is that you are using a reference manager that can export data as Endnote XML file like Endnote, Mendeley, Zotero, or Reference Manager.

If your reference manager cannot export data in Endnote xml format, you can export data in RIS or BIB format and use the free version of Mendeley or Zotero to produce the xml output for ATLAS.ti.

See Working With Reference Manager Data. (see the main manual).

Twitter

You can collect data from Twitter searching for keywords, hashtags, users, etc. ATLAS.ti can collect tweets that are not older than one week!

You need to sign in with your own twitter account to import twitter data to ATLAS.ti. See Working With Twitter Data (see the main manual).

Evernote

If you collect and store you data using Evernote, you can directly import files and folders from Evernote. See Bring out the best in Evernote with ATLAS.ti 8 Windows.

Supported formats are:

<table>
<thead>
<tr>
<th>Evernote Export</th>
<th>File Type</th>
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</thead>
<tbody>
<tr>
<td>Evernote 2.x database</td>
<td>.enb</td>
</tr>
<tr>
<td>Evernote exported XML data</td>
<td>.enex</td>
</tr>
<tr>
<td>Evernote database</td>
<td>.exb</td>
</tr>
<tr>
<td>Evernote data</td>
<td>.reco</td>
</tr>
<tr>
<td>Evernote handwritten notes and sketches</td>
<td>.top</td>
</tr>
<tr>
<td>Evernote for Google Androide note file</td>
<td>.enml</td>
</tr>
</tbody>
</table>
Main Steps in Working with ATLAS.ti

Data and Project Management

A first important but often neglected aspect of a project is data and project management. The first step is data preparation. You find more information on supported file formats in the section Supported File Formats.

Apart from analyzing your data, you also manage digital content and it is important to know how the software does it. For detailed information, see the section on Project Management (see the main manual).

If you work in a team, please read the following section: Team Work (see the main manual).

Two Principal Modes of Working

There are two principal modes of working with ATLAS.ti, the data level and the conceptual level. The data level includes activities like segmentation of data files; coding text, image, audio, and video passages; and writing comments and memos. The conceptual level focuses on querying data and model-building activities such as linking codes to networks, in addition to writing some more comments and memos.

The figure below illustrates the main steps, starting with the creation of a project, adding documents, identifying interesting things in the data and coding them. Memos and comments can be written at any stage of the process, whereas there is possibly a shift from writing comments to more extensive memo writing during the later stages of the analysis. Once your data is coded, it is ready to be queried using the various analysis tools provided. The insights gained can then be visualized using the ATLAS.ti network function.

Some steps need to be taken in sequence. For instance, logic dictates that you cannot query anything or look for co-occurrences if your data has not yet been coded. But other than that there are no strict rules.

![Workflow Diagram]

Data Level Work

Data-level activities include Exploring Data using word clouds and word lists, segmenting the data that you have assigned to a project into quotations (see the main manual), adding comments to respective passages note-making/annotating (see the main manual), linking data segments to each other called hyperlinking (see the main manual), in ATLAS.ti, and coding data segments and memos to facilitate their later retrieval. The act of comparing noteworthy segments leads to a creative conceptualization phase that involves higher-level interpretive work and theory-building.
ATLAS.ti assists you in all of these tasks and provides a comprehensive overview of your work as well as rapid search (see the main manual), retrieval, and browsing functions.

Within ATLAS.ti, initial ideas often find expression through their assignment to a code or memo, to which similar ideas or text selections also become assigned. ATLAS.ti provides the researcher with a highly effective means for quickly retrieving all data selections and notes relevant to one idea.

**Conceptual Level Work**

Beyond coding and simple data retrieval, ATLAS.ti allows you to query your data in lots of different ways, combining complex code queries with variables, exploring relationships between codes and to visualize your findings using the network tool.

ATLAS.ti allows you to visually connect selected passages, memos, and codes into diagrams that graphically outline complex relations. This feature virtually transforms your text-based work space into a graphical playground where you can construct concepts and theories based on relationships between codes, data segments, or memos.

This process sometimes uncovers other relations in the data that were not obvious before and still allows you the ability to instantly revert to your notes or primary data selection. -- For more detail, see Querying Data and Working With Networks.

**Creating a New Project**

If you just started ATLAS.ti,

On the welcome screen click on the button: New Project.
Enter a name for the project and click on Create.

If a project is already open,
click on Project > New.

Enter a name for the project and click Create.
The ATLAS.ti Interface

When you open a project, you see the menu on top, the project navigator on the left-hand side and an inspector on the right-hand side. The inspector displays more information of the current active entity. After just opening a project, this is the project.

Below the main menu, you see a toolbar that allows quick access to the Document, Quotation, Code, Memo and Network Manager. (see the main manual).

You also find the usual show and hide icons for the side bars and the inspector.
The Main Menu

<table>
<thead>
<tr>
<th>New</th>
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<tr>
<td>Open</td>
<td>O</td>
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<tr>
<td>Open Recent</td>
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<tr>
<td>Import Project...</td>
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<td>Merge with Project...</td>
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<tr>
<td>Close</td>
<td>W</td>
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<tr>
<td>Save</td>
<td>S</td>
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<tr>
<td>Rename Project...</td>
<td></td>
</tr>
<tr>
<td>Info and Comment</td>
<td></td>
</tr>
<tr>
<td>Project Explorer</td>
<td>O</td>
</tr>
<tr>
<td>User Management</td>
<td></td>
</tr>
<tr>
<td>Change Password...</td>
<td></td>
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<tr>
<td>Remove Password...</td>
<td></td>
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<tr>
<td>Export</td>
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<tr>
<td>Print...</td>
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</table>

The **Project menu** gives access to all project related functions:

- opening, closing or renaming a project (see the main manual).
- importing a project (see the main manual).
- user management (see the main manual).
- merging projects (see the main manual).
- project export (see the main manual).
- project export for universal data exchange (see the main manual).
- exporting data for further statistical analysis (see the main manual).
The Document menu gives access to all document related functions:

- **Adding Documents**
  - Adding a Geo Document (see the main manual).
  - Importing Survey Data (see the main manual).
  - Importing Reference Manager Data (see the main manual).
  - Importing Twitter Data (see the main manual).
  - Showing the Document Manager (see the main manual).
  - Renumbering Documents and Quotations (see the main manual).
  - Importing Document Groups (see the main manual).
  - Exporting Document Groups (see the main manual).
- **Generating Reports**

The Quotation menu gives access to all quotation related (see the main manual) functions:

- Creating Quotations (see the main manual).
- Applying Codes
- Finding Redundant Codings (see the main manual).
- Unlinking all Codes from all Quotations (see the main manual).
- Showing the Quotation Manager (see the main manual).
- Showing the Link Manager (see the main manual).
- Showing the Relation Manager (see the main manual).
- Generating Reports (see the main manual).

The Code menu gives access to all code related functions:

- Creating a new code (see the main manual).
- Creating a new smart code (see the main manual).
- Focus Group Coding (see the main manual).
- Search & Code (see the main manual).
- Showing the Code Manager (see the main manual).
- Showing the Link Manager (see the main manual).
- Showing the Relation Manager (see the main manual).
- Showing the Code Forest (see the main manual).
- Importing & Exporting a Code Book
- Generating Reports (see the main manual).
The **Memo menu** gives access to all memo related (see the main manual) functions:

- Creating a memo (see the main manual).
- Convert Memo to Document (see the main manual).
- Showing the Memo Manager (see the main manual).
- Generating Reports (see the main manual).

The **Network menu** gives access to all network related functions:

- Creating a network
- Showing the Network Manager (see the main manual).
- Generating Reports (see the main manual).

The **Analysis menu** gives access to all analytic functions that you need after you have coded the data. You also find the Word List / Word Cloud option under this menu:

- Opening the Code Co-occurrence Explorer (see the main manual).
- Opening the Code Co-occurrence Table (see the main manual).
- Opening the Code Document Table (see the main manual).
- Opening the Query Tool
- Creating word lists and clouds
- Accessing stop and go lists (see the main manual).
- Setting inter-coder agreement mode (see the main manual).
- Opening the inter-coder agreement analysis tool (see the main manual).
Software Navigation

In the following it is explained how to work with the various entities and features in the main work space. If you want to click along, you may want to open the Children & Happiness sample project.

After you downloaded the project bundle file, import it. See Importing An Existing Project. (see the main manual).

When you open a project, the Project Explorer opens automatically on the left-hand side. From the main branches you can access documents, codes, memos, networks and all groups. If you are looking for something in particular, you can enter a search term into the search field. If you open the branches of the various entities, they will only show you items that contain the search term.

To open a branch, click on the triangle in front of each entity, or right-click and select the Expand option from the context menu.

When double-clicking on a main branch, the respective manager of the selected entity type is opened. See Entity Managers. (see the main manual).

Under the main Documents branch, you see all documents. Below each document, you can access all quotations of a document.

Under the main Codes branch, you see the list of all codes. On the next level, you see all linked codes. For further information see: Linking Nodes.

Under the main Memos branch, you see the list of all memos. On the next level, you see all linked entities, which for memos can be other memos, quotations and codes.

Under the main Networks branch, you see the list of all networks. On the next level, you see all entities that are contained in the network. If you open the branches further, you see the entities that are linked to the respective items.

Parenting blog – Blog by Lisa Belkin discussing the study by Powdthavee

April 1, 2009, 4:06 pm

Does Having Children Make You Unhappy?

By LISA BELKIN

Children do not bring happiness. In fact more often they seem to bring unhappiness. The conclusion of one academic study after the next — and there are so many that it makes researchers kept trying, hoping for a different result.

In the April edition of the online Journal of the British Psychological Association, reseach by Nattavudh Powdthavee, of the University of York in Great Britain (whose own academic career has been a model of academic success) concludes that there is no difference between the life satisfaction levels of parents and non-parents.

Using data sets from Europe and America, numerous scholars have found some evidence of this aggregate, parents often report statistically significantly lower levels of happiness (Akerlof and Kranton, 2000), life satisfaction (Di Tella et al., 2003), marital satisfaction (Twenge et al., 2003) and well-being (Clark & Oswald, 2002) compared with non-parents.

And it is not just the years of active parenting that tamp down happiness, Powdthavee
Under the **Groups** branches, you see the list of all groups and below each group, the list of all members of the selected group.

If an entity has a comment, this is indicated by a yellow post-it note attached to the entity icon.

**Browsers**

In addition to the Project Explorer that contains all project items, you can open browsers that only contain one entity type. Browsers are available for documents, quotations, memos and networks.

To open one of the browsers, click on one of the entity icons. The document icon is blue, the quotation icon is orange, the code icon is green, the memo icon is magenta, and the network icon is purple.

The single entity browsers open in tabs next to the Project Explorer. Each browser also has a search field on top. This facilitates working with long lists.

**Toolbar**

Above the Project Explorer you see a toolbar that gives you quick access to the five main entity types: documents, quotations, codes, memos and networks. Each entity icon has a drop-down menu that gives you access to the most frequently used options in relation to each entity type.
Drop-down Menu for Documents

- Add Documents
  - Adding a New Text Document, for instance if you want to transcribe your data directly in ATLAS.ti
  - Adding a New Geo Document (see the main manual).
- Opening the Document Manager (see the main manual).
- Opening the Document Group Manager

Drop-down Menu for Quotations

- Opening the Quotation Manager (see the main manual).
- Opening the Link Manager (see the main manual).
- Opening the Relation Manager (see the main manual).

Drop-down Menu for Codes

- Creating New Codes
  - Opening the Code Manager (see the main manual).
- Opening the Code Group Manager
- Opening the Link Manager (see the main manual).
- Opening the Relation Manager (see the main manual).

Drop-down Menu for Memos

- Add a New Memo (see the main manual).
- Opening the Memo Manager (see the main manual).
- Opening the Memo Group Manager
Drop-down Menu for Networks

- Creating a New Network
- Opening the Network Manager (see the main manual).
- Opening the Network Group Manager

Context Menus

Each item in the Project Explorer has a context menu, which means a context sensitive menu opens when you right-click. Depending on the entity that you click, each context-menu will be slightly different. Common to all context menus are the Duplicate, Copy and Delete options, and the option to open the selected item in the respective Entity Manager.

Docked and Floated Windows

All documents, memos and networks open in the main area and are docked.

All managers and analysis tools open in a floated window. If you want that a floated window stays on top and does not disappear in the background if you open something else, you can pin it to your screen by clicking on the pin icon on the top right-hand side of the window. The pin then turns blue.
Working With Tabs and Regions

If you open multiple documents, or a document, a memo and a network, they are displayed in tabs. If you want to see them next to each other, you can open a second region:

Select one of the tabbed items and drag and drop it into the empty region. If you drag it to the right-hand side until you see a colored bar, the item is displayed next to the other item(s). If you drag it to the top of the region, the item is displayed below the other item(s).
The Six Main Entity Types

The six main entity types in ATLAS.ti are:

- Documents (see the main manual).
- Quotations (see the main manual).
- Codes (see the main manual).
- Memos (see the main manual).
- Networks (see the main manual).
- Links (see the main manual).

All entity types have their own manager. See Entity Managers (see the main manual). The Entity Managers allow access to the entities and provide several options and functions.

To open a manager, double-click on the button in the ribbon.

Entity Managers are child or dependent window of the main editor. Child windows have some common properties:

- They are closely related to the parent window 'knows' about changes in the child window, like the selection of an item, and vice versa.
- They can be resized and positioned independently of their parent window.
- They are minimized when the parent window is minimized and they are restored with their parent window.
- They are closed when the parent window is closed.
- However, child windows do NOT move with the parent window.

Miscellaneous Goodies

You can copy the content of every entity, be it a document name, a group name, a code, memo or quotation name, or a node in a network and paste it into an editor or a network.

If you copy an entity name from a list into an editor, the name is pasted.

If you copy a node and paste it into an editor, the name of the node is pasted.

If you copy the name of an entity and paste it into a network, it is pasted as node. If links already exist, they will be shown immediately.

Adding Documents

To add documents to a project:

- From the main menu, select Document > Add Documents. Another option is to open the drop-down menu of the document icon in the toolbar. You can select individual files or folders.
All added or linked documents are numbered consecutively starting with 1, 2, 3 and so on.

**Sort order of documents**

The default sort order is by name in alphabetical order. The document order cannot be changed in the Mac version.

**What happens when you add documents to a project**

All documents that you add to a project are copied, and the copies become internal ATLAS.ti files. This means, strictly speaking, that ATLAS.ti no longer needs the original files. However, we strongly recommend that you keep a backup copy of your original source files.

As audio and video files can be quite sizable, you have the option to create an external reference to the files. This means the multimedia documents remain at their original location and are accessed from there. Preferably, these files should not be moved to a different location. If the files need to be moved, you need to re-link the files to your project. ATLAS.ti will alert you, if there is an issue, and a file can no longer be accessed.

When you add documents to a project, they are stamped with a unique ID. This ID allows ATLAS.ti to detect if documents are the same when merging different projects.

When you work in a team and want to work on the same documents, it is important that one person is setting up the project and adds all documents that should be shared. The consequence of not doing is that documents of the same content are duplicated or multiplied during the process of merging projects, and you cannot bring them together. If this happens, please contact the help desk. One of our developers may be able to rescue the situation.

**Size Restrictions**

Theoretically, size restrictions do not play a major role due to the way ATLAS.ti handles documents. However, you should bear in mind that your computer's processing speed and storage capacity may affect the performance.

Excessively large documents can be uncomfortable to work with, even when you have an excellently equipped computer. The crucial issue is not always the file size, but rather, in the case of multimedia files, the length of playing time.

For textual documents, the number and size of embedded objects may cause extraordinarily long load times. There is a high likelihood that if a textual document loads slowly in ATLAS.ti, it would also load slowly in WORD or WordPad.

For very long texts or multimedia files, scrolling to exact positions can be cumbersome.

Please keep those issues in mind when preparing your files.

**A Word about "Big Data"**

Please keep in mind that the focus of ATLAS.ti is to support qualitative data analysis and to a lesser extent the analysis of qualitative data.
Big data is a buzz word nowadays, and a lot of big data often comes as text or images, hence could be considered qualitative. ATLAS.ti, however, is not suited for true big data analysis, which is not the same as qualitative data analysis.

As point of orientation, coding can be supported using the auto coding feature. However, you still need to read and correct the coding, and most coding in ATLAS.ti is done while the researcher reads the data and creates or selects and applies a code that fits.

A project is too large if you have so much data that you need to rely on a machine to do all the coding for you and you cannot read what has been coded yourself. If this is the case, ATLAS.ti might not be the right tool for you.

**Working With Groups**

Groups in ATLAS.ti help you to sort, organize and filter the various entities. Groups are available for documents, codes, memos, and networks.

Common to all groups are:

- An entity can be sorted into multiple groups. For example if you sort a document into the group `gender::female`, it can also be sorted into other groups like `location::urban`, or `family status::single`.
- If you click on a group in a manager, you activate a filter (see below). Then only the items that are in the selected groups are displayed.
- You can combine groups using Boolean operators. See for example Exploring Coded Data (see the main manual).
- You can save a combination of groups for further re-use in form of a smart group (see the main manual).
- You can set groups as global filter (see the main manual).

There are no groups for quotations, as codes already fulfil this function. Codes group quotations that have a similar meaning. Therefore instead of groups, you see the codes in the side panel of the Quotation Manager.

**Application of Document Groups**

Often data come from different sources, locations, respondents with various demographic backgrounds etc. To facilitate the handling of the different types of data, they can be organized into document groups.

You can also use document groups for administrative purposes in team projects if different coders should code different documents. You can then create a group containing all documents for coder 1, another group containing the documents for coder 2 and so on.

Another application is the use of document groups for analytic comparisons in the Code Document Table (see the main manual).

Document groups can also be added to Networks (see the main manual), and you can show which codes have been applied to which group.
Application of Code Groups

Code groups can be used to sort and organize codes in the Code Manager.

Code groups facilitate the navigation of codes in the Code Manager as local filter. See below.

Code groups can be used as global filters in analysis.

Code groups can also be used in the Code Document Table (see the main manual) for case comparisons.

Users often mistake code groups as a kind of higher order code, which they are not. They do however can be quite useful in building a coding system.

Application of Memo Groups

Memo groups come in handy if you have written lots of memos. You could for example group memos by function: methodological notes, team memos, research diaries, analysis.

If you have multiple memos that contain answers to one research question, you can group all those memos.

If you have multiple memos that contain input for a particular section in the research report, you may want to create a memo group for those.

You find more information on working with memos here: Memos and Comments (see the main manual).

Groups as Filters

Groups are listed in the side panels of the document, code, memo and network manager.

Click on one or more groups to filter the list of items. If you want to select multiple groups hold down the Cmd key.

Once you have set one or more groups as filter, a yellow bar appears above the entity list indicated that a) a filter has been set and b) which one.

To reset the filter to see all entities again, click the minus (-) on the top right-hand side of the yellow bar.

It is also possible to run simple AND and OR queries:

As soon as you select more than one group, you see the word any in blue in the filter bar. This means the default operation is to combine the items of the selected groups with OR.

If you want to filter by the intersection of two or more groups, click on the word "any" and change it to all. This is the Boolean AND operator.
An example would be to filter by all female respondents who live in an urban region. This requires that you have grouped the documents by these two criteria:

- gender::female
- region::urban

The filter would then show the following text: Show documents in all of the groups: gender::female, region::urban.

The same options are available for all entity types.

**Working with Quotations**

**The ATLAS.ti Quotation Level**

"When you create a quotation, you’re marking a segment of data that can later be retrieved and reviewed. You might know, right at that point how and why it’s interesting or meaningful, in which case you can immediately capture that – by re-naming it, commenting on it, coding it, linking it to e.g. another quotation, or a memo. If you don’t yet know, you can just create the quotation, and come back and think about it later, perhaps when you have a better overview of the data set in its entirety and are ready to conceptualise meaning in relation to your research objectives.

One of my favourite things about ATLAS.ti is that quotations can be visualised and worked with in a graphical window, i.e. the ATLAS.ti networks. The content of quotations can be seen within the network, and quotations can be linked, commented upon, and coded in that visual space. This is very useful if you like to work visually or are used to analysing qualitative data manually with highlighters, white-boards, post-it notes etc. Networks can also be used as visual interrogation spaces – for example to review quotations which have more than one code attached, which is very powerful. Everything you do in the network is connected throughout the ATLAS.ti project."

*Interview with Christine Silver, expert in Computer Assisted Qualitative Data Analysis Software.*

The ATLAS.ti quotation level gives you an extra layer of analysis. In ATLAS.ti you are not required to immediately code your data as in most other CAQDAS software. You can first go through your data and set quotations, summarize the quotations in the quotation name and write an interpretation in the comment field. See Working with Quotations (see the main manual). This is useful for many interpretive analysis approach for the process of developing concepts. Once you have ideas for concepts you can begin to code your idea.

This prevents you from falling into the coding trap, i.e. generating too many codes. Codes that can be applied to only one or two segments in your data are not very useful. Code names should be sufficiently abstract so that you can apply them to more than just a few quotations.

You will also see later in the analysis process that you find that none of the further analysis tools like the Code Document Table (see the main manual), or the Code Co-occurrence Table (see the main manual), seem to be very useful.

If you find yourself generating 1000 or more codes, take a look what you can do with quotations instead (see the main manual). Based on that develop codes on a more abstract level allowing you to build a well rounded code system.
Creating Quotations in Text Documents

When you code data, quotations are created automatically. See Coding Data. You can however also create quotations without coding. To do so:

Highlight a section in your text, right click and select the option Create Quotation. Alternatively, you can also use the shortcut cmd+H.

at all, I was very conscious of how easy it is for things to go wrong, and after the pregnancy. I knew it is very difficult to care for a baby, to raise a child, to deal with a teenager. But I wanted, that I needed that experience. Even though it all went wrong, and it was going to be difficult, and sometimes looking at a stranger with your eyes whom you can whom you deeply love, nonetheless.

We’ve been outrageously lucky. Our daughter is 2 years old, precious and bright child, has brought a lot of work into my life, and has also made my life richer and filled with life, just like they say: parenthood is not for the faint of heart, totally worth it.

Once a quotation is created, you see a blue bar in the margin area and an entry in the Quotation Manager and the Document tree in the Project Explorer.

Quotation ID

Each quotation has an ID, which consists of two numbers:

The ID 3:10 for example means that the quotation comes from document 3, and it is the 10th quotation that was created in this document. Quotations are numbered in chronological and not in sequential order. If you want to change this order, see Working with Quotations (see the main manual).

Adding Quotation Names

Being able to name each quotation has a number of useful applications.

- It allows you to quickly glance through your quotations in list view.
- You can use the name field to paraphrase a quotation as required by some content analysis approaches, or to write a short summary.
- You can use the name field for fine-grained coding (line-by-line Grounded Theory coding; initial coding in Constructive Grounded Theory, or as required by other interpretative approaches) instead of applying codes. If you already apply codes during this phase, you will end up with too many codes that are useless for further analysis. See Building a Code System.
- Adding titles to multimedia quotations. See Working with Multimedia Data (see the main manual).
To add a name to a quotation, select it and add a text to the name field in the inspector on the right-hand side.

If you select a quotation in the Quotation Manager, you see a preview of the quotation in the panel below the quotation list. This applies to all data file formats.

Modifying Quotation Boundaries

Modifying the length of a quotation is easy.

If you select a quotation, e.g. by clicking on the bar in the margin area, you see a blue line with a dot at the beginning and at the end of the quotation. Move the start or end position to a different location depending on whether you want to shorten or lengthen the quotation. This applies to all media types.
Coding Data

"Coding means that we attach labels to segments of data that depict what each segment is about. Through coding, we raise analytic questions about our data from [...]. Coding distills data, sorts them, and gives us an analytic handle for making comparisons with other segments of data" (Charmaz, 2014:4).

“Coding is the strategy that moves data from diffuse and messy text to organized ideas about what is going on” (Richards and Morse, 2013:167).

“Coding is a core function in ATLAS.ti that lets you “tell” the software where the interesting things are in your data. ... the main goal of categorizing your data is to tag things to define or organize them. In the process of categorization, we compare data segments and look for similarities. All similar elements can be grouped under the same name. By naming something, we conceptualize and frame it at the same time” (Friese, 2019).

Creating New Codes without Coding

You can create codes that have not (yet) been used for coding. Such codes are called "free" codes. This can for example be useful when ideas for codes come to mind during normal coding work and that cannot be applied to the current segment but will be useful later. Sometimes you also need free codes for expression conceptual connections in networks. If you already have a list of codes, possibly including code descriptions and groupings elsewhere, you can use the option: Importing A List Of Codes.

Click on the Code button in the toolbar and select New Code(s) from the drop-down menu. The short-cut key combination is Cmd+K.

You can also create new codes in the Code Manager by clicking on the + button.

Coding with a New Code

Open a document and highlight a data segment, i.e. a piece of text, a rectangular area in a graphic document, a section on the audio wave of a video or audio document, or a location in a geo document.
Right-click and select ApplyCodes, or use the short-cut Cmd+J, or click on the 'Apply Codes' button in the toolbar.

Enter a name and click on the plus button or press enter.

You can continue to add more codes, or simply continue to select another data segment. The dialogue closes automatically.

**Parenting blog – Blog by Lisa Belkin discussing the study by Powdthavee**

April 1, 2009, 4:06 pm

**Does Having Children Make You Unhappy?**

By LISA BELKIN

Children do not bring happiness. In fact more often they seem to bring unhappiness. That is the conclusion of one academic study after the next — and there are so many that it makes one wonder if researchers keep trying, hoping for a different result.

In the April edition of the online Journal of the British Psychological Association, researcher Nattavudh Powdthavee, of the University of York in Great Britain (whose own academic work concludes that there is no difference between the life satisfaction levels of parents and non-parents) summarizes the existing studies:

Using data sets from Europe and America, numerous scholars have found some evidence that, on aggregate, parents often report statistically significantly lower levels of happiness (Alessa, 2004), life satisfaction (Di Tella, 2003), marital satisfaction (Yuen, 2003) and mental well-being (Clark & Oswald, 2002) compared with non-parents. And it is not just the years of active parenting that tamp down happiness, Powdthavee writes:

There is also evidence that the strains associated with parenthood are not only limited to the period during which children are physically and economically dependent. For example, Glenn and McLanahan (1981) found those older parents whose children have left home report the same or slightly less happiness than non-parents of similar age and status. Thus, what these results are suggesting is something very controversial — that having children does not bring joy to our lives.

Which leads to the seminal question — why does anyone have children in the first place? If, statistically and on average, parents are no happier, and many are less happy, then those without children, then what are all these baby showers about?

Is it because we see others struggle, but we figure it won’t be as much of a struggle for us? Because we focus on the upside — the cute and the smiley and the little chub-chubs? Powdthavee believes we do “ablate”

for more information on working with data other than text, see Working With Multimedia Data (see the main manual) and Working With Geo Docs (see the main manual).

**Display of Coded Data Segments in the Margin Area**

The coded segment is displayed in the margin area. A blue bar marks the size of the coded segment (= quotation), and the code name appears next to it. When coding data in this way, a new quotation is created automatically, and the code is linked to this quotation.

**Applying Existing Codes**

Existing codes can be applied using the Coding Dialogue or via Drag & Drop.

**Using the Coding Dialogue**

Highlight a data segment, right-click and select Apply Codes.
Select one of the existing codes, click on the plus button or press Enter. If you type the first few letters in the entry field, only those codes are presented that match the letter combination.

Code density is not a value that is calculated by the software. It goes up, when the researcher begins to link codes to each other. See Working With Networks.

Drag-and-Drop Coding

Drag-and-Drop Coding is possible from the following locations:

- the Codes branch from the Project Explorer
- the Code Browser in the navigation panel.
- the Code Manager

Below you find More Drag-and-Drop options.

To use drag-and-drop coding highlight a data segment, select one or more codes in the above mentioned lists or windows and drag the code onto the highlighted data segment.

Code Browser in the navigation panel: To open the Code Browser, click on the Codes icon. The search field in the Code Browser facilitates handling a longer code list. Rather than scrolling the list, you enter the first letters of a code.

Code Manager: When using the Code Manager, it is recommend to place it next to the text you are coding. If you click on the pin on the top right-hand side of the window, the Code Manager stays on top.

You can quickly access codes using code groups to filter the list, or using the search field.

Code In Vivo

Use in-vivo coding when the text itself contains a useful and meaningful name for a code.

In-vivo coding creates a quotation from the selected text AND uses the selected text as the code name. If the selected text’s boundaries are not exactly what you want for the quotation, modifying the quotation’s "spread" is
often the next step after creating the in-vivo code. See Working with Codes > Modifying the length of a coded segment.

Select a segment in a text document, right-click and select Code in Vivo.

In-Vivo coding can only be applied to textual primary documents.

Apply Last Used Codes

Applying the last used code(s) to the current data segment is an efficient method for the consecutive coding of segments.

Highlight a data segment or click on an existing quotation.

Right click and select Add Last Used Codes from the context menu.

More Drag-And-Drop Options

- You can drag-and-drop quotations in the Quotation Manager to a code in the side-panel in the Quotation Manager.
- You can drag-and-drop quotations from the Quotation Manager to a code in Code Manager.
- You can drag-and-drop one or more codes to a quotation in the Quotation Manager.
- You can drag-and-drop one or more codes to a quotation in the Quotation Browser in the Navigation Panel.
- You can drag-and-drop quotations from the Quotation Browser to a code in Code Manager.
- You can drag-and-drop quotations from the Quotation Browser in the Navigation panel to a code in side panel of the Quotation Manager.

Keyboard Shortcuts For Coding

<table>
<thead>
<tr>
<th>Coding</th>
<th>Short-Cut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create Free Code</td>
<td>Cmd+K</td>
</tr>
<tr>
<td>Apply Codes</td>
<td>Cmd+J</td>
</tr>
<tr>
<td>Apply Last Used Codes</td>
<td>Cmd+L</td>
</tr>
<tr>
<td>Code In Vivo</td>
<td>Shift+Cmd+V</td>
</tr>
</tbody>
</table>

Display of Codes and Coded Data Segments in the Project Explorer

Under the main Documents branch you see on the first level the quotations including quotation ID and start and end position. If a quotation is coded, you see the codes on the second level.
Under the main Codes branch, all codes are listed. If codes are linked to other codes, you can expand the code subtree further. See linking codes.

The number behind a code, e.g. (1-0) means that the code has been applied 1 time and that it has not yet been linked to other codes (density = 0). The density remains 0 until the researcher manually links codes to other codes, mostly in later stages of the analysis if relationships between codes become apparent.

**Working with Codes**

**Modifying the Length of a Coded Segment**

Select the quotation by clicking on the quotation bar or code in the margin area and move the handle in form of a blue line and dot to the right, to the left, or up or down, depending on whether you want to shorten or lengthen the quotation.

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**April 1, 2009, 4:06 pm**

**Does Having Children Make You Unhappy?**

By LISA BELKIN

Children do not bring happiness. In fact more often they seem to bring unhappiness. That is the conclusion of one academic study after the next — and there are so many that it makes one wonder if researchers kept trying, hoping for a different result.

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**Removing a Coding**

This option is the reverse function of coding. It removes the links between codes and quotations. Unlike the delete function, neither codes nor quotations are removed; only the association between the code and the quotation is removed.

**Margin Area**

Right-click on the code in the margin area and select the option Unlink from the context menu.

**Coding Dialogue**

Double-click on quotation in the margin area. This opens the Coding Dialogue. Click on Applied Codes to quickly see which codes have been applied to the quotation. Click on the button with the minus (-) to remove a code.
Replacing a Code via Drag & Drop

If you want to replace a code that is linked to a data segment, you can drag and drop another code from either the Project Explorer, Code Browser, or the Code Manager on top of it. When you drop it on top of another code, select the second option from the context menu: Replace ... with ...

Adding, Changing and Removing Code Color

To change the code color, select a code and click on the circle next to the word 'color' in the inspector. Another option is to right-click on a code in the Project Explorer, Code Browser, Code Manager, or in a Network and select the option Change Color from the context menu.

Renaming a Code

You can left-click on a code anywhere to rename a code in in-place edit mode. Another option is to rename the code in the inspector.

Deleting One or Multiple Code(s)

In the Project Explorer, the Code Browser, or Code Manager, right-click on a code and select Delete.
About Renaming, Deleting and Unlinking Codes

Renaming and deleting codes are procedures that seem trivial, but understanding the scope of these operations can be a problem for new users. For both operations you must understand, that there is only ONE code, for example 'source of happiness: children' in a given project, even if you applied this code many times.

In the margin are, you may see the code appear many times while scrolling through your document. In fact, you are seeing the codings for this code. Technically speaking, these are links between a quotation represented by a blue bar and the code, represented by its name and icon.

Removing a coding in the margin area (i.e. unlinking the code) is like erasing a word in the margin of a paper document with an eraser. It only affects one coding, i.e. one specific occurrence of the code. All other occurrences of the same code are untouched. The effect of the operation is local.

By renaming or removing a code from a project, you are affecting every occurrence of the code throughout the entire project. The effect is global. Renaming the code will instantly change all the code links in the margin to reflect the new name. Deleting it will remove all occurrences in the margin (and from all other contexts in which it was engaged, like networks, groups, etc.).

Duplicating a Code

It is also possible to duplicate codes with all its linkages. The duplicated code is a perfect clone of the original code including color, comment, code-quotation links, code memo links and code-code links. Duplicating a code can be a useful option to clean up or modify a code system.
To duplicate a code, right-click on a code in the Project Explorer, Code Browser or Code Manager and select Duplicate.

**Writing Code Comments**

Code comments can be used for various types of purposes. The most common usage is to use them for a code definition. If you work in teams, you may also want to add a coding rule, or an example quote. If you work inductively, you can use code comments to write down first ideas of how you want to apply this code. You can also use it to write up summaries of all segments coded with this code and your interpretation about it. There are several ways to write a code comment.

- If you select a code anywhere, you can write a code comment in the inspector.
- In the margin area, you can double-click on a code to open the comment editor. Another option is to right-click on a code and select the **Edit Comment** option from the context menu.

All codes that have a comment shows a little yellow flag.

**Creating a Code Book**

The recommended option to create a code book is to use the Excel export:

Open the Code Manager, select all codes (e.g. Cmd+A), click on the Export button and select Export as Spreadsheet.

ATLAS.ti exports are columns that are visible in the Code Manager. If you click on a column header, you can deselect columns that you do not want to export.

**Merging Codes**

You may begin your coding very close to the data generating lots of codes. In order not to drown in a long list of codes, you need to aggregate those codes from time to time, which means merging and renaming them to reflect the higher abstract level. Another reason for merging is that you realize that two codes have the same meaning, but you have used different labels.

Select two or more codes in the Code Manager and drag them to the code where you want to merge them into. A menu opens. Select the first option **Merge code ... into ...**

A comment is automatically inserted into the target code that provides an audit trail of which codes have been merged. If the codes that are merged had a comment, these comments are also added to the target code.
Splitting a Code

Splitting a code is necessary if you have been lumping together many quotations under a broad theme. This is a suitable approach for a first run through to get an idea about your data. At some point, however, those codes need to be split up into smaller sub codes.

Right-click a code that you want to split in the Code Manager or Project Explorer and select **Split Code** from the context menu.

In the **Split Code** tool, you see the list of the quotations coded with the code.

Click on the button **Add Codes**. Enter as many sub codes as you need. ATLAS.ti automatically creates a prefix that consists of the name of the code you split followed by a colon (:). After adding all sub codes that you need, click **Add**.

You can now assign the quotations to one or more sub codes. When you select a quotation, its content is shown below the list of quotation. Assign the quotations by clicking on the checkbox of the sub codes that apply. The quotation is automatically unlinked from the main code that you are splitting.
After you have distributed some or all of the quotations into sub codes, click on Split Code. Now the sub codes are created, and the quotations are assigned accordingly.

It is not required that you assign all quotations to sub codes. If you are not sure what to do with a quotation, you can leave it coded with the main code and split it later.

It is recommended not to double-code with the main, and the sub code. It takes up unnecessary space in the margin area. Instead, create a code group of all codes that share the same prefix. This way, you can access all data of this category by using the code group as filter.
Mutually Exclusive Coding

If you do not want to allow that a quotation is coded with two of the sub codes, activate the option Mutually Exclusive. This is a requirement for some content analysis approaches and for calculating inter-coder agreement. See Requirements for Coding (see the main manual).

Options

- **Copy Comments**: Select if you want all sub codes to have the same comment as the code you split.
- **Copy links**: Select if you want all sub codes to inherit existing links to other codes or memos.
- **Mutually exclusive**: If activated, you can assign a quotation to only one sub code. This is a requirement for some content analysis approaches and for calculating inter-coder agreement.

Importing a List of Existing Codes

Importing an already existing code book can be useful for a number of reasons:

- To prepare a stock of predefined codes in the framework of a given theory. This is especially useful in the context of team work when creating a base project.
- To code in a "top-down" (or deductive) way with all necessary concepts already at hand. This complements the "bottom-up" (or inductive) open coding stage in which concepts emerge from the data.

You can prepare a code book including code descriptions, code groups and colors in Excel and import the Excel file. This is how you need to prepare the Excel file:

You can enter headings like Code, Code Definition, Code Group 1, Code Group 2, but you do not have to. If you do not enter headings, the columns are interpreted in the following order:

- column 1: code name
- column 2: code description (comment)
- column 3: code group
- column 4: code group
- all subsequent columns: further code groups

If you color the code names, this color is used in ATLAS.ti as code color.

To import the Excel file, select Codes > Import > Codebook (XLSX).

Select a file. Depending on whether you have inserted headers in the Excel file, activate or deactivate the option "Ignore headers (first row) during import". You find this option at the bottom left in the file picker.

If your project already has codes, you need to decide what ATLAS.ti should do if the list of codes in the Excel table contains codes that are already in your project. You have the option to update or to keep the existing codes. You find this option at the bottom right-hand side of the file picker.
After you have set the options, click Import.

Exporting the List of Codes

You need to use this option if you want to export a list of codes for re-use in another ATLAS.ti project.

To export all codes with comments and groups, select Codes > Export > Codebook (XLSX).

For purposes of creating a code book for a report or appendix, we recommend using the Export option offered in the Code Manager. This export also contains groundedness and density counts. See Report Examples.

Building a Code System

A well-structured code list is important for further analysis, where you look for relationships and patterns in the data, with the goal of integrating all results to tell a coherent story. If, as in a survey, you only have questions with the answer categories “yes” and “no” in your questionnaire, your data will only consist of nominal variables. This means that the analysis is limited and does not go beyond the descriptive level. This is like a code list that consists of a set of codes whose analysis level remains indefinite.

Benefits of a well-structured code list

• it creates order
• it brings conceptual clarity for yourself and others
• it provides a prompt to code additional aspects as you continue to code
• it will assist you in identifying patterns

Characteristics of a well-structured code list

• Each code is distinct, its meaning is different from the meaning of any other code.
• The meaning of each code is described in the code comment.
• Each category can be clearly distinguished from other categories.
• All sub codes that belong to a category are similar as they represent the same kind of thing. Nonetheless, each sub code within a category is distinct.
• Each code appears only once in the code system.
• The code system is a-theoretical. This means the code system itself does not represent a model nor a theory. The codes merely describe the data, so that the data can easily be accessed through them.
• The code system should be logical, so you can find what you are looking for.
• The code system contains between 10 and 25 top-level categories.
• The code system has no more than two to three levels. Thus, it consists of categories and sub codes, and possible a dimension like positive / negative, or a time indicator like before / during / after. If dimensions apply to many codes in the code system, it is better to create separate codes and double-code the data with the content code plus the dimension.
How to Begin Building a Code System

The aim of building a code system is that you can access your data through the codes and that you can make full use of the analysis tools. For example, knowing you can cross-tabulate codes with the code co-occurrence table, helps to understand why it is important to either apply multiple codes from various categories to a quotation, or to code in an overlapping fashion.

You start by creating codes to catch ideas, the list of code grows. You then begin to sort and order codes into categories and sub codes making use of the merge and split functions. It is recommended to develop categories that contain only one level of sub categories (two if necessary), so you can flexibly combine the different aspects when querying the data and to avoid unnecessary long code lists and code labels.

You will find that you have different types and levels of codes. Structural codes that code speaker units in focus groups; attribute codes that code socio-demographic attributes of speakers or persons within a document; codes that indicate a category and codes that are sub codes of a category, and so on. As there is only one entity for all of these different things - the code - you can indicate different types and levels using the code label. The table below proposes a syntax that you can use as guideline:

Syntax for Different Types and Levels of Codes

<table>
<thead>
<tr>
<th>What</th>
<th>Syntax for Code Label</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial concept</td>
<td>Lower case</td>
<td>personal growth</td>
</tr>
<tr>
<td>Category</td>
<td>UPPER CASE, colored</td>
<td>EFFECT</td>
</tr>
<tr>
<td>Sub code</td>
<td>Lower case, same as category color</td>
<td>Effects pos: personal growth</td>
</tr>
<tr>
<td>Concept that does not fit any</td>
<td>asterisk (*) label in lower case</td>
<td>*scientific evidence</td>
</tr>
<tr>
<td>category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td>Lower case + special character, coloured</td>
<td>/time: during</td>
</tr>
<tr>
<td>Socio-demographics</td>
<td>prefixed with #</td>
<td>#gender: female</td>
</tr>
<tr>
<td>speaker units</td>
<td>prefixed with @</td>
<td>@Tom</td>
</tr>
</tbody>
</table>

Example

# gender: female

# gender: male

@Tom

@María

@Clara

/time: before

/time: during

/time: after

*single code 1

*single code 2
You see that the prefixes divide your code system into different sections. This helps you to keep organized and to quickly find what you are looking for. It also allows you to flexibly combine the codes of the different categories or categories with speakers, attributes and dimensions when querying the data.

If you have interview data, instead of attribute codes, you use document groups (see the main manual) to sort documents by attributes like gender, age, family status and the like.

Organize your code structure based on conceptual similarities, not observed or theoretical associations, nor according to how you think your will want to write the result chapters, or the possible role they play in any emerging theory.

Use a separate code for each element of what the text is about, i.e. each code should encompass one concept only. If there are multiple aspects, the passage can be coded with multiple codes.

Don't worry if not all of your codes can be sorted into a category. Some codes will remain single codes. In order not to "loose" them in the categories, use a special prefix, so they show up in their own section in the code system.

The Role of Code Groups in Building a Code System

Users are often tempted to use code groups as higher order categories. This defeats the purpose somehow. Code groups are filters and codes can be assigned to multiple code groups. A code of one category can however only belong to one and not to multiple categories. This is why code groups do not serve well as higher order codes. If you want to build categories and sub codes, the recommendation is using the above suggested syntax instead. Indicate a category by using capital letters.
If you have a lot of low frequency code that you want or need to merge, then code groups are a good way to collect them. After you have added all low level codes that belong to the same theme / topic / idea, you can set this code group as filter. This makes it easier to merge the codes. You can then add prefixes, and the category code in capital letters.

Once you have developed categories with sub codes, you can create a code group for each category for the purpose of using it as filter. Code groups will allow you to filter by categories, and for further analysis, you can use the code groups to analyse on the category level rather than the sub code level.

Moving on

Once the data is coded, you have a good overview of your material and can describe it. You can then take the analysis a step further by querying the data. The tools that can be used include the code co-occurrence table (see the main manual), the code document table (see the main manual), the query tool, and the networks (see the main manual).

The goal is to delve deeper into the data and find relationships and patterns. Writing memos (see the main manual) is very important at this stage as much of the analysis does not just happen because you apply a tool. The insights come when reading the data resulting from a query, and when writing summaries and interpretations.

Literature

The recommendations in this section are based on the following authors:


Exploring Text Data

A quick way to get a feeling for the content of text documents is by creating a word cloud or word list.

**Word lists** offer word “crunching” capabilities for a simple quantitative content analysis. This feature creates a list of word frequency counts, and some additional metrics like word length, and percentage of occurrence within or across all selected entities. Word lists can be exported to Excel.

**Word clouds** are a method for visually presenting text data. They are popular for text analysis because they make it easy to spot word frequencies. The more frequent the work is used, the larger and bolder it is displayed. Word clouds can be exported as image.

Word clouds and word lists can be created for:

- documents and document groups
- quotations
- content of quotations by code and code group

A stop and go list including a list of 'ignorable' characters can be used to control the analysis. Words can also be temporarily removed from a list or cloud without the need to add them to a stop list.

For information see **Creating Word Lists and Clouds**.
Creating Word Lists and Clouds

To create a word list or cloud, select Analysis > Word List/Cloud from the main menu.

Select the entity type: Documents, Quotations, Codes, Document Groups or Code Groups, and from the list the entities for which you want to create a word list or cloud. You can also enter a search term into the search field to look for a specific document, code, or quotations that only contain specific words.

On the top left-hand side you find the buttons to switch between list and cloud view.

Options

**Ignore case**: Select this option, if you do not want to count words separately depending on whether they contain upper or lower case letters.

**Show inflected forms**: The plural forms of nouns, the past tense, past participle, and present participle forms of verbs, and the comparative and superlative forms of adjectives and adverbs are known as inflected forms. If you activate this options, the word cloud only shows the basic form of the word, e.g. building but not buildings.

**Separate counts by object**: The word list provides the total count and percentage across all selected objects. Select this option if you also want a count for each selected object.
**Context Menu Options**

When you right-click on a word, you have the following options:

- Copy
- Add to Stop List
- Remove from Go List
- Search (in context)

The **Copy** option is useful, if you want to run the auto coding tool based on some words in the word cloud. See Text Search (see the main manual).

When you add words to a **stop list**, they will not be included in a word list or word cloud. See Working with Stop and Go Lists. (see the main manual).

If you use a **go list** then only words that are in the go list will be included in the word list or cloud. If you do not want a specific word, you can remove it using the context menu option. See Working with Stop and Go Lists. (see the main manual).

The **Search** option opens the Project Search (see the main manual), and shows the selected word in its context.

**Exporting the Word List to Excel**

In the upper right-hand corner, click on the export icon (a rectangle with an up arrow). Enter a file name and select a location where you want to store it. You can also choose to open the file immediately in Excel. Click **Save**.

**Exporting the Word Cloud**

Word clouds can be saved as image file in png format. In the upper right-hand corner, click on the export icon (a rectangle with an up arrow). Enter a file name and select a location where you want to store it. Click **Save**.
Search & Code

With the recent advances in deep learning, the ability of algorithms to analyse text has improved considerably. Creative use of advanced artificial intelligence techniques can be an effective tool for doing in-depth research.

Under the Code > Search & Code menu, ATLAS.ti offers four ways of searching for relevant information in your data that can then be automatically coded.

You find more detail on each of the four tools in the main manual:

- text search (see the main manual).
- expert search (see the main manual). with regular expressions
- Named Entity Recognition (NER) (see the main manual).
- Sentiment Analysis (see the main manual).

Below only one of the tools, namely Sentiment Analysis is explained:

Sentiment Analysis

Currently supported languages are: English, German, Spanish and Portuguese.

Sentiment analysis is the interpretation and classification of emotions (positive, negative and neutral) within text data using text analysis techniques.

Application Examples

- identifying and cataloguing a piece of text according to the tone conveyed by it.
- understanding the social sentiment of a brand, product or service.
- identifying respondent sentiment toward the subject matter that is discussed in online conversations and feedback.
- analysing student evaluations of lectures, seminars, or study programs.

Sentiment analysis works best on structured data like open-ended questions in a survey, evaluations, online conversations, etc.

Carrying out a Sentiment Analysis

To open the tool, select Code > Search & Code > Sentiment Analysis from the main menu.

Select documents or document groups that you want to search and click Continue.
Select whether the base unit for the search, and the later coding, should be paragraphs or sentences, and which sentiment (positive, neutral, negative) you want to search for.

ATLAS.ti proposes code label for each sentiment: Positive / Neutral / Negative. If you want to use different code names, you can change them here.
Manage Models: If you want to improve your results, you can download and install a more comprehensive model. Currently, it is available for German and English language texts. More languages will be added in the future. The size of the German model is ~ 230 MB and for the English model ~ 110 MB.

Click on Manage Models if you want to install or uninstall an extended model.

Click Continue to begin searching the selected documents. On the next screen, the search results are presented, and you can review them.

The result page shows you a Quotation Reader indicating where the quotations are when coding the data with the proposed code. If coding already exist at the quotation, it will also be shown.
By clicking on the **eye** icon, you can change between small, medium and large previews.

You can go through and review each data segment and then code it by clicking on the **plus** next to the proposed code name. You can also code all results at once by selecting **Accept All Proposed Codings** as shown in the image below.

Depending on the area you have selected at the beginning, either the sentence or the paragraph is coded.

The regular **Coding Dialogue** is also available to add or remove codes.

**The Search Engine Behind the Sentiment Analysis**

We are using spaCy as our natural language processing engine. More detailed information can be found [here](#).

Input data gets processed in a pipeline - one step after the other as to improve upon the derived knowledge of the prior step. Click [here](#) for further details.

The first step is a tokenizer to chunk a given text into meaningful parts and replace ellipses etc. For example, the sentence:
“I should’ve known (didn’t back then).”
will get tokenized to:
“I should have known (did not back then).”

The tokenizer uses a vocabulary for each language to assign a vector to a word. This vector was pre-learned by using a corpus and represents a kind of similarity in usage in the used corpus. Click here more information.

The next component is a tagger that assigns part-of-speech tags to every token and lexemes if the token is a word. The character sequence “mine”, for instance, has quite different meanings depending on whether it is a noun of a pronoun.

Thus, it is not just a list of words that is used as benchmark. Therefore, there is also no option to add your own words to a list or to see the list of words that is used.

The sentiment analysis pipeline is trained on a variety of texts ranging from social media discussions to peoples’ opinions on different subjects and products. We are using modified pre-trained/built-from-the-ground-up models - depending on the language.

Artificial intelligence techniques have been developed for big data analysis. The data corpora usually handled by ATLAS.ti are considerably smaller. Thus, you cannot expect all results to be perfect. Reviewing the results will be a necessary component of the analysis process when using these tools. When working with the tools, you will see that the tools will add another level to your analysis. You find things that you simply do not see when coding the data manually, or would have not considered to code. We, at ATLAS.ti, consider manual and automatic coding to be complementary; each enhancing your analysis in a unique way.

Quotation Reader

The Quotation Reader allows you to conveniently read quotations coded by a selected code or as a result of a query. You can modify existing codes, which means add or remove codes. Elsewhere, this has been referred to as coding on.
In the Quotation Reader, you can:

- change between single line, small and large preview
- add or modify the quotation name
- write a comment for a quotation
- apply new or existing codes
- remove applied codes
- view a quotation in the context of the original document
- delete a quotation
View Options: Depending on the length of your quotations you can adjust the view to single line, small or large preview. If you have very short quotations, the single line view might be all what you need to see. It is also useful if you have created your own name for quotations, e.g. to paraphrase textual data or wrote titles for multimedia quotations.

Apply Codes: To change the coding for a quotation, click on the Code button in the toolbar, or right-click and select Apply Codes, or use the short-cut:cmd+j. This opens the coding dialogue, and you can use all options that are explained in the section Coding Date.

Coding with the Last Used Code: Right-click on a quotation and select Add Last Used Codes. Or: Select multiple quotations, right-click and then select the Last Used Codes option.

You can also select multiple quotations or all quotations and code all selected quotations with a new or an existing code.

View in Context: If you want to see a quotation in the context of the original document, either click on the right arrow, or double-click.

Open Network: If you want to see all links of a quotation, select one or multiple quotations, right-click and select Open in Network. See Working with Networks.

Show Word List/Cloud: Another context menu option is to show a word list or word cloud for selected items.

Writing a comment: If you want to write a comment for a quotation, select it, right-click and select Edit Comment from the context menu.

Options

Create Document Group: You can create a new document group containing all documents that the quotations in the Quotation Reader are a part of. Let's assume you have coded for years of professional experience. This was something that came up in the interview, and you did not know beforehand. If you want to compare statements of people with different lengths of working experience, this is a convenient way to turn a code into a document group, and in this case a variable for comparison.

Export as Spreadsheet: You can export all quotations to an Excel spreadsheet.

Export as Report: You can create a text report containing all quotations and further information that you are interested in. You find more information on how to create text reports here.

Working with Memos and Comments

Memos

- "Memos and diagrams are more than just repositories of thoughts. They are working and living documents. When an analyst sits down to write a memo or do a diagram, a certain degree of analysis occurs. The very act
of writing memos and doing diagrams forces the analyst to think about the data. And it is in thinking that analysis occurs” (Corbin & Strauss: 118).

- "Writing is thinking. It is natural to believe that you need to be clear in your mind what you are trying to express first before you can write it down. However, most of the time, the opposite is true. You may think you have a clear idea, but it is only when you write it down that you can be certain that you do (or sadly, sometimes, that you do not)” (Gibbs, 2005).

As you see from the above quotes, memos is an important task in every phase of the qualitative analysis process. Much of the analysis ‘happens’ when you write down your findings, not by clicking buttons in the software.

The ideas captured in memos are often the pieces of a puzzle that are later put together in the phase of report writing.

Theory-building, often associated with building networks, also involves writing memos.

Memos in ATLAS.ti can be just a text on its own, or can be linked to other entities like quotations, codes, or other memos.

Typical Usage of Memos

- Memos can contain a project description
- You can list all research questions in a memo.
You can use memos to write a research diary.

- You can use one memo as to do list.
- Memos can be used as a bulletin board to exchange information between team members.
- You can store definitions, findings or theories from relevant literature in one or more memos.
- You can write up your analysis using memos. Those memos will be the building blocks for your research report.

Memos can also be assigned as documents, if you want to code them. See Using Memos as Document (see the main manual).

**Differences between Memos and Comments**

From a methodological point of view, comments are also memos. Comments are also places for thinking and writing.

In technical terms, in ATLAS.ti there is a distinction between comments and memos, as comments exclusively belong to one entity. For example, the document comment is part of the document; a code comment belongs to a particular code and is usually a definition for this code. A quotation comment contains notes or interpretations about the quotation it belongs to.

Comments are not displayed in browsers separately from the entity to which they are attached.

**ATLAS.ti memos in comparison**

- can be free-standing, or they can be linked to other entities.
- You can write a comment for a memo, for example: use this memo for section 2 in chapter 4 in my thesis.

**Typical Usage of Comments**

Below some ideas are listed for what you can use comments:

**Project comment**

- project description

**Document comment**

- Meta information about a document: source, where and how you found or generated it
- Interview protocols

Information about a respondent like gender, age, profession etc., are best handled by document groups. There is no need to write this type of information into the comment field.

**Quotation Comment**

- interpretations that only concern a specific data segment
- ideas how a quotation might be related to another quotation
• summaries for what you hear or see in the multimedia quotation
• interpretations of image quotations
• notes on a geo position

**Code Comment**

• first ideas what you mean by a code
• a code definition
• a coding rule, especially when working in a team
• an example of what kind of data can be coded with this code
• summary of coded segments

**Memo Comment**

• note to yourself where you want to use the memo in a report
• comments from supervisors or team members
• links to or notes about relevant literature

**Network Comment**

• description of the network
• idea how you want to develop it further

**Link Comment**

• Explaining why the two entities are linked in a specific way.

**Writing a Comment**

You find a field for writing comments in every Entity Manager (see the main manual).

To write a comment, select an item and type something in to the comment field in the inspector. As soon as you select another item, the comment is automatically saved.

All items that have a comment display a yellow post-it within their icon.

Alternatively, you can right-click on any entity and select the **Edit Comment** option from the context menu and write a comment for the selected entity.

**Creating Memos**

Memos can be created from the **toolbar**, or in the **Memo Manager**.

To create a memo from the **toolbar**:

Click the drop-down menu for Memos and select *New Memo*. A new memo opens immediately, and you can change the default name in the inspector.

To create a memo in the **Memo Manager**
From the main menu select Memo > Show Memo Manager.

In the Memo Manager, click on the plus. A new memo is created in the list, and you can enter a title. You can begin to write your memo in the editor in the lower part of the Memo Manager.

**Opening an Existing Memo**

You can access memos from everywhere: the Project Explorer, the Memo Manager, in the margin area if you linked a memo to a quotation, or from within a network.

If you want to review or continue to work on a memo, just double-click the memo. In the Memo Manager, you can select a memo with a single click and review and edit it in the lower part of the manager window.

Memos can be linked to quotations, codes and other memos. You can link memos per drag & drop basically anywhere in the program, or visually in networks. See Linking Nodes. Below a few examples are given.

**References**


Gibbs, Graham (2005). Writing as analysis. Online QDA.
Querying Data

ATLAS.ti offers several tools that support you in querying your data:

Simple Boolean Retrieval.

See Retrieving Coded Data.

Code Document Table

The Code Document Table is a cross-tabulation of codes or code groups by documents or document groups. It shows how often a code (codes of a code group) has (have) been applied to a document or document group. See Code Document Table. (see the main manual).

Co-occurrence Analysis

Use the Code Co-occurrence Explorer to explore coded data to get a quick overview where there might be interesting overlaps. If you are looking for specific co-occurrences and for accessing the quotations of co-occurring codes, the Code Co-occurrence Table is the better choice. See Code Co-Occurrence Tools. (see the main manual).

The Query Tool

The Query Tool finds quotations based on a combination of codes using Boolean, Proximity or Semantic operators. Example: Show me all quotations where both Code A and Code B have been applied.

Such queries can also be combined with variables in form of documents or document groups. This means that you can restrict a query to parts of your data like: Show me all quotations where both Code A and Code B have been applied, but only for female respondents between the age of 21 and 30. See The Query Tool.

Smart Codes

Smart Codes are stored queries. They can be reused and always reflect the current state of coding, e.g. after more coding has been done or after coding has been modified. They can also be used as part of other query, thus, you can build complex queries step by step. See Working With Smart Codes. (see the main manual).
Smart Groups

Like smart codes, smart groups are stored queries based on groups. The purpose is to create groups on an aggregate level. For instance, if you have groups for gender, age and location, you can create smart groups that reflect a combination of these like all females from age group 1 living in city X. See Working With Smart Groups. (see the main manual).

Global Filters

Global filters allow you to restrict searches across the entire project. If you set a document group as global filter, the results in the Codes-Document or Code Co-occurrence Table will be calculated based on the data in the filter and not for the entire project. Global filters effect all tools, windows, and networks. See Applying Global Filters For Data Analysis. (see the main manual).

Retrieving Coded Data

In the Code Manager

Open the Code Manager and double-click a code. This open the Quotation Reader and you can review all codings.

Simple Retrieval in the Margin Area

If you double-click on a code in the margin area, the comment field opens. From there you can access the quotations coded with the code.

Simple AND and OR Queries in The Quotation Manager

Open the Quotation Manager.

Select a code in the filter area. The list of quotations only shows the quotations of the selected code. If you click on a quotation, it will be shown in the preview area. If you double-click, the quotation will be shown in the context of the document.

The yellow bar on top shows the code(s) you are using as filter.

When selecting two or more codes in the side panel, the filter is extended to an OR query - Filter quotations, which are coded with any of the codes.....

Click on the box with the any operator. This opens a drop-down, and you can change between ANY and ALL.

• **ANY**: Show all quotations linked to any of the selected codes.
Show quotations where **all** the selected codes apply. This means that two or more codes have been applied to the exact same quotation.

**IMAGE**

If you want to export the results, click on either the **Report** or **Excel Export** button in the ribbon. Find more detail see **Creating Reports**.

**Code-Document Table**

You can use the Code Document Table for within and across documents or group comparisons by relating codes or code groups and documents or document groups to each other.

The table cells contain:

- **frequency count** of the number of codings. This can be different from the number of quotations, if a quotation is coded by multiple codes. Counted is each link between a code and a quotation.

- **word count** of the quotations coded by the selected code or code group.

**Running an Analysis in the Code Document Table**

- From the main menu select Analysis > Code-Document Table.

- Select codes or code groups for the table rows; and select documents or document groups for the table columns.

**How to make selections:** To select an item, you need to click the check-box in front of it. It is also possible to select multiple items via the standard selection techniques using the **cmd** or **shift-key**. After highlighting multiple items, push the **space bar** to activate the check boxes of all selected items.

**How to read the table**

By default, the codes / code groups are displayed in the left column, and the documents / document groups in the top row.

**Left column**

- Next to each code, the number indicates how often the code is applied in the entire project.

- Next to a code group, you see two numbers: The first one tells you how many codes are in the group, the second numbers gives you the number of codings. This is different from the number of quotations, as multiple codes from the same code group could be linked to the same quotation.

**Top row**

- Below a document, you see the total number of quotations in each document.
Below a document group, you see two numbers: the first one tells you how many documents are in the document group, and the second number gives you the number of quotations for all documents in the group.

The additional information you get for each selected row or column item allows you to better evaluate the numbers inside the table cells. If the value in the table cell is 10, but the code overall was applied 100 times, this leads to a different interpretation as if the code was only applied 12 times in the entire project.

Table cells

• The results in the table cells show how often each selected code was (or the codes of a code group were) applied in each document or document group. Counted are the number of codings, unless you select to count words (see options).

• If you click on a cell in the table, the quotation content is shown in the Quotation Reader on the left-hand side.

• The table cells are colored to reflect the frequency. The darker the color, the higher the frequency.

Code-Document Table Toolbar

Compress: This is a quick way to remove all rows or columns that only show empty cells. This is the same as manually deactivating codes or documents that yield no results. Thus, you cannot decompress a table.

Table / Sankey: You can switch between table view, and a visualization of the selected data in form of a Sankey diagram (see the main manual).

Options: See full manual. (see the main manual).

Export: You can export the table as Excel spreadsheet, and the Sankey diagram as image in pgn format.

Sankey Diagram

As soon as you create a table, a Sankey diagram will be shown in the area below the table. The Sankey diagram is an alternative view complementing the original table view.

The basic table data model of rows and column entities is represented in the Sankey model as nodes and edges, the strength of co-occurrence between pairs of nodes. The Code Document table uses codes, code groups, documents and document groups.

For each table cell containing a value, an edge is displayed between the diagram nodes. The thickness of the edges resemble the cell values of the table. Cells with value 0 are not displayed in a Sankey view.

The Code Co-Occurrence Table

The Co-occurrence Table in comparison to the Explorer shows the frequencies of co-occurrence in form of a matrix similar to a correlation matrix that you may know from statistical software.
To open the tool, select Analysis > Code Co-occurrence Table.

Next you need to select the codes that you want to relate to each other:

Select codes from the first list for the table columns, and codes from the second list for the table rows. To select an item, you need to click the check-box in front of it. It is also possible to select multiple items via the standard selection techniques using the cmd or shift-key. After highlighting multiple items, push the space bar to activate the check boxes of all selected items.

How to read the table

First column / first row: The number below and behind each code shows how often the code is applied in the entire project. This helps you to better evaluate the number of co-occurrences in the table cells.

The number in the cell indicates the number of hits, how often the two code co-occur. This means that the number of co-occurring „events“ and not the number of quotations are counted. If a single quotation is coded by two codes or if two overlapping quotations are coded by two codes, this counts in both cases as a single co-occurrence.

Retrieving the qualitative data: If you click on a cell, the quotations of the corresponding row and column codes are displayed next to the table in the Quotation Reader.

The quotation reader always displays two lists of quotations: the quotations of the column code, and the quotations of the row code.

Code Co-Occurrence Table Toolbar

Compress: This is a quick way to remove all rows or columns that only show empty cells. This is the same as manually deactivating codes that yield no results. Thus, you cannot decompress a table!

Table / Sankey: You can switch between table view, and a visualization of the selected data in form of a Sankey diagram (see the main manual).

Options: See full manual. (see the main manual).

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Sankey Diagram

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For each table cell containing a value, an edge is displayed between the diagram nodes. The thickness of the edges resemble the cell values of the table. Cells with value 0 are not displayed in a Sankey view.
The Query Tool

The **Query Tool** is used for retrieving quotations using the codes they were associated with during the process of coding. The simplest retrieval of this kind - search for quotations with codes- is what you frequently do by double-clicking on a Code in the Code Manager or a code browser. See Retrieving Coded Data. This may already be regarded as a query, although it is a simple one. The Query Tool is more complex in that it can be used to create and process queries that include a variety of combinations of codes.

A **query** is a search expression built from operands (codes and code groups) and operators (Boolean, proximity or semantic operators) (see the main manual). that define the conditions that a quotation must meet to be retrieved, for example "All quotations coded with both codes A and B".

You can also use the Quotation Manager to build queries. (see the main manual). The Quotation Manager, in addition to code queries, also allows you to set further filters like only including quotations that contain a certain word.

A query can be built incrementally which is instantaneously evaluated and displayed as a list of quotations. This incremental building of complex search queries gives you an exploratory approach toward even the most complex queries.

To open the Query Tool:

From the main menu, select **Analysis > Query Tool**. When the query tool opens, the first code from your code list is selected.
In the grey section at the top of the window, you build the query.

- You can select codes and code groups and combine them with Boolean, proximity or semantic operators.
- You can restrict the search to documents or document groups, or a combination using Boolean operators.

See the following pages for:

- example Boolean queries
- example proximity queries
- an example of a complex query based on a combination of operators (see the main manual).

Remember the results of a query in the query tool are always quotations.

How to Build a Query Using Boolean Operators

The examples shown are based on the sample project Children & Happiness. You can download and import it, if you want to follow along.
Example 1

The aim is to find all statements where people wrote about the two positive effects of parenting: 'fulfillment' and 'life is richer'.

Open the Query Tool: Select Analysis > Query Tool. When the query tool opens, the first code from your code list is selected.

Change the operator in the first line to any.

In the second line, change the code to 'effects pos: fulfillment'.

Click on plus at the end of the second line to add a second code to the query. Select 'effects pos: life is richer'.

A second way to enter a Boolean query is as follows:

Leave the first line as is: Contains quotations which must match all of the following rules.

In the second line, click on the first field and select the OR operator. As the OR operator always requires two arguments, two lines are added where you can enter codes or code groups.

Change the code in the third line to 'effects pos: fulfillment', and the code in the fourth line to 'effects pos: life is richer'.

If you want to select a code group instead of a code, click on the Code field and select Code Group from the drop-down menu.

Reading the Results of a Query

- The resulting number of quotations are shown on the right-hand side.
- The results of the query are shown in the Quotation Reader below the query. The full functionality of the quotation reader is also available here.

Removing or Modifying a Query

If you want to add a new query, change the operator and select different codes or code groups. Instead of selecting a different operator, another option is to select undefined (Empty). Then you can build a query from scratch.

If a query gets more complex and there are multiple lines, you see a minus button. If you click on it, this part of the query is removed.

Example 2

In this example, we show you how you build a query with two Boolean operators:

The aim is to find all statements where people wrote that children either make them more happy, or they experience equal level of happiness, plus they mentioned a source of happiness captured by codes of the code group 'sources of happiness'.

This is a bit more complex, as we need to embed an OR query within an AND query. We first need to find all statements where people express equal level of happiness or more happiness. This is the OR part of the query. The AND part of the query is to find only those quotations that are also coded with any of the codes from the code group 'sources of happiness'.

This query yields 1 quotation as result.
We need to start with the AND operator, so we can embed the OR query within it: Select the operator AND. Next, you can either click on the button Embed rule on the right-hand side and select the OR operator, or change the field "is coded with" in the third line to the OR operator.

Add the two codes 'children: = equal level of happiness' and 'children: > happiness' into the fourth and fifth line.

In the sixth line change the field 'code' to code group and as code group select 'sources of happiness'. See image below.

How to Build a Query using Proximity Operators

The examples shown are based on the sample project Children & Happiness. You can download and import it, if you want to follow along.
Example 1

The aim is to find all data segments where people who mention positive effects of parenting, also write about that having children has made them happier.

Open the Query Tool: Select Analysis > Query Tool. When the query tool opens, the first code from your code list is selected.

In the field 'is coded with' select the option Quotation co-occurrence. This adds two lines to the query, as all proximity operators need two arguments.

In the third line change codes to codes of group and add the code group 'effects of parenting positive'. In the fourth line add the code 'children: > happiness'.

The result of this query yields 8 quotations.

![Query Tool Image]

The results of a query are shown in the Quotation Reader. The full functionality of the quotation reader is also available here.

Example 2

You can also combine multiple proximity operators.

The aim is to find all blog comments where people wrote something about positive effects of parenting and negative effects of parenting. The statements about positive and negative effects are embedded in the blog comment, they can but do not have to overlap directly.

Select the option Quotation co-occurrences.

As the statements about positive and negative effects do not necessarily overlap, we first need to find the blog comments that contain statements of either positive or negative effects. Therefore, we need to embed the following query:
Select the option Quotations enclosing quotations and select the code 'blog comment' in the fourth line, and the code group 'positive effects of parenting' in the fifth line. In the sixth line, select the code group 'Negative effects of parenting'.

The result of this query yields 10 quotations. The following image shows one of the resulting quotations:
**ATLAS.ti Networks**

Visualization can be a key element in discovering connections between concepts, interpreting your findings, and effectively communicating your results. Networks in ATLAS.ti allow you to accomplish all three of these important objectives. These small segments of your larger web of analysis are modeled using the network editor, an intuitive work space we also like to think is easy on the eye.

The word *network* is a ubiquitous and powerful metaphor found in many fields of research and application. Flow charts in project planning, text graphs in hypertext systems, cognitive models of memory and knowledge representation (semantic networks) are all networks that serve to represent complex information by intuitively accessible graphic means. One of the most attractive properties of graphs is their intuitive graphical presentation, mostly in form of two-dimensional layouts of labeled **nodes** and **links**.

In contrast with linear, sequential representations (e.g., text), presentations of knowledge in networks resemble more closely the way human memory and thought is structured. Cognitive "load" in handling complex relationships is reduced with the aid of spatial representation techniques. ATLAS.ti uses networks to help represent and explore conceptual structures. Networks add a heuristic "right brain" approach to qualitative analysis.

The user can manipulate and display almost all entities of a project as nodes in a network: quotations, codes, code group, memos, memo groups, other networks, documents, document groups and all smart entities.

If you are interested in learning more about network theory and how it is applied in ATLAS.ti, you can watch the following video: Did you ever wonder what's behind the ATLAS.ti network function.

**Opening Ad-hoc Networks**

An ad-hoc network is when you open a network on an entity. This will show the entity in a network with all of its directly linked neighbors, except when you open a network for a document or multiple items. In the latter two cases, only the selected entities open in a network. More nodes can be added to such networks using different techniques. See Adding Nodes To Network and Adding Neighbors (see the main manual).

Select an entity in the margin area, a manager, the project explorer or any browser, right-click and select **Open in Network**. Another option is to select the Open Network button in the ribbon. It is available if you select an entity in a manager.

The nodes are initially placed using a default layout procedure, but can be rearranged manually or using any of the other layout procedures. See Layout And Routing. (see the main manual).

Each time a network is opened on a selected entity, a new network is created. There is no need to save it, as you can easily display it at any time by opening it again. If, however, you rearranged the nodes and want to preserve the new layout, or if you add or remove nodes, then you need to save it explicitly. To do so, in the main Network ribbon select **Save** and enter a name for the network. Saved networks can be selected from the Project Explorer, the Network Manager, and the Networks Browser.
Basic Network Procedures

Two methods for creating networks are available. The first one creates an empty network, and you begin to add entities as sequential steps. The other method creates a network from a selected entity and its neighbors.

Creating a New Network

Open the drop-down menu for Networks in the toolbar, and select New Network. The network opens immediately in the main space. It is recommend to change the default name in the inspector.

Another option is to open the Network Manager and to create a new network there by clicking on the plus button.

Adding Nodes to a Network

You can add nodes via the Add Nodes button in the toolbar, or via drag-and-drop.

Adding Nodes Using the Selection List

Click on the Add Nodes button in the toolbar.

This opens a selection list that is docked to the left-hand side of the network. At the bottom of the selection list you see a preview if one is available for the selected entity.

Select the entity type and then the entities that you want to add to the network. Double-click to add the entity to a network; or drag-and-drop the selected entities to the network; or click on the Add button.

Adding Nodes via Drag & Drop

You can add nodes by dragging entities into the network editor from entity managers, group managers, the margin, the project explorer, or any of the browsers.

Open a network and position it for example next to the Project Explorer.

Select the node(s) you want to import into the network and drag-and-drop them into the editor.

Selecting Nodes

Selecting nodes is an important first step for all subsequent operations targeted at individual entities within a network.
Selecting a Single Node

Move the mouse pointer over the node and left-click.

All previously selected nodes are deselected.

Selecting Multiple Nodes

Method 1

Hold down the cmd key on your keyboard, move the mouse pointer over the node and left click. Repeat this for every node you want to select.

Method 2

This method is very efficient if the nodes you want to select fit into an imaginary rectangle.

Move the mouse pointer above and left to one of the nodes to be selected. Hold down the left mouse button and drag the mouse pointer down and right to cover all nodes to be selected with the selection marquee. Release the mouse button.

Linking Nodes and Entities

Select one or more nodes. A dot appears in the top left corner of the node(s). Click on the dot with the left mouse button and drag the mouse pointer to the node that you want to link. In case you have highlighted more than one node, you need to select the dot of one of the nodes.

Release the left mouse button on top of the node. If you link codes to codes or quotations to quotations, a list of relation opens. Select a relation.

The two nodes are now linked to each other. In case you linked two codes or two quotations to each other, the relation name is displayed above the line.

If none of the existing relations is suitable, select Create Relation and create a new relation (see the main manual). The new relation will immediately be applied to the link.

Editing a Link

Click on a link. If the link has a relation, click on the relation as this makes it easier to select it. A selected link is displayed in blue.

Right-click and open the context menu.
For a named relation, you have the following options:

- **Edit comment**: Use the comment field to explain why these two nodes are linked.

- **Flip link**: Use this option if you want to change the direction of a transitive or asymmetric link. (see the main manual).

- **Open in Link Manager**: The Link Manager for codes lists all code-code links; the Link Manager for quotations lists all hyperlinks. (see the main manual). In the Link Manager you can review all links, filter by relations, write comments or modify relations.

- **Change Relation**: Select a different relation from the list of available relations or create a new one and apply it.

- **Open Relation Manager**: to review and modify existing relations, or to create new relations. (see the main manual).

- **Copy**: This creates a plain text description of the relation between the two entities that you paste into a comment, memo or text editor.

- **Unlink**: Removes the link between the two nodes.

### Linking Codes to Codes, Quotations to Quotations, Memos to Memos in Managers and Browsers

Quotations, codes and memos can also be linked to each other in the Manager, the Project Explorer, or the respective entity browsers.

Select one or more source items in the list pane of the Manager, in the respective sub-branches of the Project Explorer, or in the entity browsers and drag them to the target item in the same pane.

Select a relation from the list of relations in case you link two codes or two quotations, or select **New Relation Type** and create a new relation. (see the main manual).

### Linking Entities of Different Types

When you code your data reading through a document, listening to audio data, viewing an image or video file, you are linking codes to quotations. This can also be done via drag & drop from the Project Explorer or any of the entity browsers to the list of codes or quotations in a manager.

This also applies to linking memos to codes, or memos to quotations.

### Exporting Networks

Networks can be printed, or saved as PDF file.

Open the network.
From the main menu select **Project > Print**. Click on **Show Detail** to change the orientation and other options. Either select the print, or the PDF option.
Creating Reports

Export as Spreadsheet

In every manager, you find a button (the rectangular icon with an up arrow) to export the content as spreadsheet. The export is a WYSIWYG (what you see is what you get) type of report. All columns currently displayed are exported.

From Managers

- To exclude a column from the report, click on the column header and deselect it.
- To create a report, open the drop-down menu of the report button in the toolbar and select Export as Spreadsheet.

Use the grouping options to create different sheets for each of the selected entity, e.g. if you group a quotation report by codes, ATLAS.ti creates a separate sheet for each code and its quotation in the spreadsheet or Excel file.

From the Query Tool

- To create a report, open the drop-down menu of the report button in the toolbar and select Export as Spreadsheet.

From the Quotation Reader

- To export the quotations listed in a Quotation Reader as spreadsheet, open the drop-down of the options button in the toolbar and select Export as Spreadsheet. The content of the report is the same as from the Quotation Manager. It contains all columns from the Quotation Manager.
Info Sheet for Spreadsheet / Excel Reports

All spreadsheet / Excel reports have an additional sheet that shows meta information like the type of the report, the project name, date of export and name of exporting user.

The info sheets for reports based on the Code Document- and the Code Co-occurrence Table, and Inter-coder Agreement Analysis contain further information.

- abbreviations that are used
- Code Document Table: Information about which relative frequency count is used
- Code Co-occurrence Table: whether the c-coefficient was selected
- ICA reports: coder names

Export as Report

When using this option, you get a report in text or PDF format. It is available form all managers and the query tool. The report is configurable, this means you can select what it should contain. Before you create the report, you see a preview.

Open a Manager. Click on the drop-down menu of the report button in the toolbar and select Export as Report.
On the left-hand side you see how the report looks like given the current selections. On the right-hand side, you can select further options:

- **Filter**: If you selected items before clicking on the report button, you can switch between creating a report for only the selected or all items.

- **Grouping**: Depending on the entity type you have different grouping options, e.g. by code, code group or document. Select a grouping option if appropriate.

If you select to group quotations by code, and a quotation is coded by multiple codes groups, the quotations for this code will occur multiple times in the report.

If you select to group by code groups, and a code is a member of multiple code groups, the quotations for this code will occur multiple times in the report.

- **Report options**: In this field, you can select which content should be displayed in the report. As soon as you select an option, you see in the preview how it will look like in the report. See below for further detail.

- **Save**: This saves the report as Word document. Select a name for the report and a location.

- **Print**: You can send the report directly to a printer and print it, or you can save it as PDF file. Other options are:
  - Save as PostScript
  - Send in Mail
  - Send via Messages
  - Save to iCloud Drive
  - Save to Web Receipts

**Options in the Document Manager**

- **Type of Content**: text, image, geo, audio or video

- **Add the Creating & Modifying User** to the report.

- **Quotations**: Adds the quotations that are in the document (ID, reference, quotation name, and document name). If selected, you can add further information about the quotations(s) from the sub-tree, e.g. their content and the codes that are applied.

- **Codes**: Adds the codes that are applied to the quotations in the document. If selected, you can add further information about the code(s) from the sub-tree.

- **Groups**: Adds the document groups that a document is a member of. If selected, you can add further information about the groups from the sub-tree.

- **Content**: Adds the content of the document.

- **Comments**: Adds the comment you have written for a document to the report.
Options in the Quotation Manager

- **Type of Content**: text, image, geo, audio or video
- **Add the Creating & Modifying User** to the report.
- **in Document**: Adds the document name to the report. If selected, you can add further information about the document from the sub-tree.
- **Coding**: Adds the codes that are applied to the quotation to the report. If selected, you can add further information about the code(s) from the sub-tree.
- **Hyperlinks**: (see the main manual). Adds quotations that are linked to a quotation to the report. If selected, you can add further information about the linked quotations from the sub-tree, like their content.
- **Linked Memos**: (see the main manual). Adds the memo(s) that are linked to the quotation to the report. If selected, you can add further information about the memo from the sub-tree, like the memo content.
- **Content**: Is selected by default. If selected, the content of the quotation is displayed.
- **Comments**: Adds the comment you have written for a quotation to the report.

Options in the Code Manager

- **Add the Creating & Modifying User** to the report.
- **Used in Documents**: Adds the documents where the code has been applied. If selected, you can add further information about the document(s) from the sub-tree.
- **Groups**: Adds the groups that a code is a member of. If selected, you can add further information about the group(s) from the sub-tree.
- **Linked Codes**: Adds the codes that are linked to a code. If selected, you can add further information about the linked code(s) from the sub-tree.
- **Quotations**: Adds a list of quotations coded by the code (ID, reference, quotation name, and document name). If selected, you can add further information about the quotations(s) from the sub-tree, e.g. their content.
- **Linked Memos**: (see the main manual). Adds the memos that are linked to a code to the report. If selected, you can add further information about the memo from the sub-tree, like the memo content.
- **Comments**: Adds the comment you have written for a code to the report.

Options in the Memo Manager

- **Add the Creating & Modifying User** to the report.
- **Groups**: Adds the groups that a memo is a member of. If selected, you can add further information about the group(s) from the sub-tree.
Linked Codes: Adds the codes that are linked to a memo. If selected, you can add further information about the linked code(s) from the sub-tree.

Linked Quotations: Adds a list of quotations linked to the memo (ID, reference, quotation name, and document name). If selected, you can add further information about the quotations(s) from the sub-tree, e.g. their content.

Linked Memos: (see the main manual). Adds the memos that are linked to a memo to the report. If selected, you can add further information about the memo from the sub-tree, like the memo content.

Content: Adds the memo content to the report.

Comments: Adds the comment you have written for a memo to the report.

Options in the Network Manager

Add the Creating & Modifying User to the report.

Groups: Adds the groups that a network is a member of. If selected, you can add further information about the group(s) from the sub-tree.

Comments: Adds the comment you have written for a network to the report.

Predefined Reports

Predefined reports are essentially a shortcut for creating text or PDF reports from Managers. You find a Generate Report menu entry under the main menu for Document, Quotation, Code, Memo and Network.

After selecting an option, you see the same window when selecting the Export as Report option in the Managers, as has been described above. The only difference is that the fitting options have already been selected for you. You can add further options to the report.

For Documents

For quotations, you have the following pre-defined reports:

- Documents and Groups: A report that contains all documents and their type, and the groups they are a member of.
- Document Groups and Members: A report that contains all document groups and their members.

For Quotations

For quotations, you have the following pre-defined reports:

- Quotations by Document: A report that contains all quotations with their content and comments including the document name
- Quotations by Codes: A report that contains all quotations with their content including the document name for each code
• **Hyperlinks with Comments**: A report that contains all hyperlinks. Included are the quotation ID, the reference, the quotation and document name for both source and target quotation, and the relation linking the two.

**For Codes**

For codes, you have the following pre-defined reports:

- **Codebook**: A report that contains all codes and their comments. If you want to add a code book to the appendix of a thesis or a report, we recommend using the spreadsheet option. See Example Reports.
- **Codes by Documents**: A report that contains all codes and their comments, sorted by documents in which they occur.
- **Code Groups and Members**: A report that contains all code groups and their members.

**For Memos**

For memos, you have the following pre-defined reports:

- Creates a report that contains a list of all documents and their group membership
- Creates a report that contains all document groups with their members

**For Networks**

For memos, you have the following pre-defined reports:

- Creates a report that contains a list of all documents and their group membership
- Creates a report that contains all document groups with their members

**Example Reports**

**Report: All Quotations for Multiple Codes**

Open the Quotation Manager. Select multiple codes by holding down the Ctrl-key in the filter area on the left.

Click on the Excel Export button and select whatever should be included in the table:

- ID
- Select Quotation Name only when you have renamed the quotation.
- Document
- Quotation Content
- Quotation Comment (optional)
Select Codes if you want to see other codes that have been applied to a quotation.
- Reference (start and end position of the quotation in the document)

Activate the Group by Codes option so that ATLAS.ti creates different sheets for each code in the Excel table.

**Report Code Book**

Open the Code Manager and select all codes.

Click Excel Report in the ribbon and select the following options:
- Code
- Comment
- optional: Grounded (code frequency) / Density (number linkages to other codes)
- Code Group

**Report: Documents and their Codes**

Open the Document Manager and select all documents that you want to export with their codes.

Click Excel Report in the ribbon and select the following options:
- ID
- Document
- Codes

**Report: for Multimedia Data**

If you have utilized the quotation level when working with multimedia data and have replaced the default quotation name with summaries of what can be seen or heard in the multimedia quotation, this is how you create a useful report:

Select the video quotations in the Quotation Manager.

Select the Excel Report button in the ribbon and select the following options:
- ID
- Quotation Name
The report will show an overview of all the titles you have created for your image, audio or video segments and the comments you have written. Plus, it provides the exact position within the multimedia file.

**Project Management**

**Opening a Project**

To open a project, click on a project on the Welcome Screen (see the main manual), or if a project is already open, and you want to open another one, select Project > Open.

**Saving a Project**

To save a project, select Project > Save from the main menu or use key combination command + S.

The project is saved as internal ATLAS.ti file in the ATLAS.ti library. The default location for the library is the application folder on your computer. See Where Does ATLAS.ti Store Project Data? (see the main manual). It is possible to either change the default location for the ATLAS.ti library or to create new libraries. See About ATLAS.ti Libraries (see the main manual). See the full manual for further detail.

If you want to save an external copy of your project, you need to export it. See Project Export. (see the main manual).

**Renaming a Project**

Select Project > Rename from the main menu.

**Deleting a Project**

You can delete projects from the opening screen, either when you start ATLAS.ti or by selecting Project > Open.

Select a project on the opening screen, right-click on a project and select the option Delete.

You will be asked to confirm the deletion as this is a permanent action that cannot be undone.
Password Protection

To set a password for your project, you need to load it first.

Select Project > Change Password.

ATLAS.ti Scientific Software GmbH does not save your passwords. We cannot access, read or recover your password. If you cannot remember your password, you can no longer access your project!
Appendix

The following information has been compiled for the appendix:

- **System Requirements**
- **Language Settings**
- Service Packs & Patches -- Live Update (see the main manual).
- Get In Touch (see the main manual).
- **Useful Resources:** Here you find links to the ATLAS.ti website, the Helpdesk, video tutorials, manuals in PDF format to download, the research blog and publications on the use of ATLAS.ti, including an article by Prof. Krippendorff about the implementation of inter-coder agreement in ATLAS.ti.

**Language Settings**

ATLAS.ti recognized the language or your Operating System and will set the language accordingly. Currently, the following user interface languages are available:

- English
- German
- Spanish
- Portuguese
- Simplified Chinese

For all other OS languages that are not listed above, the default language is English.

**System Requirements**

The system requirements are:

- macOS 10.13 High Sierra or higher
- min. 8 GB RAM
- 10 GB space on the hard drive
Get In Touch

Social Media

You can access all social media channels from within ATLAS.ti by selecting Help > Social Media.

Stay updated with the latest news on product updates, special offers, new training materials, or interesting articles and links we find. We are also happy to hear from users via these channels. Stop by and let us know about your projects and experience with ATLAS.ti!

- Twitter
- Facebook
- Instagram
- LinkedIn

The ATLAS.ti YouTube channel offers a variety of video materials:

- Overview of the software functionality
- Recorded webinars
- Video tutorials that help you to learn the software.

Videos are available in English and Spanish.

Useful Resources

The ATLAS.ti Welcome Screen (see the main manual) contains links to manuals, sample projects and video tutorials. The News sections informs you about current developments, updates that are released, interesting papers we have come across, use cases, and our newsletter.

The ATLAS.ti Website

https://atlasti.com/

The ATLAS.ti website should be a regular place to visit. Here you will find important information such as video tutorials, additional documentation of various software features, workshop announcements, special service providers, and announcements of recent service packs and patches.

Getting Support

https://support.atlasti.com

From within ATLAS.ti, select Help > Online Resources / Contact Support. Or access the Support Center directly via the above URL.
ATLAS.ti 9 -- What's New

What's New in ATLAS.ti 9

This document is intended specifically for users who already have experience using the previous version.

Video Tutorials

If you like to learn via video tutorials, we offer a range of videos covering technical as well as methodological issues.

ATLAS.ti 9 Video Tutorials

Sample Projects

You can download a number of different sample projects from our website. Currently English and Spanish language projects are available. The projects feature different types of data sources:

- text
- PDF
- image
- video
- geo data

... and different data types:

- interview transcripts
- reports
- online data
- evaluation data
- survey
- literature review

You can use them for yourself to get to know ATLAS.ti, or you can use them for teaching purposes. If available, also the raw data are provided.

PDF Manuals

ATLAS.ti 9 Mac Full Manual

ATLAS.ti 9 Mac Quick Tour

Research Blog

The ATLAS.ti Research Blog plays a very important role in the development and consolidation of the international community of users. Consultants, academics, and researchers publish short and practical articles highlighting functions and procedures with the software, and recommending strategies to successfully incorporate ATLAS.ti into a qualitative data analysis process. We invite you to submit short articles explaining interesting ways of making
the best use of ATLAS.ti, as well as describing how you are using it in your own research. To do so, please contact us.

**Inter-coder Agreement in ATLAS.ti by Prof. Krippendorff**

We have been closely working with Prof. Krippendorff on the implementation to make the original Krippendorff alpha coefficient useful for qualitative data analysis. This for instance required an extension and modification of the underlying mathematical calculation to account for multi-valued coding. (see the main manual). You can download an article written by Prof. Krippendorff about the implementation of the alpha family of coefficients in ATLAS.ti.

**Publications**

- Friese, Susanne (2016). Qualitative data analysis software: The state of the art. Special Issue: Qualitative Research in the Digital Humanities, Bosch, Reinoud (Ed.), KWALON, 61, 21(1), 34-45.
- Friese, Susanne (2016). **CAQDAS and Grounded Theory Analysis. Working Papers WP 16-07**