



Quirkos

Full manual

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1. Overview

1.1 What is Quirkos?

Quirkos is software designed to help people sort and manage text based data, by managing sections of text described as being about a particular topic or theme. By cataloguing this 'coded' text across dozens of sources, researchers can start to identify themes and trends emerging across the data. This is a manual process; the software cannot anticipate what interests a particular researcher. This approach is typically used as part of the analysis process in qualitative research, working with text data from interview transcripts, focus groups, ethnographic notes, documents, news articles or policy briefings. It can also be used by people working with other forms of text, for example authors, lawyers or in market research to understand customer feedback.

Quirkos allows for the import and categorisation of lots of sources of text, allowing users to keep a large corpus of data together, and then 'code' or tag relevant sections into categories. It allows researchers to manage dozens of such categories, and look for connections and links. The software offers tools to query the dataset, and explore the data, looking for more nuanced findings, or those that only apply to a particular sub-set of the data. Then users can create reports and share findings with colleagues or professionals, or export the data to other software packages for statistical analysis.

The software is designed around an easy to use interface that provides live-visualisations of the emerging data, and allows researchers to quickly code text, and examine their data. It is designed to be used with minimal formal training, and to create outputs that are visual and easily comprehensible by people outside the project. Quirkos facilitates teamwork during the analysis process, and can allow for participatory analysis by allowing respondents to engage with coding.

The name Quirkos comes from the Greek 'kirkos', the root of the word 'circle' and 'qu' for qualitative. It represents the Qualitative Bubbles (Quirks) that are central to the interface.

1.2 System requirements

For Windows, Mac and Linux you will need a computer with at least 2GB of RAM, a 1.6Ghz or higher Core 2 Duo or equivalent processor with up-to-date graphics drivers. We recommend you have a system with 4GB of RAM for working with larger projects. You will need 190MB of free disk space for installation. Windows Vista or later, or MacOS / OS X versions 10.10 or later for Intel based Macs is required. The cloud version requires a constant connection to the internet.

Quirkos does not need to be installed on a computer, it can also be run in a 'live' mode on a USB stick for example. It will then run directly from the computer it is inserted into.

1.3 Installation for Windows



Most users will install Quirkos by downloading it directly from the website.

If you are installing from a Quirkos USB stick, just plug it into a spare USB port, with the gold contacts facing upwards.



A dialogue box like this should appear, just select 'Open folder'. If not, just browse to the location of the USB stick in Windows Explorer (try double clicking on My Computer on the Desktop)



On the drive, find the file called 'quirkos-2.3-windows-installer.exe' and double click on it.

This is the same if you have downloaded the installer from the Quirkos website, you can launch from your browser download list, or check your Downloads folder.



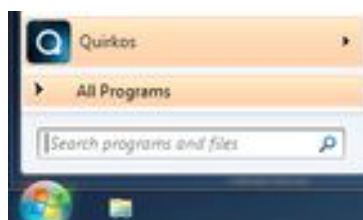
At this point, Windows will ask you to confirm that you want to install something, and may ask for administrator rights (ask your IT support team if you have problems here).



The setup programme should now launch, just keep pressing the next buttons to go through the installation process. You will need to read and accept the licence agreement to install Quirkos.



The only option you might want to change is where to install Quirkos. The default setting will be fine for most people, and it will take up around 250MB. However, you can install Quirkos to a USB stick or your own user area if you don't have access permissions for installing software to the system directories.



There are also options in the installer to put a shortcut on the desktop and open Quirkos when installation is finished. Once it's done, there will be an icon in the start menu. *You can also safely eject the USB drive (if applicable).*



Each time you run Quirkos, there will be an activation screen. You have a 21 day trial, after which you need an activation code. You can buy this from our website, or if you have already ordered it, copy and paste the long code into the box.

1.4 Installation for Mac



If you are installing from a Quirkos USB stick, just plug it into a spare USB port, with the gold contacts facing upwards.

You can download Quirkos from the website, and the .dmg will appear in the downloads folder. Double click on this and it will open the dialogue below.



To install Quirkos, just drag and drop the Quirkos icon onto the Applications folder on the right. However, it will run without being installed, although you will have to keep the .dmg file mounted.



Once installed, you can run Quirkos by double clicking on the icon in the Applications folder. You can also create a shortcut by dragging the icon onto the dock at the bottom of the screen.



Each time you run Quirkos, there will be an activation screen. You have a 21 day trial, after which you need an activation code.

You can buy this from our website, or if you have already ordered it, copy and paste the long code into the box.

1.5 Other platforms

For Linux, we officially support Ubuntu version 14.04 or later, but our Snap package should work on any fairly modern distro running an X server. However, you may need to install the Snap package manager for your system. After downloading the Snap, you will need to install with the command: `snap install quirkos_x.x_amd64.snap --devmode`

Quirkos can then be started from the command line by typing 'quirkos'. Note that on some distros you will have to log out and back in again before bash is updated and typing 'quirkos' will link to the binary. We are aware of two dependency issues at the moment, on Fedora 28 if you are using the new Wayland driver (to replace the X window system) you will need to install the package qt5-qtwayland. On ubuntu systems using the proprietary Nvidia graphics drivers, you need to manually copy the libs: `sudo cp -r /usr/lib/nvidia-version/* /var/lib/snapd/lib/gl/` This seems to be a known issue with snapd at the moment.

1.6 Licencing and trials

Quirkos offers a 21 day trial of the offline or static version of the software, with no feature or saving restrictions. The trial will start from the first time Quirkos is run, not from the download date, and counts any days from that point, not days of use. After 21 days of use, Quirkos will start, but not progress further than the activation screen. Any files created will remain, but cannot be opened on that computer until the software has been unlocked. There is the possibility of extending the trial in certain conditions, contact info@quirkos.com for more information.

There is also the option of a two week trial of Quirkos Cloud, which is identical but allows projects to be stored on our cloud servers so they can be accessed from anywhere and shared. This requires an account registration, and details of a credit/debit card that will be charged unless the trial is cancelled before the end of the trial period. This then turns into a rolling quarterly or annual subscription, which includes the software and cloud storage.

The offline/static version of Quirkos can be unlocked at any time during or after the trial by inserting a licence code. This can be purchased directly from the Quirkos website, where it will be delivered by e-mail after payment, or by raising a purchase order with sales@quirkos.com. If your institution has a site or bulk licence for Quirkos, contact your appropriate IT department to receive the code. On entering a code, Quirkos will then access our licence server to check the validity of the code. This is the only time offline Quirkos requires an active connection to the internet, after this no connection is needed to use Quirkos, and there is no expiry of the licence. If you need to activate a licence on a computer that does not have access to the internet, or if access is restricted, it is possible to do this using a special activation code which is available only by contacting us directly.

Quirkos also offers organisations the possibility of a 'floating' site licence, which includes allows for a certain number of users to access Quirkos at any one time. A set number of 'seats' are made available to the organisation, and once these are all used no more instances of Quirkos can be run simultaneously. This option allows the flexibility to support

large teams of users, who may not all use Quirkos at once, and does not require licences to be tied to a particular computer. This option can only be set up by contacting us at sales@quirkos.com.

During activation Quirkos will send basic, anonymised identifying information about the hardware of the computer to the licence server, linking your computer to the licence code. No personal data is sent, the process is similar to licence protection for Office or Windows.

Each licence is activated on one computer only, and cannot be used on multiple computers. However, if your computer changes (for example is replaced, or the operating system is reinstalled or upgraded) we can reactivate the code for you. Just e-mail info@quirkos.com with details of your order, and we will be happy to help. We can also update a licence code to allow it to be used on multiple computers, or across a whole computer lab.

1.7 Updates

We aim to provide regular updates for Quirkos, without breaking backward compatibility whenever possible. There will usually be a 'point' release, i.e. a minor update for the current version, such as v2.5 or 2.6, addressing any problems and adding some small new features. This will be free for users with a licence for that version. The plan is to have a major release every few years, for example 3.0 or 4.0 that adds significant new features and ways of working. Major releases will be available for existing customers for a small upgrade fee.

1.8 Support

Most forms of additional documentation and assistance can be accessed from the support website, www.quirkos.com/support.html.

In addition to this manual, there is also a 'Quick start guide' which provides a brief overview of using Quirkos. Example projects are also available for download, which allows users to experiment with already coded projects, or have a source of transcribed qualitative data to experiment with. There is also a Frequently Asked Questions document, which contains the answers to many common questions about Quirkos.

Several video guides of varying length show how to use Quirkos at different levels of depth and expertise. There are also a series of 'bit-guides', each around a minute long, that each shows an individual feature or task. These can be watched consecutively, or one can just watch a video that covers a particular point of interest. All the video guides can be streamed directly from the website, and are free and open to access. Some of the video guides are also provided on the Quirkos USB stick should a high-speed internet connection not be available.

The website also hosts a discussion forum, which provides a way for users to report issues and see solutions, share different ways of using Quirkos, and discuss general issues on qualitative research and analysis. This is regularly checked by Quirkos staff, and is the best place to post issues, so solutions can be quickly shared.

Finally, there is also direct e-mail support, available to academic, charity, public sector and commercial licence holders (support@quirkos.com). Commercial customers also have access to a telephone support line, for direct assistance and guidance. Check the website for up-to-date contact information, and other options for support. More information about support is provided in **section 12.2**.

2. Working with projects

2.1 Quirkos project files

In offline mode, Quirkos saves your project as a single file with a '.qrk' extension on your computer. It can easily be moved across computers or copied into different folders, as all data is contained in the file. The software makes changes directly to the file as you work with it, so it must be stored on a local computer or network while using a project. Afterwards, it can be stored on a cloud solution such as Dropbox, but it is not recommended to work directly with files on remote backup services like OneDrive or iCloud.

As Quirkos saves the file after each action, it is not necessary to 'Save' the project, all changes are kept up-to-date. This means that in the event of the computer crashing, or power being lost, no work or data should be lost. However, you are therefore dependant on the Undo and Redo functions to restore your work to a previous state, or manually saving a copy of the project at key points as a 'snapshot' of the work at a particular time. It is also recommended that you regularly back-up your projects in multiple places, not least to safeguard against data loss from computer failure or theft.

Since Quirkos currently only works with text based sources, files are rarely bigger than a few megabytes, even with hundreds of pages of text. This makes them easy to store and share, even by e-mail. Quirkos stores projects as a standard SQLite database file, while allows for direct exploration, importing and editing in some 3rd party applications. However, advanced users wishing to work in this way should note that the file can be encrypted with password protection, and is compressed in the zip format.

It is also possible to export the database from Quirkos as a series of '.csv' files, which can be easily imported into other software including Excel, SPSS and even some other qualitative analysis packages. Sources annotated with coding performed in Quirkos can also be exported as Word compatible files. More detail on exporting can be found in **Section 10**.

Please note, changes to the file format in version 1.6 and 2.0 to allow rich text that files created in this version will not be backwardly compatible with older versions (1.5.2 and earlier). All users can freely update to the latest version. When a project file from an older version of Quirkos is opened in v1.6 or v2.0, it is automatically updated to the new format, saving the old version as a backup file with a timestamp.

In the cloud version of Quirkos, projects are automatically and continually stored and backed up in our own cloud servers, which allow access to your data from any computer you have installed Quirkos to, and logged into that has a connection to the internet.

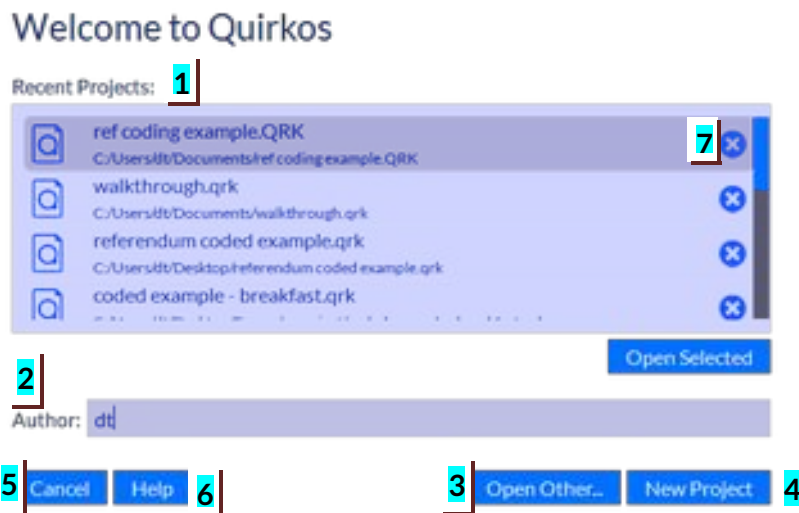
2.2 The open project dialogue



When you start Quirkos, you will have the option to login to your cloud account, or continue in offline mode if you have a static licence.

To login to the cloud storage, enter the email address and password you registered when purchasing a subscription, or click Manage Account to register or reset a forgotten password. New projects will be stored by default on the remote cloud server, and accessible wherever you log in.

If using the static, offline licence use the 'Continue with local storage' button.



When you start Quirkos in offline mode, you will see the Open project dialogue above.

[1] The recent files box shows a list of the last projects to be opened, in order of most recently accessed. Double click to open them, or use the Open Selected button. This assumes the file is in the same location as before, indicated by the small text under the project file name. You can remove unwanted projects from the list with the (X) button, although this does not delete the project file. If you double click on a project file in a file browser, it will be shown in Quirkos at the top of this list with the description 'User invoked file'.

[2] The author box should be completed with a name or initials that identify you for this session. A project cannot be opened without something here (see **Section 2.3** below).

[3] Open Other allows you to select another file that is not listed above.

[4] Start a new blank project by clicking on the New Project button.

[5] The cancel button will take you back to your current project if you already have one open.

[6] The help button has links that will take you to the Quirkos support website.

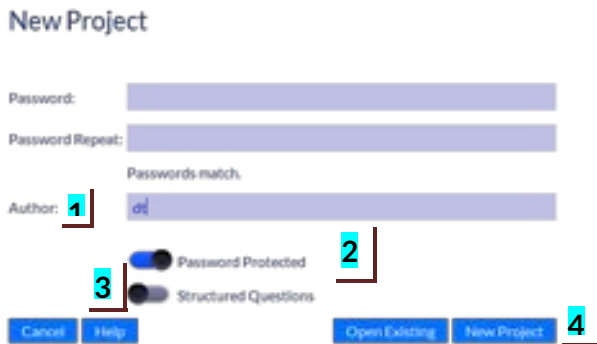
[7] The (x) button by a project will remove it from the list, but not delete the file.



If logged into Quirkos Cloud, you will get the additional options to shown on the right, including the ability to upload an exiting Quirkos project file from your computer to your cloud account [8], and a download button [9] for each project which allows you to copy the project to your local computer.

There is also the option to Sign out of Quirkos Cloud, and work offline [10]. You can also manage your account and choose files to share with other users [11].

2.3 The Project button (offline)



The new project dialogue sets options for creating a new blank project. An author name is required in box [1].

[2] You can optionally password protect your files by sliding the indicator to the right. You'll be asked to put the password in twice to ensure it isn't entered incorrectly.

[3] If you are creating a project with data from a structured questionnaire selecting this option will duplicate questions across all sources. (See **Section 2.5**)

[4] Clicking the New Project button will open a dialogue to set the location for the new project file. This must be on a local computer, not a network location.

If you are using Quirkos cloud, the options are the same, however there is no need to choose a file name or location to save the file – it is stored in your Quirkos account on the Quirkos secure servers.

2.4 Authors

The author dialogue allows you to identify the user and the changes they make during each session. Each action; for example creating a source, coding a section of text, or creating a Quirk is registered with the name of the author at the time. This allows teams to see who has done each piece of work. Quirkos will remember the name last entered in the Author dialogue the next time it is used, regardless of project. Author names can be initials, a full name, or even a longer note.

The author function can also be used as an additional categorisation system for work, so that one can use it to register a particular period of work. For example 'Experimental

coding' or 'Post workshop themes' and using the query view, all work from a particular session can be identified and removed if necessary.

2.5 Password protection

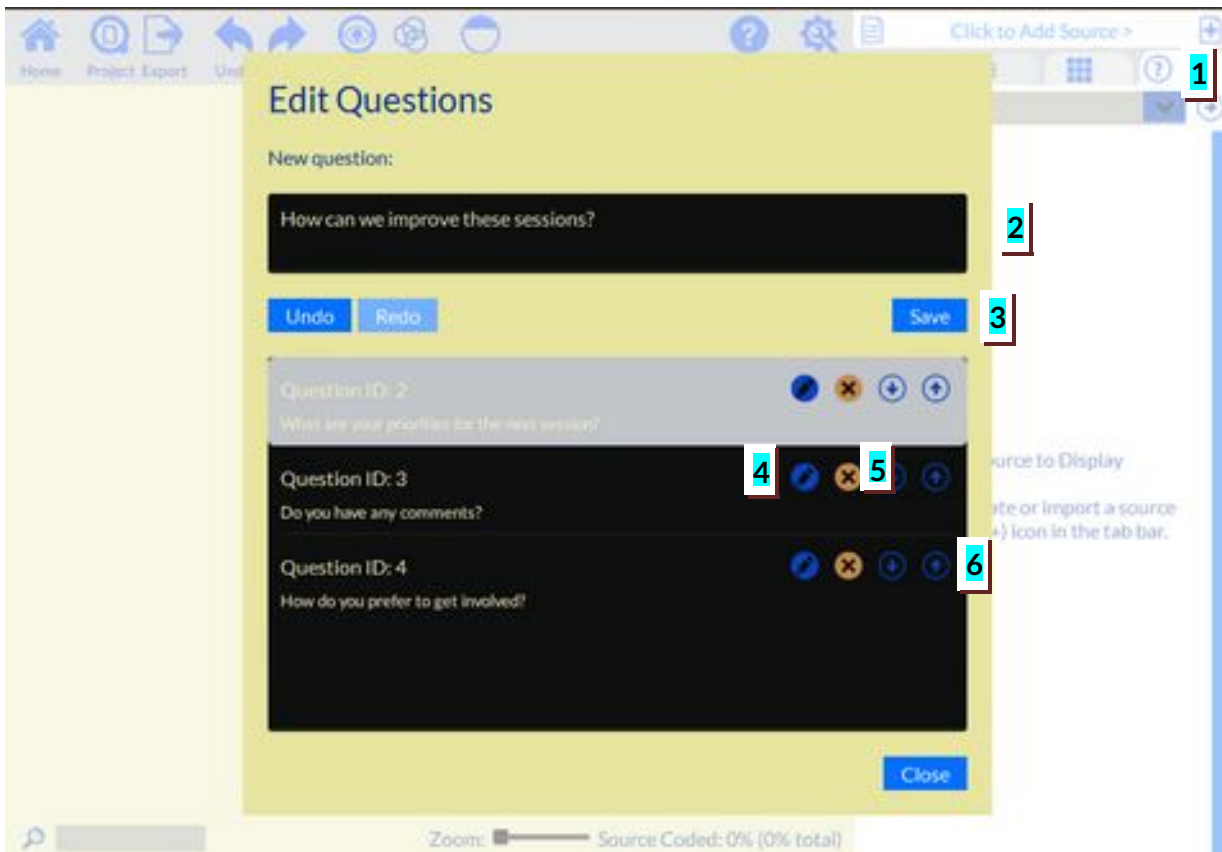
When creating a new file, the user has the option to password protect the project. This cannot be applied to an already existing project. This function allows confidential data to be kept secure, and only shared with team members who have the password.

On creating a new project with the password protected option, the password to be used to secure the file must be entered twice, to make sure that the entry has been put in correctly. Once the password has been accepted, there is no way to recover it, so the user is responsible for remembering it. There is no way to open a file if the password is lost, even for the software developers, so we cannot help in such situations. This is necessary to ensure the confidentiality of user's data.

2.6 Structured question projects

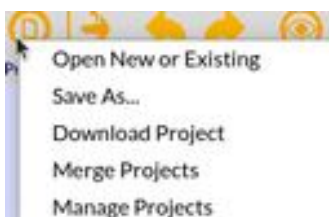
When working with sources that have the same questions asked for each source, a project can be created that allows for a regular question and answer structure across the project. This can be useful, for example when taking data from structured interviews where all interviewees are asked the same questions, or a questionnaire. Please note that this cannot be added to an existing project.

With this function, researchers can define a number of questions, with set areas for the responses. The question propagates across all the sources to facilitate rapid entry of data from structured sources.



In a structured project, the Question Editor above can be opened with the Question tab on the top right of the source view [1]. The text of questions can be entered in the box [2], and when ready, saved with the button [3]. Questions are listed in the order they appear in the source in the box below. They can be edited with the pencil button [4] or removed completely with the X button [5]. Each question can be moved up or down to change their order in the source sequence [6]. Once back in the source view, answers to the questions can be entered by clicking into the text instruction in the source column.

2.7 Saving and sharing files



Projects are saved after each action, so there is no need for a save button, or to save the project before closing the programme. However, you can save the project under a different filename or in a different folder which can keep the project conserved at a particular stage of the project. This can be achieved using the 'Save As...' option in the Project button. Please note that files must be saved on a local disk to be created or opened, as they are constantly being accessed. This means you may get a 'Could not open project' error if they are saved on a remote network location. It is easy to share offline files with other colleagues or clients by e-mailing the project file which contains all the data and coding. However, it is not recommended to have multiple users edit the file at the same time. If you want to have a project used by multiple people, Quirkos Cloud allows for live collaboration (see 3.4). Projects can also be merged together with the Merge Projects function to see all work in one file (see 2.8 below).

In Quirkos Cloud, you also have the option to Download Project, which will save it as a .qrk file on your local computer for offline use and backup. Please note, this file will not be updated with changes that happen in the cloud version of the project. For details on exporting your project to other formats, see **Chapter 11**.

2.8 Project Merge



Projects files, their sources, Quirks and coding can be combined using the project merge function in the Project menu once a file is open. By default the currently open project will become the 'Master project', which is used to take settings if there is a conflict between files. For example, if a Quirk has a different colour between projects, the colour in the master project will be kept.

Multiple files can be merged into the master project at one time, by adding to the 'Projects to merge' list using the 'Add Project' button. Once all the desired projects have been added, click the 'Next' button to move to the next stage.

If projects are password protected, a pop-up dialogue will appear for each file to enter the password. The next screen will allow you to set a password, default author and file location for the merged project. This will create a new project file with the name and location you specify (you cannot overwrite an existing master project), and open the merged project.

Quirks which have the same name will have their coding merged, and position, colour and properties taken from the master project. Sources with the same name will only be merged if the text is the same length, so make sure that sources have not been modified.

Otherwise, duplicate sources will be created, appended with a number eg (1) each time the source title has been used.

Where-ever possible, data and coding events is appended to master files. So if a section of is coded in two different ways, the merged project will show both overlapping. If a section of text is coded to the same Quirk, but the length of the extract is different, both will be added together so that the whole length of text is coded.

Where possible, source properties and levels will be appended from across all the merged projects, but if there is a disagreement then the property from the master file is taken.

3. Quirkos Cloud

3.1 Overview of Quirkos Cloud

Quirkos Cloud is a subscription service that includes access to the Quirkos software, plus access to our secure cloud server for the storage of your Quirkos projects. This allows you to install and login to Quirkos on any computer with an internet connection, and access your projects which are automatically synchronised, backed-up and kept up-to-date. Projects stored in the cloud can also be shared with other Quirkos Cloud users, where multiple users can collaborate on a project at the same time.

There is only one version of the Quirkos software, and each time you start the software on your computer, you can choose to login to the Quirkos Cloud, or use the offline storage version. The offline version requires a licence code, which is issued on a per-computer basis. The cloud version requires an active subscription to the Quirkos Cloud, but the login will allow access on any number of computers.

3.2 Registering for an account/trial

Each user on Quirkos Cloud must have a Quirkos Cloud account. These can be created by visiting <https://www.quirkos.com/account/> in any web-browser, or registering for the trial through <https://cloud.quirkos.com/buy/> and then creating a password after registering the email and confirming the email address. There is also a link to the account management and creation page on the login page on the Quirkos software.

The username is always the e-mail address used to register the account, and cannot be changed at this time.

3.3 User account management page

Visiting <https://www.quirkos.com/account/> in any web-browser, or following the link from the the Quirkos login screen will let you control all aspects of the account. When you login here you will see the login screen to the right.

After you login you will be in the Account tab. Here you can see Login Details, where you can change the password associated with the account.

The next section shows the details of your current subscription: the type of subscription active, the billing interval (3 months or 1 year), the currency and price, and current status. The next line



will show the next date when a subscription payment will be automatically taken unless the subscription is cancelled.

There are also options to change the billing address and credit card information should either of these need to be updated. Finally, if you wish to completely delete your Quirkos account and all associated project and user data from our systems, you must email support@quirkos.com so we can deal with this request for GDPR compliance.

At the top of screen is the projects tab, which shows a list of all the projects you have created in Quirkos cloud, the creation date, and options for sharing or downloading the project as a .qrk file.



Name	Created	Share	Download
A new test	19 April 2019	Share icon	Download icon

Even if the trial ends without subscribing, or a subscription is cancelled, users will still be able to login to this page and download their existing projects for offline use for one year. If at any point within one year the subscription is reactivated, they will be able to edit projects again as a full user.

3.4 Sharing projects



Projects can be shared with other Quirkos users who have an active Quirkos Cloud subscription, after you login to the web based account management page (3.3). You will need the email address which their subscription/account is registered with. All users can collaborate on the project at the same time, and see updates in real time.

The Share Icon is grey if the project is not shared, or blue when shared with at least one other user. Clicking on the share icon will open the share options (above) which allows you to add the email address of users you want to share the project with. You can also specify or change whether that user has write privilege (they can make changes to the project) or read only privilege (they can open and see the project) but not edit the project in anyway. Clicking on the X button will remove all access rights for that shared user.

You can change between the read or write access for shared users at any time, they will be notified of the change if they are using the project. They can also be removed from accessing the project entirely by the creator of the project. It is not possible for anyone other than the user who created the project to delete, or change access to the project.

Please note that you cannot currently edit or view Quirkos projects in the web user portal. This must always be done in the Quirkos software installed on your computer. Project sharing, access and account settings can only be changed in the user portal login in your web-browser. New capabilities for cloud services will be added in the future.

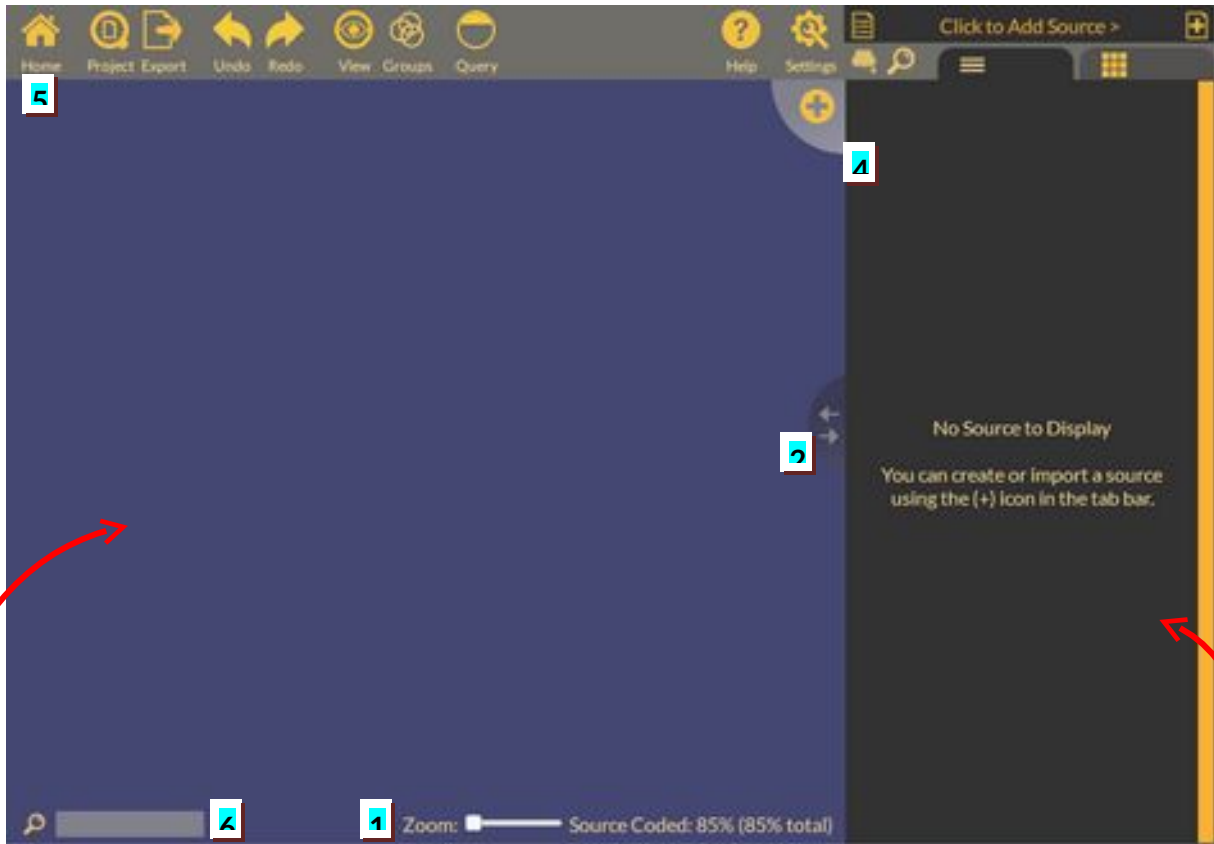
3.5 Live collaboration (Shared Projects)

When projects are shared with one or more users in Quirkos Cloud, all users can login to the project at the same time, and work in live collaboration mode automatically. There is no indication when other users are logged into the project, but users can communicate through the chat facility.

The chat icon will flash when there are new messages arrive during the session, and all the functions of Quirkos can be performed as a team. Team users can be based on any computer with an internet connection, anywhere in the world, and there is no limit to the number of users that can share a project.

4. Layout and interface

4.1 The canvas view



Here's the main view of Quirkos, the 'Canvas' view.

Quirkos is split horizontally into two separate views. On the left, is the **canvas** area where you will work with the codes or **Quirks**. This is where all the nodes or topics are displayed and arranged. You can zoom in and out of this area with the slider at the bottom of the screen [1].

On the right side of the screen is the **text column**, which contains your text sources and all the buttons for actions relating to it. You can change the relative sizes of the two columns by clicking and dragging on the divider [2].

The source browser [3] shows all of the text sources you have imported into the project. The column [4] shows the highlights, colour coded stripes that show areas of coded text on the right. The action bar on the top [5] shows all the buttons that control the main functions.

The Quirk search bar [6] allows you to search for the name of a Quirk on a canvas. Any quirks that do not match the search string will not be shown on the canvas.

4.2 Button-by-button guide

The main functions are contained in the bar on the left of the canvas area:



Home

Wherever you are, you can always get back to the main canvas view screen by clicking on the Home button.



Project

The project button opens options to open another project, save a copy with a new name, and options for exporting the project.



Export

Export options include ways to save your data as Word files, spreadsheets, just the structure or sources of the project, or produce reports and WordClouds.



Undo

You can undo your last changes to the project with this button.



Redo

If you change your mind and want to keep changes that you undid, use the redo button to reinstate them.



View

The view button lets you choose how your Quirks are arranged, such as alphabetically or by size. You can also select a linear tree view that is like a simple list (See **Section 6.5**).



Groups

With the groups button you can choose which groups of Quirks are shown at any time, and create groups to order them.



Query

The Query view lets you explore your data by combining and comparing queries (see **Chapter 8**).



Help

The about screen gives you more information about Quirkos, and links to support pages on the website.



Settings

The settings button lets you change how text and highlights are displayed, and assign keyboard shortcuts to Quirks to assign text to them.



Click to add a new topic or 'Quirk'. You can also drag and drop text straight on the button to create a new Quirk.

On the right side of the screen is the **text view** and the buttons all relate to your sources.



Show all the sources in the project



Open and close the memo column



Search for keywords across sources



Show the **text** for the currently selected tab



Show the **properties** for the current source



Add a new source or sources to the project

The search bar:



Toggle between searching the current open source, or all sources.



The search history is shown here

1

If slid to the right, this searches only complete words, not parts of words

2

Include words with derivative endings, including plurals

3

Restrict search results to text that has been assigned to a code

4

Turn on searching for related words, which you can select individually in the blue box below

5

In the 4 rows here, you can limit the search to particular sources or Quirks

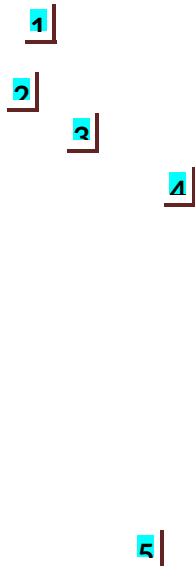
6

Slide the search bar away to better see the canvas, but keep search results open

7

Update the search results if you have added new criteria.

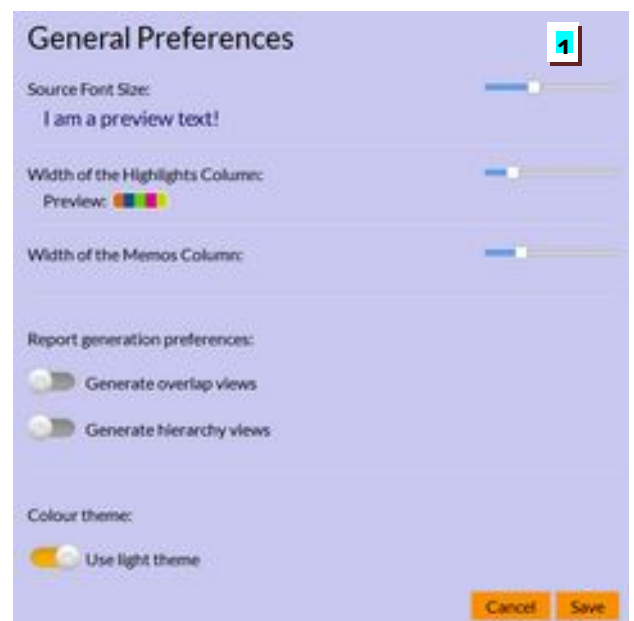
See **Chapter 8** for more on the search functions.





4.3 Project settings

The 'Settings' button gives options for general preferences, and keyboard shortcuts. In the general preferences you can adjust the size of the text displayed in the source column on the right of the screen, to make it smaller or larger than the default setting. Increase the size of the text by dragging the slider button **1** to the right, or to the left to decrease it. The 'I am a preview text' shows the size the source text will be displayed. This is currently the only customisable aspect of the text style.



In the general preferences, you can change the width of the highlight column to better see projects with many overlapping codes. All codes will be displayed as stripes in the highlight column, but you can make this easier to see by increasing the width. Drag the slider to the right to make the column wider, and to the left to make smaller. A preview of the column width is displayed in the dialogue box. You can make the same adjustment for the width of the column that displays memos with slider.

There is also an option to generate images of the overlap and hierarchy views when creating reports. By default these options are off, as the image generation is slow for large projects. It is also possible to change the colour scheme of Quirkos so that a light background for the canvas, text source and dialogues. Clicking Save will confirm and apply the settings, choose cancel to keep the previous settings.

The '**Quirk coding shortcut keys**' option in the Settings button allows you to assign each key on the keyboard to a Quirk for quick coding. When assigned, selecting a section of text, and pressing the key will code it to the corresponding Quirk, in the same way that dragging and dropping the text onto a Quirk would do. When coding a large project, this can greatly increase the speed of coding, especially when assigning a piece of text to multiple codes.



To assign a keyboard shortcut, for example to assign the 'B' key to the 'Breakfast' code, scroll down the list using a mouse wheel, or dragging and pulling the list to 'Key B:'. Then click on the drop-down list, which contains all of the Quirks in the project. Select the appropriate Quirk for that key. You can assign all the alpha-numerical keys in this way, but not special keys such as F1, or Ctrl.


5. Importing and managing text sources

5.1 Supported formats

Quirkos only supports the import of text data, with basic formatting, such as italics, underlining, or bold type. Quirkos can directly import text from several file formats: first of these is 'plain text', commonly seen as '.txt' extensions and Rich Text Format for Windows, '.rtf' files which are commonly used by transcribers. Quirkos will also open recent Word files with the '.docx' extension, supported in Word 2007 and later, but Quirkos does not currently support the obsolete '.doc' Word format. Quirkos will also import text from '.pdf' files. However, any pictures, tables and other content in Word or PDF files will not be imported. This includes PDF files that are scanned images of each page (common for older journal articles), rather than actual text content (see section 4.3 for more on this). Finally, it is possible to import text into Quirkos from the 'clipboard', allowing users to copy and paste from nearly any text source on their computer.


Users can import tabulated spreadsheet data as a **.CSV** (comma separated values) file, which allows import from many on-line survey platforms as well as common spreadsheet software such as Excel or LibreOffice Calc. This option allows for mixed qualitative and

quantitative data to quickly be imported into the active project using the source properties for closed questions.


All these actions are available from the 'Add Source' button, the  button on the top right of the screen. This will bring up an option menu for importing and creating new sources (shown right), including the ability to create a blank source, into which text can be directly entered. Once in Quirkos, all sources can be edited by right-clicking on the text of the source, and selecting the 'Edit' option.



5.2 Importing text from files

If you have text in already existing files on your computer, the easiest way to bring them into your project is to use the 'Import Source: Select File(s)' option, accessed by clicking on the 'Add Source'  button on the top right of the screen. Then select the 'Import Source: Select File(s)' option, and you will be shown a standard file browser dialogue to select one or more files to copy into your Quirkos project. Please note, files must end with a .txt, .rtf, .pdf or .docx file to be shown in this window. On selecting a file by double clicking on it, or pressing 'Open', the text of each file will be imported as a source into the project.

To select multiple files, hold down the Ctrl button (Cmd key on Macs) and select several files that you want to bring into the project. Alternatively, Shift and Click will select a series of contiguous files, or you can click and drag to use a lasso select method, as per the standard operations of your operating system.

It is also possible to bring a whole folder of text files into Quirkos with the two options for 'Import Sources: Entire Folder' in the 'Add Source' button on the top right of the screen . This opens a dialogue which allows you to select a folder containing text files in any supported format. On pressing the 'Select Folder' button, every file in the folder will be imported into the currently active Quirkos project as a separate source, with the filename corresponding to the source name.

You can also change the name of the source being imported: by default Quirkos uses the file name, but you can put any text into the 'Source Title' box by selecting the Properties column (see **Chapter 5**).

5.3 Importing text from clipboard

If you have text from a different source, such as text from a different software package or captured data from a webpage, you can use the clipboard function to bring text into your project. As Quirkos allows you to 'paste' text from any programme that you can select and copy paste from, it should be possible to add any text source you can open on your computer. For example, choosing a section of text from a website and using the Edit and Copy functions will put that text into the computer clipboard. One can copy from any

programme by pressing the keyboard keys [Ctrl] and [C] at the same time on Windows, or [⌘] and [C] on Macs.

After copying the desired text, use the 'Add Source' button (top right of the screen) and select 'Import Source: From Clipboard'. If there is suitable text, it will appear as a preview in this dialogue. You can use the refresh button to update the contents, should you need to go back and copy the text again from the source. You can change the name of this source if desired, and selecting 'Import' will bring this text into the project as a new source.

While this method will sometimes work for PDF files, there can be restrictions if they are formatted in a particular way. For example, some columns and headings will not copy neatly, and if a PDF is composed of scanned pages, as with many older journal articles, the document actually contains no text, only pictures of a printed page. It is not usually possible to copy from these types of PDF, although 3rd party OCR software or professional versions of Acrobat Reader or similar may help with extracting text.

5.4 Importing CSV spreadsheet data

Quirkos also supports importing tabulated data with qualitative text and as discrete or quantitative data, using the CSV import function. This is a common



file format supported by spreadsheet packages and many online survey platforms such as SurveyMonkey, eSurv or LimeSurvey. Using this feature, users can quickly import a mixed method survey containing closed and open ended questions. The open ended qualitative questions can be analysed in the structured question format, using Quirks to code and

group responses across different sources. Any closed, qualitative or discrete properties in the survey are imported as source properties that can be used to refine searches, and compare responses from different groups.

This feature is only compatible with the 'Structured Question' mode of the project, designed for projects where the same questions are being asked of all respondents, and a new project of this type should be created. On clicking the Add New Source (+) button, then Import Sources from CSV, a compatible file can be selected, where rows represent responses that will be imported as a source, and columns correspond to questions and answers, with the top row giving the question title. A preview of the data structure in the file will be displayed (above) giving the option for users to choose whether a column should be **Ignored** (not imported), treated as a source **Property** (for quantitative and discrete

values) or as a **Question**, for open-ended text responses. There is also the option to choose one column as the **Source Title**, this may be a name, or unique identifying number.

It is possible to keep adding sources in this way, for example if more responses to a survey have been collected, and add them to an existing project with the same structure. However, Quirkos will always add all rows as sources from a CSV file, so a file with new responses should not contain sources which have previously been brought into the project.

When exporting CSV data, please make sure that you save the file as UTF-8, with the ' symbol (single quotation) as the string delimiter, and the comma symbol , as the field delimiter to separate rows. These options can be changed in Excel in the **Get & Transform Data > From Text/CSV** menu, but are not shown in the Save As menu. LibreOffice Calc will automatically give you these options on export.

5.5 Creating blank sources

Users can create a blank source, by selecting the New Source option from the 'Add Source' button. This will create a new source in the project, which can be edited in Quirkos by right or long-clicking on the placeholder text in the source column. This is useful if you want to have a source for a coding journal when you collect your comments and reflections as you analyse, or wish to create a single source from several different files, as you can copy and paste into the edit source dialogue box (see below).

5.6 Editing text sources

By right clicking with the mouse, or long clicking with the mouse (or finger on a tablet) on the displayed text of a source in the source view column, the text can be edited. This can be useful to correct minor mistakes in transcriptions, or to completely remove or add sections of text, as it is possible to select and copy and paste text into the edit text dialogue box.

Direct typing into a source can also be useful as a 'journal' function during the coding process, so coders can add their thoughts and comments to a particular piece of work. By using a 'notes' Quirk topic, or defining a series of sources with a 'notes' property, one can use the cluster view, or query view to see all comments, or a memo next to a relevant coded section of text from another source.

5.7 The source browser and tabs

The source view column on the right of the screen only displays one text source at a time. However, you can see all sources in your project and select those to display using the Source Browser button [1]

. This brings up a scrollable slide-up list of all the sources in the project (shown right). These can be re-arranged using the Order options. Here you can choose between the default arrangement, or re-ordering them



by author, title, how much of the source has been coded, or the date the source was imported. There is also a filter where you can type the name or part name of a source to search for matching titles. The list of sources shows the name of the source, detail of who added the source and when, the percentage of that source that has been coded, and finally a (X) button that allows you to permanently remove a source. Please note, deleting a source cannot be undone. Scroll up and down the list by clicking and holding anywhere in the list, and moving the mouse up and down.

Along the top of the source column are three tabs, which allow you to quickly move between sources. Clicking on one of the tabs will make that source active, and display it in the source view above. To choose which sources are displayed in the tab area, just click on a source in the Source Browser. The tabs display the last three sources selected from the Source Browser, or by default, the last three sources created.

5.8 Text coverage

The source browser shows a percentage of how much of that source has been assigned to at least one code. This is calculated as the number of characters in that source that have been coded to at least one Quirk, as a percentage of the total number of characters in the file. The bottom of the canvas shows the Source Coded for the active source, and after that in brackets, the total percentage of all sources that have been coded. This is an average of all the sources in the project file.

6. Source properties


6.1 Source properties summary

Each source in a Quirkos project can have any number of 'properties' – open ended characteristics that describe the source. In other programmes these can be called 'attributes' or the 'metadata' about each source. For example, in a project that has interviewed people, the properties might describe their occupation, gender, age, name or the date of the interview. If working with journal articles, the properties can be used to record the author, year, journal etc. The properties can be numerical or discreet (text), with any number of properties or values for those properties. This gives a very flexible way to describe any source of text brought into the project.

Each property can have any number of 'values' which are the possible traits – for example a property named 'Occupation' might have values for 'Builder' or 'Teacher'. When a property

is created, it propagates across all of the sources, and all previously entered values are recorded as possible values in a drop down box.

1

The source properties view **6** for the active source can be toggled using the properties tab  at the top right of the screen in the source column. This shows all the properties for the current source. **3**

2

3

6.2 Creating source properties and values

4

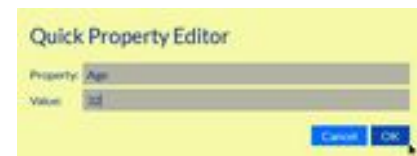
5

7

Properties and Values Editor

When the source property view is active, there are two ways to create a new property value. By using the [+]

button (left) at the bottom of the source view, you can add a quick new property and single value. This opens a dialogue (right) to create a property and one value assigned to it. This is useful to quickly add a new property to the sources in the project.



Alternatively, one can get greater control over the properties and values by using the Properties and Values Editor in the source properties view. This is detailed in the following section.

In the source properties view the user can see all of the properties and values assigned to each source, or remove and change them.



At the top of the Source Properties pane for each source are several fields. The speech-bubble button on the top left **1** can be clicked on to change the icon displayed for a particular source. The speech-bubble is the default, but the user can also choose a male or female icon, which can help in identifying sources.

The 'Title' **2** or identifying name of the source was set when the source was imported or created, but can be changed by clicking and typing in this dialogue box.

If the project sources have large numbers of properties, the order in which they are displayed can be rearranged using the drop-down box **3**. The three options are 'default' which uses the order in which properties were created, or ascending or descending alpha-numerical order, which sorts by the property name alphabetically or numerically.

Below these options is the actual list of properties and values assigned to the source. Note that since properties exist for all sources, if a value for a property has not been assigned to a source, it will initially display 'No Values Added'. The icon at the top left of each property **4**

shows a key, and either a small '1' or infinity symbol '∞'. This indicates that the property is set to accept only one value (1) or multiple choices (∞). This option can be set in the Properties and Values Editor (see section 5.3 below). Next to this is the name of the property, and below it the value(s) assigned for this source.

At the top right of each property [5] is a drop down box [V] which allows you to quickly assign any value that has been previously entered for a property. For example, if you have already defined a gender property as having 'male' and 'female' values, these will appear in the drop-down box. A small (x) button next to this clears all values assigned to the property for this source. Individual values can also be cleared for that property by clicking on the small blue (x) next to the value name in the box below. This is useful when multiple values are assigned, and the user wants to remove only certain values.

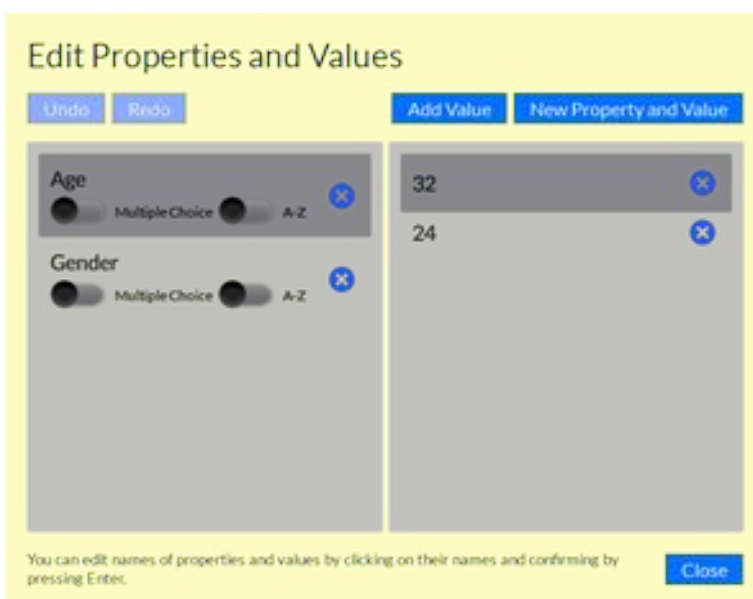
If there are more properties than can be shown in the pane, the list can be scrolled using either the scroll wheel on the mouse, or by clicking and dragging a blank part of the list with the left mouse button, or two-finger scrolling on tablets and touchscreens where supported.

The top right of the property view pane shows a graph icon [6] which shows a visual overview of the properties and values across all the sources. This is detailed in **section 5.6**.

Finally, the source property view can be closed, returning the user to the text of the source by clicking on the text tab in the top left of the source property column [7].

6.3 Editing, removing and arranging properties

Using the Properties and Values Editor, users can have nuanced control over the properties and values assigned to sources. Here users can alter the names of existing properties and values, allow properties to have more than one value, and remove values or properties altogether.



The editor has two columns, the properties are listed on the left, and values for the selected property on the right. Both these columns can be scrolled down if there are many properties and values (either by clicking and dragging or using a scroll wheel on a mouse).

By clicking in the name of the property in the left column [1], the name can be altered using the keyboard. Clicking elsewhere will save the change. To completely

remove the property and all corresponding values from the project, use the small blue (x) [2].

Below this are two options, the first is a toggle switch that sets whether a property can have multiple values assigned to it [3]. By default this is off, but sliding it to the right will allow that property to have more than one value, for example 'Occupation' could then allow sources to have many jobs, such as 'Builder' and 'Decorator'. The next A-Z toggle when enabled sorts the values for that property in numerical, then alphabetical order [4]. When off, as by default, the order of values is in descending order of last created.

As with the names of the properties, the values for each of the properties can also be edited in this dialogue. To display the values, click on the desired property, and the right column will change to display all the currently entered values. The small blue (x) can be used here to remove an unwanted value option from the list, or by clicking on the text (or number) of the value, it can be edited [5]. There is also the option above the right column to add a new value.

Changes made to the value or property (for example correcting a typo or spelling mistake) will apply to every instance of the value in the project.

6.4 Predefined property values





There are a number of predefined property values built into Quirkos, added as a convenience. These cover some commonly used scales, often used in surveys. They can be set in the Properties and Values Editor (detailed above) and by clicking on the orange 'New Property and Value' button. Here are the standard input boxes for

defining a property and value name, but also a slide button option labelled 'Select predefined set of values'. If this button is toggles to the right, a series of common predefined options are provided. These include binary Yes/No or True/False options, as well as two Likert scales, one a series of numbers from 1-10 for ranking or scoring exercises, or an agreement scale with 5 values: Strongly Agree, Agree, Not Sure, Disagree and Strongly Disagree. These options can be selected, which will then create a new property with these default options as values.

If necessary, these can be modified as normal values in the Properties and Values Editor, for example users can remove the 'Not Sure' option, or change the wording to 'Completely Agree'. This feature is not limited to use in structured question projects.

6.5 Property overviews

Quirkos can display a bar graph summary of the source properties across the whole project, showing for example a breakdown of gender, age groupings, or any other defined properties. To show the property overviews from the Home view, click on the Source Properties tab:  then click on the graph icon  on the top right of the screen. In this

view, each property will be shown with a bar graph representing the total number of sources with each value in the project.

At the moment, the colours associated with the value cannot be changed, and there are no other options for modifying the format of the graph. Note that if some sources do not have values defined for a project, the percentages will not add up to 100%, and for multiple source properties the total may exceed 100%.

The source property overview can be exported and shared as it is shown by default in reports generated in Quirkos, but can be turned off if they are not required. For more information, see **Section 9** on customising reports.

6.6 Properties and queries

The source properties are an important part of how Quirkos lets you explore your coded qualitative data, and is a key way that discrete and quantitative data is integrated with the project. Using the Query button on the main screen, users can see coded text that is associated with any source property value: for example one can see just text coded in male or female respondents, or people who agreed with a certain statement. It is also possible to do side-by-side comparison views of queries, so that coded comments from different groups of interest can be scrutinised for significant differences. Queries are covered in more detail in **Section 9**.

7. Themes, Quirks and coding


7.1 The canvas view

In the main view in Quirkos (accessed by pressing the Home button), the left side of the screen is the canvas view, which is the creative space for working with Quirks, also known as themes or nodes. These are the bubbles which represent topics of interest in your project, and the canvas is a space where these can be moved and grouped. Users can zoom in and out of the canvas area using the zoom control (shown left and labelled 'Zoom')



scroll left/right and up/down with the yellow scroll bars on the bottom and right side of the canvas.

7.2 Creating Quirks

There are three ways to create a new Quirk to represent a node or topic in the project. By clicking on the  button on the top right of the canvas, a new Quirk bubble is created, with a random colour and random location on the canvas. A dialogue box automatically appears to change the characteristics of the Quirk, such as name and colour. This is covered in **Section 6.3**. If users repeatedly click on the Add New Quirk button, many Quirks can be created in quick succession, but a property dialogue will only be opened for the last created Quirk.

It is also possible to create a new Quirk by dragging and dropping a section of text directly onto the New Quirk button. This will create a new Quirk, containing the selected text. This is useful during emergent coding.

Finally, by right-clicking on any empty area of the canvas, a dialogue will appear allowing users to 'Add Quirk Here'. This creates a new empty Quirk in that place on the canvas.

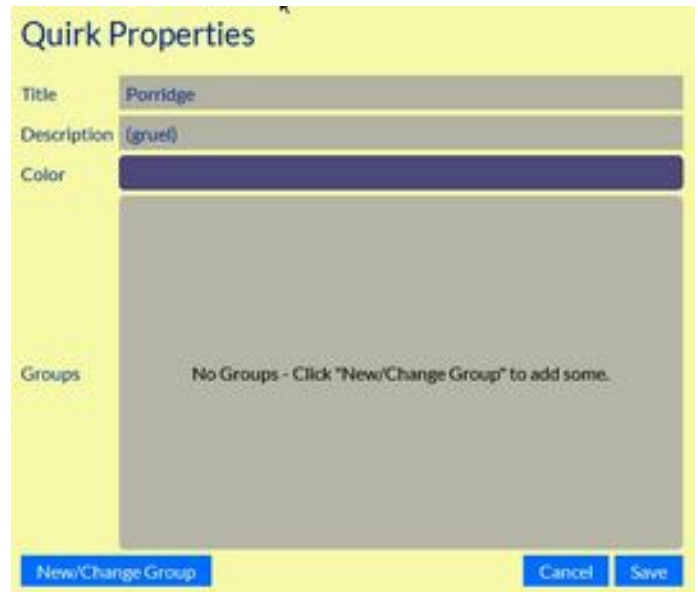
Pressing the Undo button after any of these actions will remove the Quirk.



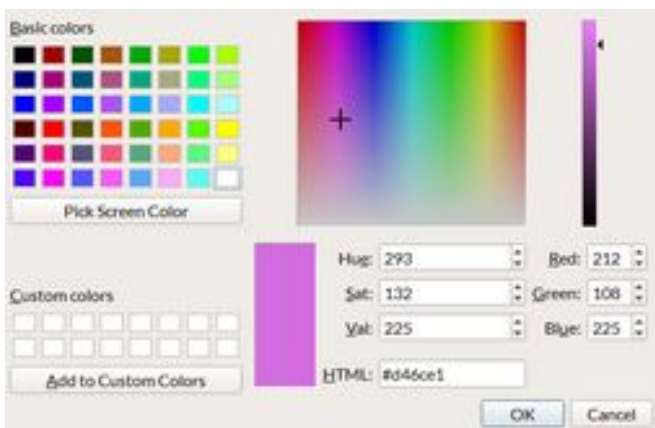
Right or long-clicking on a Quirk will bring up a menu with all the functions available for that node, (shown left) each of which is detailed in a following section of this chapter. The Delete option here will remove a Quirk and all its associated coding from the project.

7.3 Edit (Quirk Properties)

In the Quirk menu, which is toggled by right-clicking or long clicking a Quirk, users can select the Edit dialogue, which can be used to change any of the attributes of the coding bubble. Here, a title can be changed, and a longer description of the Quirk assigned. This description is shown optionally in reports, and when the mouse hovers over a Quirk, and is useful for creating a more nuanced description of the node or topic.



Once one of these options has been changed, the cancel button will return to the canvas view without saving the changes, or the Save button will apply the alterations.



Clicking on the 'color' option allows user to change the colour of the Quirk bubble on the canvas, as well as the highlight strip alongside the coded text, and the colour that represents that topic in any reports. The dialogue (shown left) allows users to choose from a pre-set number of colours, or click anywhere in the rainbow box to select a more specific colour. The shade of that colour can be altered using the

darkness slider on the far right. Users can also save a custom palate of colour to use (bottom left) or specify specific HTML Hex colour values, or HSV/RGB values if there is a need to match a specific colour tone. Clicking the OK button confirms the colour and assigns it to the Quirk. Please note, this dialogue is slightly different across different versions of MacOS and Linux.

Quirk properties also contains the Groups settings, which are discussed in more detail in section 6.10.

Hovering the mouse cursor over a Quirk in the Canvas or Tree view will display a summary of the number of times that Quirk has been coded in each source, and the longer description of the Quirk.

7.4 Quirk Sub-categorisation

Quirks can be grouped in a hierarchical fashion, allowing users to create a nested group of codes with related categories. For example, a parent node, 'Juice', might have several subcategories of types of juice, such as 'Orange' or 'Apple'. These are usually described

as parent-child relationships, with a parent Quirk or node containing one or more topics that form a sub-category.

To add a node to a parent (and make it a subcategory), just click and hold down the mouse button on a Quirk, and drag it onto the parent node, then release the mouse button. The parent node will turn grey to indicate it is selected, and the dragged Quirk will become a nested category. The parent will have a thick white line around the outside of the circle, which indicates that there are nested categories below.



The hierarchy is shown by overlapping bubbles, where the child nodes are nested underneath the top level parent node. When there are a large number of sub-categories or children, they are shown in a nested petal fashion as in the top left example. To view all of the clustered bubbles, place the mouse

over the central parent node, and the sub-categories expand (as shown in the right view above).

To code text on a nested node, it is necessary to first hover the mouse over the parent node, then move it onto the sub-category once it has 'popped out'. It is not possible to directly code onto a child node from this view (use Luggage Label view for this).

To remove a child Quirk from its parent, just drag and pull the bubble out onto an empty space in the canvas.

It is also possible to create one more level of clustered Quirks, sub-sub categories, or 'grandchildren' of the parent node. For example, in the category of Juice, a sub category of Juice may contain a further delineation of 'Smooth' or 'Fresh'. The process for creating these is the same as for children: drag a Quirk onto the parent, wait for the sub-categories to expand, and then drop onto the desired sub-category. Sub-sub categories are not shown in the petal view, but will expand once a mouse cursor is hovering over the parent, and be represented by the white circle.

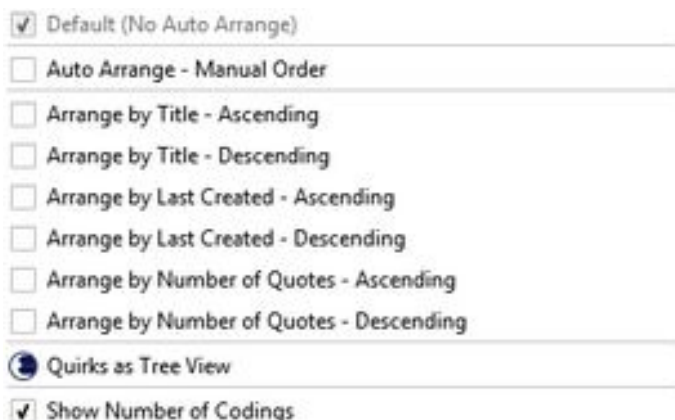
The parent node is still classed as a separate Quirk, and codes can be added directly to this node, and the number of codes in child nodes does not count towards the total number assigned to the parent.



7.5 Views and Arranging Quirks

By clicking and dragging a Quirk, its position on the canvas can be moved. This allows researchers to arrange codes in a way that is useful to them. This layout is remembered and restored on closing the programme, or changing to another view. This is called the

default layout. When moving a Quirk, a light blue box is displayed indicating the extent of the area in which the Quirk can be moved.



It is also possible to automatically re-arrange the Quirks or nodes on the canvas using their properties. Clicking on the 'View' button displays all the options for arranging the canvas view (see left).

'Auto-arrange - manual order' regularly spaces the Quirks around the canvas in a grid, but allows the user to drag and rearrange the order.

The following 'Arrange by' options give the possibility to sort and order the canvas according to three of the properties of the Quirks, by name of the Quirk (in ascending or descending alphabetical order), last-created Quirk (codes most recently added to the canvas) or number of coded sections of text (i.e. size of bubble): the number of text entries assigned to that Quirk.

There is also an alternative display for the nodes/Quirks in the project, using the 'Tree view' toggle. This displays all the themes on the canvas as a traditional hierarchical tree structure (right). The size of these labels does not change with number of codes, and child/parents relationships are displayed by indentations. In all other respects, the luggage label view works in the same way as the bubble canvas view, text can be added by dragging and dropping, and the view arranging options will change the order of the luggage labels.

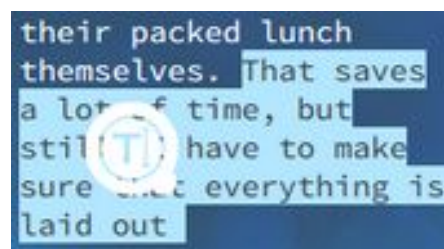


There is also an option to 'Show Number of Codings'. In the Quirk bubble canvas view, this toggles the display of the number of quotes assigned to each code on the bottom of the Quirk on the canvas. For Quirks with sub-categories, the total number of quotes in all grouped quirks are shown in brackets ().

Hovering the mouse over the Quirk will display the number of quotes that come from each source name, compared to the total number of quotes coded in that source listed after the / symbol.

7.6 Coding text

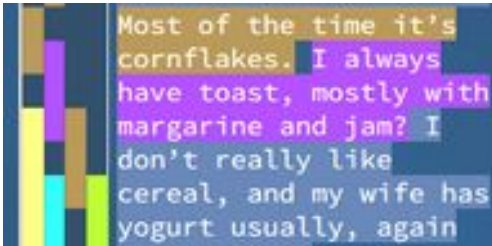
To add text to a Quirk, select the text by clicking at the beginning of the section of interest, and holding down the mouse button, drag the cursor to the end of the relevant section. Release the mouse button and the



text is selected, and highlighted in a light blue colour (above). Clicking and holding down the left mouse button in the middle of the text will select the area of text, and by dragging and dropping it onto a Quirk, that text will be added to that Quirk/theme.

As a result, the text will be highlighted in the colour of that Quirk, and the Quirk will grow slightly to indicate text has been added.

7.7 Highlights




On the text displayed on the right side of the screen, there is a column on the left which displays a strip of colour that indicates the themes which the text has been added to. The highlight column width is adjustable in the Settings > General Project Preferences. Hovering the mouse over one of these highlight strips displays the name of the associated code in a floating box. Right clicking on the strip allows a user to remove that section of text from the Quirk by selecting the 'Remove Highlight' option.

If a section of text is coded to more than one Quirk, the colour of the text highlight turns a generic light blue, and the highlight strips overlap and stack in the column view.

7.8 Viewing coded text by Quirk (overview)

To view the text assigned to an individual Quirk, users can long or right click on any Quirk and select Overview. This changes the canvas view to a hierarchical structure (right) with the parent at the top, and all sub categories and sub-sub categories beneath it. This view shows all of the quotes coded in the whole hierarchy on the right text view column.

By clicking on one of the Quirks, only the quotes from that node are displayed. Coded text on the right can be added to other nodes in this view using the standard drag and drop operations.

Selecting the properties tab  will show an overview of the properties of sources from which quotes from the selected Quirk(s) have come from. Clicking on the Home view will return to the main canvas view.

You can create new Quirks in this view with the (+) button (create a sub-category by clicking on a Quirk to be the parent), and right click on Quirks to edit and delete them. This is useful when recoding or reordering Quirks.



7.9 Merging and duplicating Quirks

Any of the Quirks can be duplicated by right clicking on the appropriate bubble and selecting the 'Duplicate' option. This creates a new Quirk, with all the same properties and coding assigned to it, named with a 'Duplicate' suffix. The duplicated Quirk also occupies the same position on the canvas, so by default is on top of the original Quirk, and can be easily dragged to a new location. This functionality is useful should a code need to be split, for example if during emergent coding when a vague topic needs to be turned into two or more specific codes. Specific codes can be removed from a duplicate quirk by selecting the Quirk overview, and right clicking on the highlight column of codes which are no longer needed. This creates a Quirk with a specified subset of the original data.



It is also possible to merge the contents of two Quirks together. This is useful in the opposite scenario, where two topics are very similar, and the coded text under both should be kept under a single Quirk. Right click on the Quirk

which the user wishes to keep, and select the 'Merge' option. This brings up the Merge Quirk dialogue (above) allowing the user to change the name of the final Quirk (by default, the original Quirk name with the suffix '(merged)'). The 'Merge with' drop-down box gives a list of all the Quirks in the project, and this is the Quirk to which the contents will be taken from and deleted.

If the user wishes to merge and effectively duplicate the contents, users should perform a duplicate Quirk action before the merge action, as the merged Quirk is removed.

7.10 Groups

Quirkos offers another way to manage and group Quirks, called groups. This allows you to create groups of Quirks that cut across subcategories, and group otherwise unrelated topics. This can provide different ways to analyse themes, as Quirks that can belong to one or more groups. For example, a researcher may have a category for 'food' that cuts across many different categories and sub-categories, and perhaps some drinks like smoothies. They may also have particular themes of interest that will appear in a paper or specific chapter, and they can be grouped and categorised together. Quirks can belong to more than one group, unlike in the child-parent groupings.

Right clicking on any Quirk in the canvas view, and selecting Quirk Properties will show the groups available in the project, and allow the user to assign the current Quirk to any of those levels (see right). By




sliding the indicator [1] to the right (changing to yellow), the Quirk is assigned to that group, and can belong to multiple group.

To change any aspect of the groups, click on the 'New/Change group' button [2] in any of the Quirk Properties dialogues. This brings up the Edit Groups screen (right). Create a



new Group by entering a description and clicking on the 'Save' button. To edit an existing group name, click on the entry in the list below, and make the changes in the dialogue box at the top, pressing 'Save' when the desired changes are complete. It is also possible to delete a group by clicking on the 'Delete' button. All these actions can be undone or redone using the appropriate buttons. When happy with the changes to the

group, click the 'Close' button to return to the Quirk Properties.

Using the Group icon  on the main Canvas, you can choose which groups are displayed at any time. By default all Quirks are shown, but by ticking one of the groups in the project, only Quirks belonging to that group will be displayed. You can show one or more groups at any time, or choose the 'check all' option to show only Quirks belonging to a group, or 'uncheck all' to display all Quirks again. You can also edit group names from this menu.

You can select the Group as a refine option in the Query or search view, and so restrict results to a particular level, and generate reports that just contain data from Quirks belonging to one group.

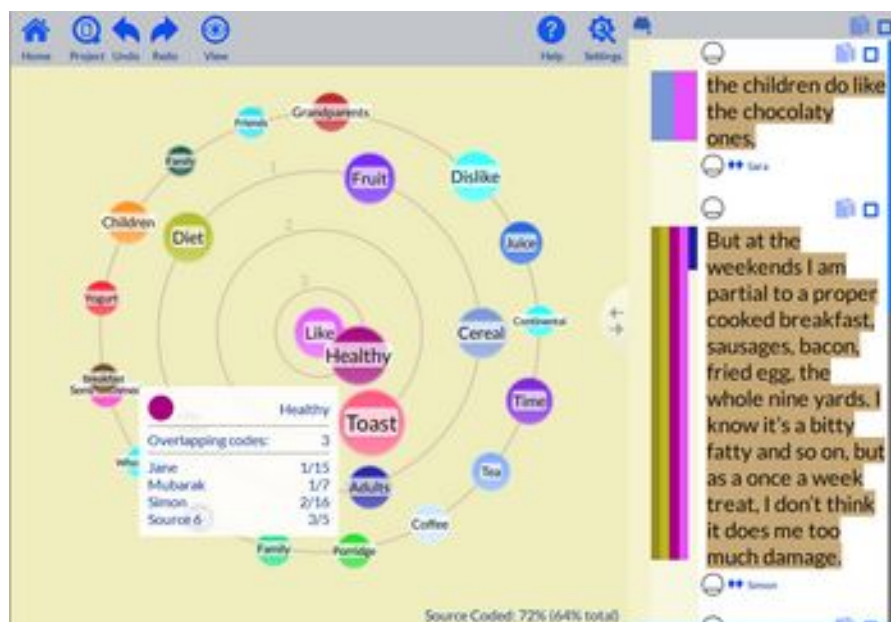
7.11 Overlap view

When coding, it is possible to assign a section of text to more than one theme or 'Quirk'. This will show overlapping strips of colour in the highlight column, indicating the many topics that that text is assigned to. In fact, this is an advantageous approach in many CAQDAS packages, but especially in Quirkos, which takes special interest in overlapping categories.

Whenever any section of text is assigned to more than one category, Quirkos notes this association, and uses it to profile connections between Quirks. For example, if the themes 'Healthy' and 'Fruit' are often being coded together, Quirkos will note this as a possible association between the themes. The overlap view is a way to visualise these connections between themes created by text that has been assigned to multiple codes.

To see which topics are being coded together with a certain Quirk, right (or long) click on that Quirk, and select Overlap (below). This shows a visual representation of the connections between Quirks, with the selected Quirk (in this example Healthy) in the

centre. Those other Quirks with overlapping codes are displayed around the Quirk in concentric circles: **the closer the bubble to the central Quirk, the more overlapping codes.** The Quirks on the outermost circle have no concurrent coding events. In the example below, 'Like' is most closely associated with Healthy, followed by Toast. The arrangement within the rings has no significance, only the distance from the central Quirk.




By leaving the mouse cursor over any of the Quirks, a dialogue is displayed showing how many overlapping codes were found, and in which sources any quotes are found (in the image above, this is being shown for the Healthy quirk).

On the right side of the screen is a list of all the quotes which contained

the selected code and at least one other code. By clicking on any of the Quirks in this view, the display on the right will change to show only the codes assigned to the central and selected Quirk. For example, clicking on 'Toast' will show only text associated with 'Toast' and 'Healthy'.


To go back to the main canvas view, click on the Home button on the top left. Any of these cluster views can be included as part of a report.

This view is automatically generated, and it is also possible to code in this view. For example, text shown in the right view can be added to another Quirk if it is deemed relevant in the usual drag-and-drop fashion.

You will also see the copy icons in the text view, this allows you to select either individual quotes with the tick box adjacent to that quote, or all of the quotes at the top right. Then pressing any of the copy buttons  will copy the selected text and the name of its source to the clipboard to paste into another programme. These options are also seen in the search results, and the hierarchy view.

7.12 Memos (text annotations)




The memos column allows users to add a text annotation to a section of text in a source. This can be used to record observations and notes attached to part of a source, or be used for analytical approaches like line-by-line coding and in-vivo coding. Clicking the memo icon  at the top of the


column will toggle the display of memos, although the icon always shows the location of a memo in the text. Double clicking on a memo icon will also open and close the memo column.

To create a memo, drag and drop a section of text onto the memo column. A new yellow label and memo icon will be created, and the user can click into the label to type or edit the memo. Clicking outside the box will leave and save the memo. Right click on a memo and choose Remove memo to delete it. Memos are shown in any results that show text highlights, for example in overview or overlap views. They are also exported as a list at the end of a generated Report.

7.13 Chat (project/user annotations)

The chat button  (bottom left) can be used in collaborative projects for users to talk to each other in shared projects. Each message is stored in the project, with a user and date/time stamp showing who made the comment and when. The chat button toggles opening and closing the chat pop-up window. Users can delete their comments with the (x) button next to each comment, but only the original creator of the project (master user) can delete other people's messages.

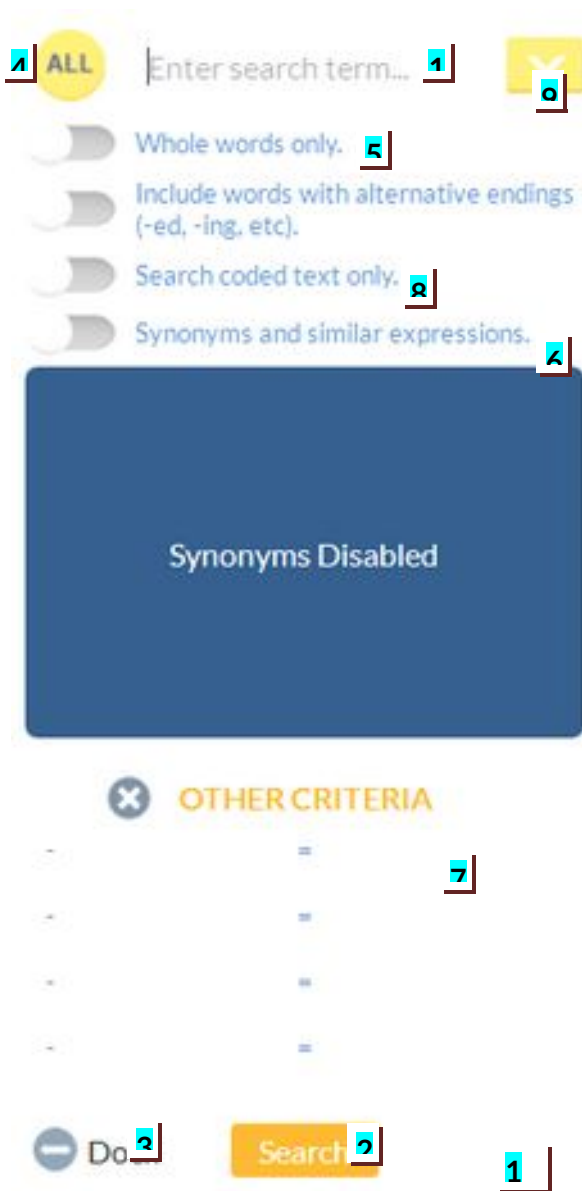


Click into the text box to write, and press the Enter button or click the send icon  to save and transmit the message. The user's own messages are shown in blue on the right side of the view, and all other users on the left in grey. The chat window size can be changed by dragging the edges of the chat window.

The feature can also be used in the offline/static mode to use as a project-wide memo function. Here users can record their own thoughts and observations, or keep a coding/analysis journal as they analyse their project.

8. Text search

Quirkos has a powerful integrated search tool to allow you to find keywords or phrases across the sources or coded text as required.




use the 'Dock' button on the bottom left [3].

To close the search view, click on the  button at the top left of the text view column.

8.2 Refining included words

There are several options to change the specificity of the search results. The first is the search coverage button, on the top left [4]. By default this shows 'All' and searches across all of the sources in the project. It can also be toggled to show '1' and this shows search results for the currently active source only – i.e. the active tab in the text view column before clicking on the search button.

8.1 The search pane

To toggle the search pane click on the magnifying glass button  on the top left of the text view window. Make sure you are on the main canvas view (click on the home button if you can't see the search button). The search view will slide out (shown left).

Enter a search term in the box [1] and press the Return/Enter key on your keyboard or click on the search button [2] to run the search, entries are displayed as they are found. The number in the bottom right [10] will show the number of **sections** of text found (not occurrences of the word). Search Results are displayed in the text column to the right. The search term will be highlighted in bold and underlined in the results. The (...) buttons can be used to display more text around each result, and you can also code directly from the search results. Just highlight a section of text from a result, and drag and drop it onto a Quirk. As you move the text across to the canvas, the search pane will temporarily slide away to make sure the canvas is not obscured. To manually store or expand the search pane,

Next are four toggle activated options [5] which are off by default. The first is 'Whole words only'. By default, Quirkos will show any string of text matching a result, even if it is only part of a word. For example searching for 'fault' will also include any instances of 'default' as the word contains that string of letters. Activating this option ensures that only whole words are returned as results, not parts of longer words.

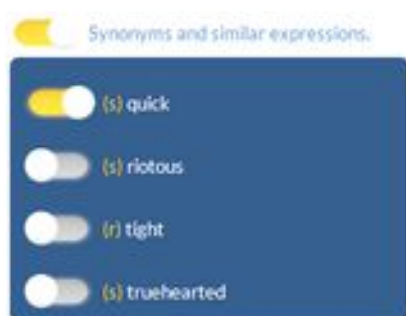
Secondly, 'alternative endings' can be toggled. This, when used with the whole words option will also display common word extensions like 'faults' 'faulting' 'faulted' and 'faults' but not parts of other words like 'default'.

The next option only displays search results from 'coded text only' – only showing instances of the search term which appear in text that has been assigned to any code or Quirk.

The last option turns on the synonym search parameters, detailed in section 7.3 below.

When any of these options have been changed, the results need to be updated by clicking on the search button [2] again.

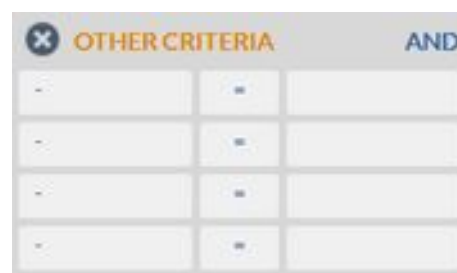
8.3 Synonym searching



By sliding the indicator for 'Synonyms and similar expressions' [6] to the right, the keyword in the search box will be run through a built-in database of common synonyms and antonyms, based on the Princeton WordNet project. This generates a scrollable list of related words, which can be included in the search one-by-one by sliding their corresponding toggle to the right.

For example, entering 'fast' in the search box, and enabling synonyms will show matches for synonyms such as 'quick' and words with alternate meanings, such as 'tight' (held fast) or truehearted (close). By selecting which synonyms are relevant to the meaning of the search term, users can find many more instances using different words in the text corpus. However, the database is illustrative, not complete, and may not always contain all possible options for certain terms.

8.4 Refining other search criteriaThe 'Other Criteria' box [7] allows you to specify additional criteria to be met to return a search result. The box on the left offers a drop down list of possible options. The first option is 'Quirk' which allows you to show only results coded under a particular theme, selected in the box on the right. 'Author' allows you to show only work from one particular project user. The other options correspond to source properties you may have created in the project, such as age or gender. Again, possible values can be chosen in the box on the right. The middle column allows the user to change the criteria



from '=' (equal) to '!=' (not equal), so that a search can be run showing all values **except** the one specified. Up to 4 criteria can be defined in this way, and the 'Search' button should be pressed to rerun the search once these parameters have been defined. Selecting the dash '-' in the left box will remove that one line, and the (x) button next to other criteria will remove all the criteria below.

On the right of the 'Other Criteria' is an option to toggle the operand for multiple criteria. By default these are 'AND' operations, in that each additional criteria further refines the results. So searching for 'Quirk = Food' and 'Quirk = Drink' would show results coded in both Food and Drink topics at the same time. Clicking on the AND operator will toggle it to OR in which case the criteria are more open, and would return results from either Food or Drink.

8.5 Coding from search results

If you want to see only results from text that has already been coded (i.e. assigned to one or more Quirks), select the toggle 'Search coded text only' [8]. This refines results to only display keywords found in text that has been assigned to any code. You will also see the copy icons that allow you to select either individual quotes with the (1) button adjacent to that quote, or all of the quotes (All) at the top right. Pressing any of the copy buttons will copy the selected text to the clipboard, from which they can be pasted into another programme.

8.6 Saving search criteria

The orange drop down box [9] next to the keyword entry box stores a list of recently run searches for that active session – they are not saved with the project. This allows you to quickly re-run a search with all the criteria you previously entered. The drop down box displays results with the most recently run searches at the top of the list, and indicates:

(Term:) search term

(ALL) whether the search was across one source, or all of them,

(WW) if the search was limited to whole words,

(SYN) if synonyms were included,

(ALT) if alternative endings were enabled and


(CTO) if the results are refined to coded text only.

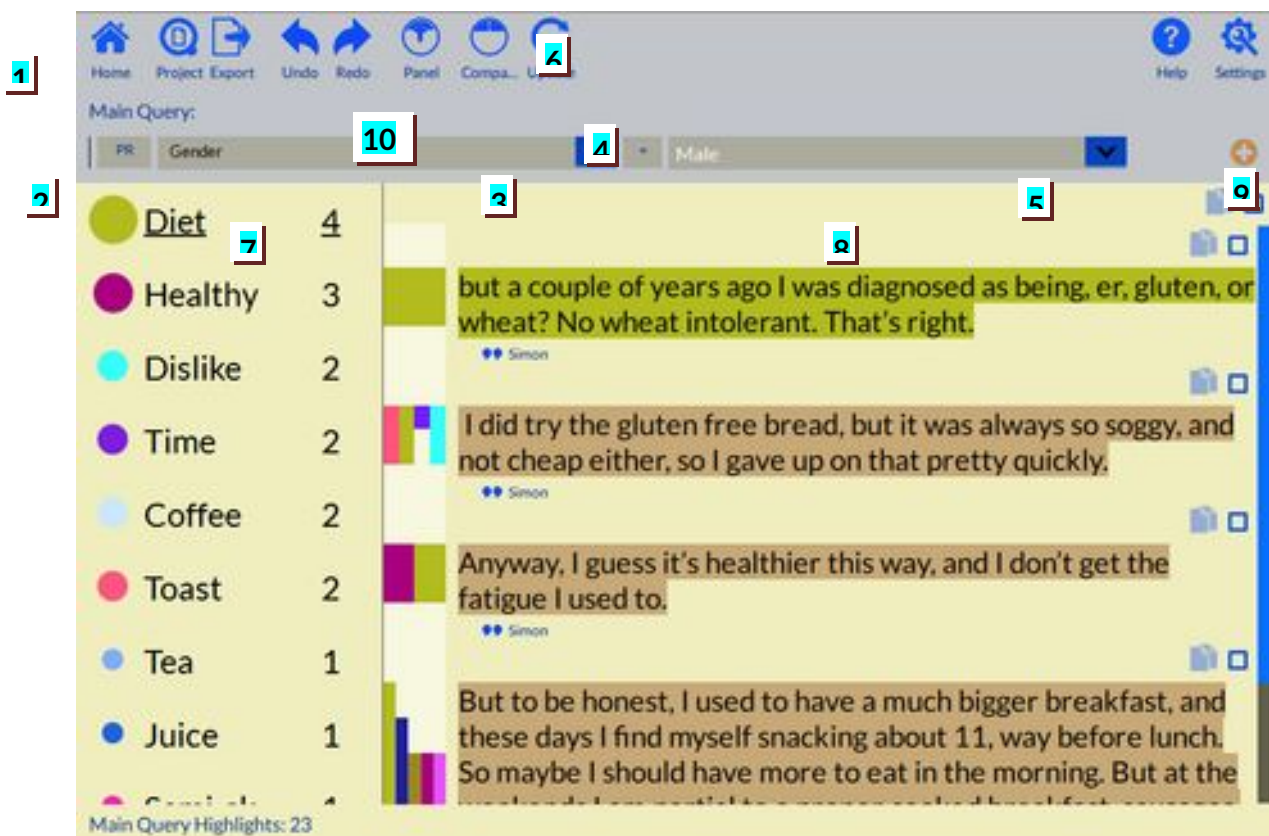
Please note that searches are only saved for the currently active session. Once the project is closed, the search history is lost.

9. Queries

Queries allow you to see the results of your coding, and explore sub-sections of your data using a variety of filters to refine results. These are presented as both a visual overview, and code-by-code detail of coded text results.

9.1 The query view

Pressing the Query view button  in the left toolbar in the main canvas view will open



the query view dialogue:

At any stage, pressing the Home button [\[1\]](#) will return you to the main canvas view. The other options are explored in the sections below. To see more of the results window, the grey query panel at the top of the screen can be toggled with the Panel button [\[10\]](#).

9.2 Forming a query

The grey bar along the top of the screen contains all of the options for formulating a query. The first box [\[2\]](#) allows you to select what criteria you want to use to refine the results. The default value is Source Property [PR], but other options include Highlight Author (HA) to select coding in a project from a particular user, Quirk Author (QA) to show results from Quirkos only created by one user, Highlight Date (HD) to show coding actions performed on a particular date, Quirk Date (QD) which will restrict results to Quirkos created on a

defined date, and Quirk Level, which allows you to refine results to Quirks assigned to a particular level and Source Title (ST) which shows results just from a single source.

The property entry box [3] is used to select source properties from a list of all properties in the project. The value box [5] shows a list of all the available properties for the author and property options, in a drop down list of possible values from the project. When selecting a dated variable, dates must be typed into this dialogue in the form dd.mm.yyyy, for example 27.01.2018 will show results for the 27th of January 2018. This box is not needed when selecting quirk or highlight authors.

The operand box [4] allows the user to choose the logic of the query. By default this is set to = (equals) so will return results meeting the contents of the value box [5]. However, clicking on the operand box shows a drop down list of alternative logic options. [!=] equates to 'not equal to', so users can specify a query to return results where Gender was **not** equal to Male, which might return results for Female and Transgender: all the sources except Male. There are also numerical comparison options, less than [<], less than and equal to [<=], more than [>] and finally more than and equal to [>=]. These are especially useful with date ranges, or source properties with numerical numbers such as age. For example, results could be shown for only respondents where the age was over or equal to 65.

Clicking on the 'Update' button [6] will update the view below to show the results based on the criteria in the query view.

It is possible to add many separate criteria to form a more complex query. Clicking on the (+) button [9] will add a new row, containing another set of query boxes, which can be used to either refine, or expand the query results. This shows a new box at the end of the query row, by default showing [A..] for AND. This operator means leads to additional criteria refining the results of the query, as results must meet both the first and second values. For example, the following query:

```
[PR][ Gender ]    [ = ]  [ Male ]                [AND]  
[PR][ City      ]    [ = ]  [ Edinburgh ]
```

would show results only from men living in Edinburgh. Changing the operand from AND to OR will create an additive criteria, so that results are shown from all men, OR anyone living in Edinburgh (men or women) giving more results. Up to 10 additional options can be added in this way by clicking again on the (+) button, while the (x) button will remove that row from the query. After specifying another row, press Run Query again to update the results.


9.3 Exploring results

The results of the query are shown in two columns, with the Quirk or theme in the left column [7] and the coded text results in the right [8]. The left column shows a colour coded bubble, with a size relative to the number of coded results for each quirk, in descending order of number of quotes found for each Quirk. The results only include matches for the query criteria entered above, for example only quotes from men. Clicking on one of the Quirks will show the text of the quotes matching the query criteria in the right column [8].


Between the two is a highlight column which shows colour coded stripes for all themes associated with that quote.

Hovering the mouse over one of the stripes displays the corresponding Quirk name in the bottom left of the status bar, and coding can be removed by right clicking in the same way as in the normal canvas view.

9.4 Comparison view

Clicking on the 'Compare' button  in the left action bar will toggle a two-paned, side-by-side comparison view. The layout is essentially the same, but with an additional duplicated vertical query column in which another query can be detailed. This allows for two different queries to be run side-by-side, allowing for easy visual and textual comparison between different parts of the project data. The formulation of queries for the left and right sides remain the same as above, and again up to 10 additional query criteria can be specified for each column.

This view offers new options in the query panel including, Sort by Left or Right Query, which allows the results to be displayed in descending order of quirks with the most results for either the left or right query. When side-by-side results are displayed, the same ordering of Quirks is preserved across both columns so that they are displayed in rows. For example, if 'Anger' is the most commonly coded result from the left query, and 'Negative' is in second place, the right column will also display results in this order for easier comparison, even if there are more 'Negative' results than ones for 'Anger' for the right-hand results. However, toggling the 'Sort by Right Query' option reorders the results so that the most common Quirks for the right column are used to determine the display order. Additionally, it is possible to export results from one of the queries by clicking on the corresponding Report (Left Query) or Report (Right Query) button. See **section 8.5** below for more detail on query reports.


You can switch back to the single query view by clicking on the  'Single' button on the left of the screen, which will show only the left query. When navigating away from the double query view, or going back to the main canvas view, the query parameters are retained, and will be restored on returning to the query view during that session.

9.5 Exporting query reports

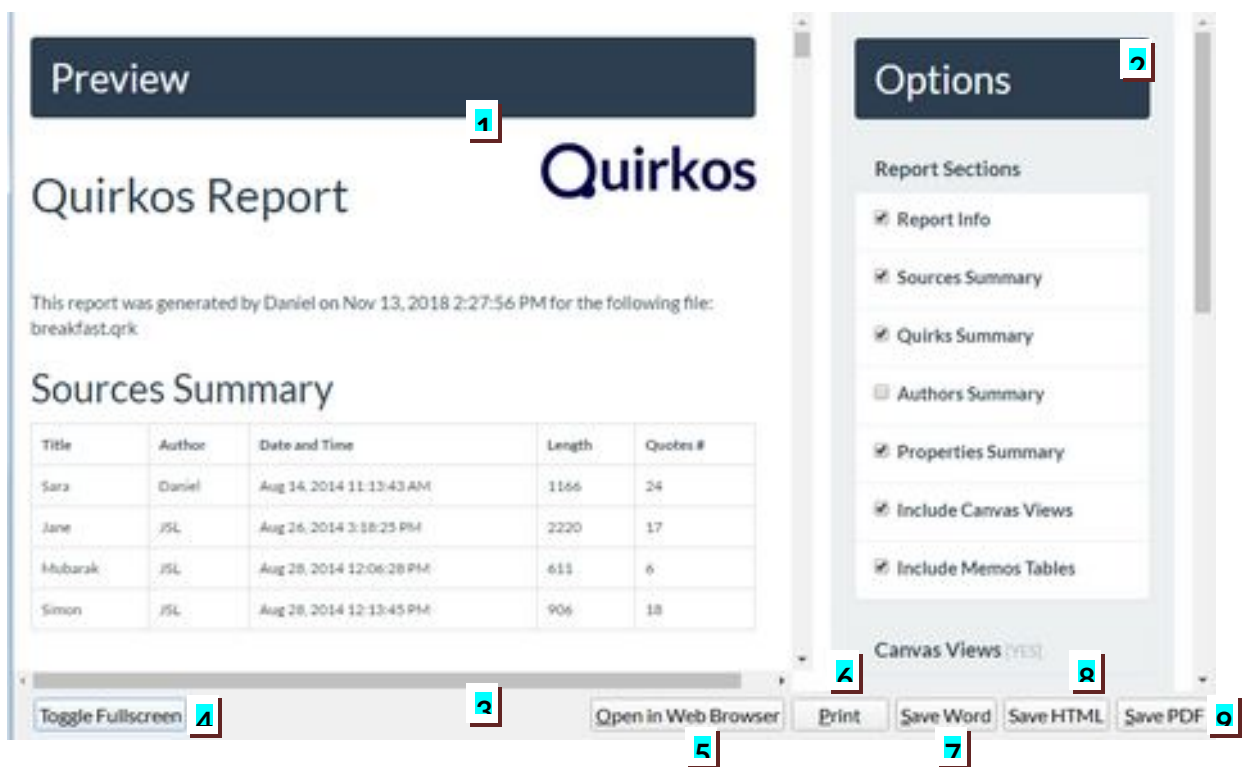
The refined results of the query can be exported as a report in the same format as a whole project report, generated from the main canvas view. Clicking on the [Report] button in the query panel will generate a report to be exported as PDF, HTML or printed document which contains a general overview of the statistics for the whole project, followed by quotes (sorted by code or source) of only the coded text that matches the query criteria. For example, users can create a report with lists of quotes only from sources described as 'Male'.

In the comparison view, reports can be generated for either of the two query columns, left or right. However, there is currently no report option that will show the side-by-side view as displayed on the screen. Report generation and formatting is the same as in the main canvas report: for more detail, see **section 10** below.

10. Reports

Quirkos generates a single report that provides summaries and detail for the whole project, or a sub-set of the data when created from a query. The report can be customised to contain only certain sections and levels of detail. Reports for the whole project are generated by clicking the Export button , in the action bar on the left side of the screen in the main canvas view, and choosing Create Report. This starts a process that generates the report, including images of canvas views and cluster views that can be used in other documents. This process normally only takes a few seconds, but for larger projects may take several minutes. It can be stopped at any stage using the Cancel button.

10.1 The report overview



Once a report has been generated, Quirkos will display the preview window above. This is formed of three elements: a preview of the actual report contents on the left [1], options for which sections to include in the right column [2], and a series of options at the bottom [3]. To make the view larger, the view can be made to fill the current screen using the Fullscreen button [4]. You can also choose to 'Open in Web Browser' [5] to customise the report in your own locally installed web-browser, before printing.

10.2 The options column

The options column [2] contains a list of customisable sections which can appear in the report. These are turned on or off by selecting the tick box next to that heading, which will immediately toggle that section in the preview column on the right. The table below details

the contents of each of the optional settings in the report, with default sections listed in bold. Options for each section can be displayed or hidden by clicking on the section title, options are detailed below:

<p>Report Sections</p> <p>Report Info</p> <p>Sources Summary</p> <p>Quirk Summary</p> <p>Authors Summary</p> <p>Properties Summary</p> <p>Include Canvas Views</p> <p>Include Hierarchy Views</p> <p>Include Overlap Views</p>	<p>The report sections shows a list of major components that can be included in the report. The Report Info contains data on when the report was generated, and the project file. Sources Summary provides a table of the sources in the project, who added them and when, their length in characters, and number of coded sections. Quirk Summary gives a list of all the codes/Quirks in the project, their relationships, and total numbers of Quirks and sections of coded text. Authors summary shows a graph of coding by each author, Coding Coverage is across the whole project, and then a breakdown by Quirk/code. Properties Summary gives graphs for the number of sources assigned to each property value. Finally, Canvas, Hierarchy and Overlap views can be included, each covered in their own section below.</p>
<p>Canvas Views [YES/NO]</p> <p>Include Coding Numbers</p> <p>Primary Canvas</p> <p>By Title - Ascending</p> <p>By Title - Descending</p> <p>By Time - Ascending</p> <p>By Time - Descending</p>	<p>The canvas views option will include pictures of the coding framework as it appears in the main Quirkos window, showing all the Quirks as bubbles. 'Include Canvas Views' in the above option enables this section, and any number of different views can be selected and shown at once.</p> <p>Ticking the 'Include Coding Numbers' will add a label of the number of sections of text coded to each Quirk. They can be ordered as Primary or 'default' (how they have been manually positioned), or there are options to regularly order them by a property of the Quirk, for example in alphabetical order by title, or order of creation, either ascending or descending.</p>
<p>Hierarchy Views [YES/NO]</p> <p>Include coding numbers</p>	<p>Hierarchy views show an image of the parent-child relationship for grouped Quirks. Select any of the parents [P] to show a list bubble view of all the child [C] and grandchild [GC] Quirks.</p>
<p>Overlap Views</p> <p>Include coding numbers</p>	<p>Overlap views are the cluster diagrams of how frequently topics overlap in the coding of text, showing relations between Quirks. 'Show coding numbers' will show the total number of quotes assigned to that Quirk, and a list of all Quirks in the project allows views for each Quirk's relationships to</p>

	be toggled (only if there are overlapping events, otherwise these Quirks are greyed out).
<p>Quotes</p> <p>Text by Theme</p> <p>Order Codes by:</p> <ul style="list-style-type: none"> Default Quirk Title Coverage Quotes Count <p>Order Quotes by:</p> <ul style="list-style-type: none"> Default Source Title Position in Source Date and time <p>Text by Source</p>	<p>The Quotes section shows a list of all of the coded text in the project, ordered by Quirk: for example all the text about Juice, then all the text about Tea.</p> <p>The order in which the Quirks are displayed can be changed with the 'Order codes by:' option, and within this the order in which the text quotes are displayed using the 'Order Quotes By' options.</p> <p>Text by source shows all the coded text for each source in order: for example all the quotes for Sam, followed by all the quotes from Lucy. Again, these can be reordered.</p>
<p>Quotes Style</p> <ul style="list-style-type: none"> Show <i>Coded by</i> Section Show <i>Theme</i> Section Show <i>Coverage</i> Section Show Highlight ID Section <p>Highlight Style:</p> <ul style="list-style-type: none"> Coloured stripe beside quote Highlight quoted text Colour coded text <p>Include Properties in Quotes</p>	<p>These options can be used to change the information displayed about each quote. Coded by will show the author name that coded that section of text, and the date and time it was coded.</p> <p>Show coverage displays the percentage each quote represents of the total text source, and total project.</p> <p>Highlight ID gives a unique number for each quote to use in referencing</p> <p>Highlight style allows the user to choose a style to display the colour coding of the quotes (connected to the Quirk colour) These are illustrated below.</p> <p>Turn on source properties for each quote with the last option.</p>

Below are some example styles for the quotes for the text, first of all with coloured stripe, source properties, and all details:



Quotes with highlighted colour, and no source properties:



And finally with no details, and text changed to the Quirk colour.



10.3 Creating a PDF, Word or printed report

Once you have chosen the sections and format of the report, you can share this in two ways that preserve your layout: as a PDF document, or a physical printout. Pressing the 'Print' button [6] above, will sent the report to your printer using the standard printer dialogue for your computer.

You can create an editable version of the report as a standard Word (docx) file using the Save Word button [7]. On selecting the 'Save PDF' [9], a file save dialogue will appear, asking you to select a location and filename for the PDF report. This will then generate a standard PDF (Portable Document Format) file with the selected sections assigned to each page. This is an easy way to share a project report with people, in a format they cannot easily change. The format is small enough to e-mail, and supported by most computers and web-browsers.

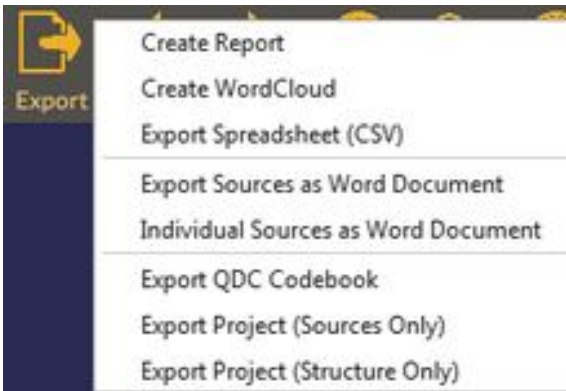
10.4 Sharing an interactive HTML report

The 'Save as HTML' button [8] allows you to export a report in a format that can be opened in a standard web-browser, with the same customisation options as in the report preview view. This allows you to share a report in a format that other people can explore, and create a custom report of their own using the section options without having Quirkos installed. All the data, images and layout are stored in a folder that can be 'zipped' and shared. Selecting this option brings up a dialogue asking for a folder to locate the saved HTML report. This generates a report.html file in the location, as well as a folder called 'data'.


The 'data' folder here is useful because it contains image files of all the canvas views, and other visualisations of the project data, which can be added directly into any compatible software. For example, an overlap view could be included in an article written in Word, or a PowerPoint presentation.

The image files are labelled as: main_canvas (and then ordering, and if numbers are included), overlap_(and a number for each quote), and hierarchy_(and a number representing each Quirk). You should be able to view all of the files in the folder as icons in

11. Export options



In addition to reports, Quirkos offers a number of other ways to export data from the project to use with other programmes.

Clicking on the Export button  in the main canvas view will display options to export the project in various formats, as displayed on the right. These include Word documents, Quirkos project files (.qrk) and the project database as a CSV file. These are detailed in the sections below:

11.1 Exporting project structure or sources (QRK files)

Quirkos provides two ways of saving certain parts of your project file that separate the structure, and the sources.

Export Project (Sources Only) preserves only the sources and source properties from the currently active project as a new file. This function would be useful if several researchers are doing their own independent 'emergent coding' and interpretation of the same corpus of data, and wish to have a blank framework, but use the same sources of data. Essentially, the Quirks and any coding are removed from the saved project.

Selecting Export Project (Structure Only) will create a .qrk project file that only contains the coding framework in the currently active project. Essentially, the codes, levels and grouping of the Quirkos on the canvas. This is useful if you have developed a standard coding approach, using a set of assessment criteria that you wish to use with multiple projects which should be coded in the same way, but for different sources of text. Any sources or coding from the current project are not included in the new file, and it provides a blank template to bring in new sources to analyse using a pre-defined framework.

11.2 Exporting annotated text as Word files



Quirkos also offers the ability to export the coded sources to Word format (.docx) complete with annotated highlights showing colour coding for each Quirk or theme.

The Export dialogue gives two options for this export: either to create one long Word document with all the sources sequentially

'Sources', or to create a separate word document for 'Individual Sources' . For the latter, a dialogue will ask the user to select a folder in which all the Word files will be created, with the name of the source matching the name of the Word file. The created .docx files are compatible with other word-processing software, such as LibreOffice and Google Docs. Functionality will differ slightly depending on the version and configuration of your word-processor.

In the corresponding Word file(s), the complete text of the source from the project is contained, with any coding represented using a comment for each coded section. Clicking on a section will open the comment, which shows the name (and number) of the Quirk, and the author who coded that section. The text is also highlighted in different colours, which depending on the word-processor, should approximate the colours chosen for the Quirk in Quirkos. These 'comments' can be edited and deleted as normal.

This format allows you to print out an annotated and colour-highlighted transcript of your data, much as if you had coded the text using highlighter pens. It also allows you to share your coded data with someone that does not have Quirkos, but has a standard word-processor.

11.3 Exporting database for other software via CSV

If you wish to explore your coded project data in another software package, you can do this using the CSV (Comma Separated Values) format. This would allow you to examine your coded data statistically in packages such as SPSS, R, Excel or other spreadsheet software, and generate graphs and other quantitative outputs. Some other qualitative analysis packages support importing data via CSV, such as Dedoose.

Clicking on the Export button and selecting the 'Export Spreadsheet (CSV)' will open a dialogue that requests a folder to store four CSV files that contains the data from the project. You can either select an existing folder, or create a new one. These are Memos, Quirks, Quotes and Sources. The most useful one for most purposes will be Quotes, which contains every piece of coded text in the project, with the following column headings:

highlightId	the sequential highlight number used to identify each piece of coding
color	the RGB colour of the Quirk
start	the position (in characters) into the text where the quote starts,
length	length of the quote in characters
end	the end point in characters of the quote
author	the project user who coded this section of text
quirkId	number of the Quirk the quote is coded to
quirkTitle	the name of the Quirk
sourceId	number corresponding to the source the quote belongs to
sourceTitle	The name of the source
questionId	the question number (in a structured question project, otherwise 1)
quote	the text of the quote itself.
property1,2,3	the following columns will detail the source properties for each source

11.4 QDA-XML Export and Import

Quirkos now supports the QDA-XML project exchange format (.QDC files) for qualitative data (see <http://qdasoftware.org>). This allows you to bring in, or export your coded data from any other qualitative software package that supports it. In the Export button, choose the Export as QDPX option, and you can save your Quirkos project in the interchange format.

If you have data analysed in another software package, you can bring it in with the 'Open Other' button in the Open New or Existing dialogue when you first start the program. Change the file type from the default .qrk file to .qdpX, and you will be able to select the project and import it as a new project.

While for a majority of uses the export and import of data projects will support most of the major components of a project (codes, sources, coding etc), it is important to be aware that different software packages have different capabilities. So for example, Quirkos will not be able to import and audio or video files coded in other software that composes it. You may also find that the colours and structure of codes/Quirks created in Quirkos will not display in the same way in other packages that don't support similar layouts and colours.

You may also find that some software packages treat source properties, groups and memos in different ways. Likewise, different CAQDAS (Computer Assisted Qualitative Data Analysis) packages may not have ways of describing sources, codes and analytic text annotations in ways that can easily map onto Quirkos features. The REFI/QDA-XML coordinating group is working to improve the standard as more packages support it, and Quirkos has committed to continuously improve our export and import as it evolves.

12. Further support

12.1 Frequently Asked Questions (FAQs)

General

1.1 Why the name 'Quirkos'?

Quirkos comes from the Greek 'kirkos', the root of the word 'circle' and 'qu' for qualitative. It represents the Qualitative Bubbles (Quirks) that are central to the interface.

1.2 Is Quirkos browser based?

No, Quirkos is normal software that you install on your computer or tablet.

1.3 Does Quirkos store my data on 'the cloud'?

Offline/static Quirkos saves your files on whatever location you choose on your computer or network, but does not store them in any hosted solution. If you choose, you can of course save your files to a cloud platform such as Dropbox to share with others. This gives you the freedom to work according to the security policies of your organisation. You can also store projects on Quirkos Cloud, which makes them remotely accessible through our secure servers.

1.4 How long does the licence last?

The static/offline licences are indefinite, and does not expire. It will include any updates for that point release (eg. 2.6, 2.8) but not for major new versions (eg. 2.0, 3.0). They can be transferred to a new computer, but are linked to a single computer. Quirkos Cloud subscriptions are based on a quarterly or annual fee, but allow installing Quirkos and accessing your data on any number of computers.

1.5 How can I prove eligibility for discounts?

For students, we require a valid e-mail address from an educational institution, and proof of student status, such as a university student card or registration printout.

For academic licences, an e-mail address from a registered university is usually sufficient, we will try to validate this automatically looking for common e-mail domains (such as .ac.uk, .ac.fr, .ac.edu). This is also the case for some government institutions, for example e-mails ending in .gov or .nhs.uk. Otherwise, get in touch and we will validate your status. As long as yourself or your institution are visible on the internet, there shouldn't be a problem.

If you have any problems providing these, just get in touch, we will work something out!

1.6 Will there be updates for Quirkos?

On average these are 4 times a year. We will make updates available periodically to fix any bugs and add new features. We also pledge to make sure that updates do not brake compatibility with older versions, so everyone can work with the same projects.

1.7 Does Quirkos work with pictures, audio or video?

Not at the moment. We wanted to focus on text, the format that qualitative researchers use most often. We have innovative designs for working with multimedia sources that we hope to implement in future versions.

1.8 Does Quirkos support rich or formatted text?

Yes, this is now supported in version 1.6.1 and 2.x.

1.9 What formats does Quirkos support?

Quirkos will currently only open plain text files (.txt), rich text files (.rtf), Word files from recent versions (.docx), PDF (Portable Document Format) and CSV ('Comma Separated Value' files from spreadsheets). However, you can import a source from the clipboard by copying and pasting from any other programme on your computer. Rather than try and support all formats that people might be using, this lets you get text into Quirkos from almost anything your computer can open. So you can copy from text PDFs, Word files (all versions), your internet browser, LaTeX, Libre-Office etc. Quirkos will export as SQLite, Word (.docx) and CSV files, and generate reports in HTML, PDF and .png images. This combination gives users great flexibility.

1.10 I have another question, what support do you offer?

The best way to get in contact with us is via e-mail (support@quirkos.com). We will always try and respond to an e-mail within a day, but note our normal working hours: we are based in the UK, so that means 9-5 GMT, Monday to Friday. We are happy to set up Zoom or Skype support calls which are easier to demonstrate on!

2 Installation

2.1 What are the system requirements for Quirkos?

For Windows, Mac and Linux we recommend at least 2GB of RAM, a 2Ghz or higher Code 2 Duo or higher processor.

2.2 How much space is needed to install Quirkos?

You will need around 250MB of free disk space for installation.

2.3 Can I install a 'live' installation on a USB stick?

Yes you can, but note that the offline licence key is linked to a particular computer, so you cannot install to a USB drive and use that licence of Quirkos on lots of different computers. However, this is a great way to work with Quirkos Cloud if you have a subscription.

2.4 How is my licence validated?

Our licencing system links your licence key to your computer when it is validated from in the activation box. This makes sure your key cannot be used by someone else. This usually requires an active internet connection for validation, however, if you are on a system that does not have a suitable connection (for example for security reasons) contact us, and we can provide an off-line activation key. After activation, offline Quirkos does not require a connection to the internet. For Quirkos Cloud, an active subscription is required instead of a licence code, and a internet connection is essential.

2.5 I upgraded my operating system, or I got a new computer, and my licence won't work!

This is because the licence is linked to your particular computer and operating system. If you updated from Windows 7 to Windows 10 for example, our licence system would see this as a new computer. Just contact us on the e-mail address you registered with, and we will be happy to reactivate your licence key.

2.6 I installed the trial version of Quirkos, and didn't get around to trying it. Can I have an extension?

Probably! Just [e-mail us](#), and we'll try to help.

2.7 There's a new version of Quirkos. How do I upgrade?

Just download the new version, and install to the same location as your old one (ie 'C:\Program Files' in Windows, or Applications in OSX). This will update the software, and doesn't change your files. When you start Quirkos the next time, all your previously used files will still be listed, and there is no need to re-enter your licence key.

3 Files

3.1 What are the files used for Quirkos?

Quirkos uses .qrk files, which contain all the data for your project, including the sources. To share with others, or copy from one computer to another, you just need to move this one file.

3.2 What is the format of Quirkos files?

.qrk files are just a SQLite database file. You can import them into any programme that supports this open format, for example you can make direct edits and exports using the excellent [SQLite Manager](#): a free plugin for the Firefox browser.

3.3 Can I encrypt my files?

Yes, when starting a new project you can password protect and encrypt the project file. Note that at the moment you cannot add a password to an existing project, and that you must remember that password! There is no way we can recover a project with a forgotten password, this helps protect the security of the encryption process. Encrypted files also cannot be opened directly in 3rd party programmes, you would have to save the project as a new file without the password to remove the encryption.

3.4 Can the file be opened by more than one user at a time?

It is not recommended at the moment. Quirkos will warn you if the file appears to be already open by another user.

3.5 When I open a file, why does Quirkos say the file appears to already be opened by another user?

This can happen if the computer or programme crashes. In this case, no data will be lost, but the note that the programme has finished with the file will not be recorded, hence Quirkos thinks that the file is still open elsewhere. It is safe to continue in these situations.

3.6 Where is the save button?!

There isn't one! Every-time you do something, it is immediately saved. This makes sure that you don't lose any work if the computer crashes, or you have a power-cut. Under the 'Project' button you can save as a new file if you want to preserve the project at a particular state. Remember, you still should back up your files against hard-drive failure, losing USB sticks on the bus, and viruses!

3.7 Can I move files across Mac and Windows computers?

Absolutely. The file format is exactly the same across all platforms, there is no need to convert files when going between Windows, Mac, Linux or Android computers.

3.8 Can I work with a offline project file saved on a remote server?

Ideally not. As Quirkos is constantly saving your work, running a project hosted on a remote server or cloud platform can lead to slowdowns, and in some cases the file will not open for editing. It is best to download the file to your computer to work on, and upload again when you are done with your session. Quirkos Cloud is not affected by these issues.

4 Using Quirkos

4.1 What is in the report directory?

When creating a report, Quirkos produces a lot of separate files, which is why it asks for a directory to store the report. This will create a 'data' folder containing images of the canvas and Quirks, so you can use them directly in a presentation or article. There will also be HTML and associated files, which lets you share an explorable and customisable dynamic report, or a PDF file formatted exactly the way you choose.

4.2 I'm stuck! Not sure what I've clicked on!

The home button on the top left of the screen will always take you back to the main canvas view.

4.3 What size of files can Quirkos support?

Quirkos does slow down when loading very large sources (over 100,000 words). This can cause a delay in changing between tabs and editing text, but once they are loaded they should display smoothly.

4.4 How many sources can a project contain?

Dozens! As Quirkos only loads the current active source for display, a project with lots of sources will not slow down general use, but obviously searches and queries will take longer. However, most good computers should not see more than a few seconds delay in a large project - the last time we were working with whole novels by Charles Dickens, searches still took less than a minute! Quirkos is not really designed for projects requiring hundreds or thousands of separate sources, we consider this type of research to be more quantitative than qualitative.

4.5 Why is Quirkos so dark?

By default, we've set Quirkos to use dark backgrounds with light text, and a dark canvas. This is easier on the eyes for long periods of coding (we know this from experience!) and also reduces energy use compared to white backgrounds. You can change this to a light theme in the Project Settings options.

4.6 How does a whole team work on one project file?

The easiest way to do this is for all users to have a Quirkos Cloud subscription, and share project files which can then be worked on collaboratively. However, it's also possible for a group of users to work on one offline project with one file, that only one person uses at a time, sequentially. This way, you can see all the work done by different authors, and work takes off from the last edits. You can then use the merge function to bring the work into a single project file.

5 Using Quirkos Cloud

5.1 Where are my projects stored?

Your Quirkos account contains all your project files uploaded to the cloud server, allowing you to access them wherever you are, as long as Quirkos is installed and your subscription is active. Our servers are hosted in secure locations in the UK, USA, Canada and Singapore, whichever is closest to you, and meet all applicable standards for data protection, transfer and security.

5.2 How do subscriptions work?

To use the Quirkos cloud after your 14 day trial has expired, you need to have an active subscription. These are billed on a quarterly (3 month), or annual basis. While this is current, you can keep working on your projects with Quirkos cloud, if your subscription lapses or is cancelled, you are able to download existing projects for 6 months, but not work on them.

5.3 Can I still work offline?

Yes, you can download any projects to your local computer, and upload projects which were created offline, or came from colleagues also using Quirkos.

5.4 What happens if I loose my internet connection?

If Quirkos cannot connect to the server during use, you will see a 'Reconnecting...' message. If the connection is re-established, you will be able to keep working on your project, with no loss of data. Otherwise, you will have to wait until the internet connection is active again.

11.2 Other support options

In addition to this full manual, there is also a brief 'Getting Started' guide that takes new users through the main features of Quirkos with a guided step-by-step option, and a PowerPoint guide designed for teaching. Electronic versions of these can be found on our support website: www.quirkos.com/learn-qualitative/learn.html

This website also contains a copy of the FAQs above, and links to various video guides. These are available in 5 minute and 20 minute versions, as well as a series of 'bit guides', which are one minute videos that each explain a single feature or operation. These can be watched in sequence, or users can skip straight to the area they wish to see demonstrated.

We also run regular on-line workshops, which are interactive and viewers can ask questions during the live session. These are recorded, and available for later viewing on our YouTube channel, which also contains all the videos above: www.youtube.com/c/quirkos

Quirkos runs face-to-face workshops, mostly around the UK, and at academic institutions. We also offer bespoke training options, and are working with a network of international trainers to start offering workshops across the world. Details of all our workshops are regularly updated on our workshop page: www.quirkos.com/workshops.html

Our website also contains an on-line forum, in which we make announcements about new features, as well as offering a space where people can ask queries about the software. We check these regularly.

If the above options do not cover your issue, we always try and respond to e-mail support enquiries within one working day (support@quirkos.com) and also have a telephone support service. This is generally restricted to commercial users, but we are usually happy to help out with quick queries and ordering information. The telephone number is **+44 (0) 131 555 3736**, and is operated during standard UK office hours. We also have a Skype channel, username 'quirkos' through which we provide live chat assistance, as well as calls and video help. Using desktop sharing through Skype, we can demonstrate features, or see where users are getting stuck.

Finally, we regularly update our Twitter (www.twitter.com/quirkossoftware), Facebook (www.facebook.com/quirkossoftware) and LinkedIn (www.linkedin.com/company/quirkos) accounts with announcements. Our blog (www.quirkos.com/blog) is updated regularly, with

new articles about using features in Quirkos, updates, and general qualitative research discussion.

11.3 Contact and company information

Quirkos was founded in July 2013, by a team of academic researchers who felt there was a gap in the market for easy to use and affordable qualitative analysis software. After extensive private testing and development by beta testers in academia, local authorities and market research firms, the first release of Quirkos v1.0 was made publicly available in October 2014.

Quirkos continues to provide updates and development for the Quirkos software, as well as support for qualitative researchers across the globe. Our long-term goal is to advance the field of qualitative research by making it accessible to more people, in terms of both usability and cost. We believe that qualitative research is something that everyone should be able to get involved with, and that it can offer answers to complex problems in society.

Quirkos is a Scotland registered limited company (#458174), based in Edinburgh. Our office address is 3 John's Place, Edinburgh, EH6 7EL. The director and founder is Dr Daniel Turner, a qualitative researcher for nearly a decade who had experience with several commercial qualitative research packages, as well as developing some of his own. The lead developer for Quirkos is Lorinc Balog.

Our current advisory board includes Dr Lucy Pickering (Glasgow University), Dr James Hensman (Sheffield University) and Mike Forster (GeoWise).

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