Arbil

for editing and managing IMDI metadata

Arbil manual

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Chapter 1. Introduction

1.1. General Information

Two steps are required in adding a corpus to the MPI Archive. The first involves creating the corpus, editing the metadata and converting it into an archivable format using **ARBIL**(Archive Builder) while the second involves exporting the created/edited corpus to the archive using **LAMUS** .

This manual describes in detail the first step i.e. **Arbil**. For the second step, **Lamus**, please refer to the LAMUS manual [http://www.lat-mpi.eu/tools/lamus/]).

The MPI Archive can ONLY accept corpora which are in the .IMDI format. By creating a corpus through Arbil, you create an IMDI file ready to be exported to the Archive.

Arbil allows you to view all the corpora in the Archive or any other remote location (provided you have access rights).

Corpora from the archive can also be edited through Arbil. If the changes are to be implemented they have to go through **Lamus**.

In short, Arbil allows you to:

1) View the Archive

2) Import metadata from the Archive & edit.

3) Create new corpora, with new metadata and media files.

4) Export the IMDI files, ready to be archived

Changes you make to corpora imported from the Archive will **not** affect the Archive directly, as Arbil merely allows you to make changes on a **local level**, and not to the Archive itself. If you want to upload your changes to the archive, you must export them to LAMUS, which in turn, allows you to submit corpora into the archive.

Arbil is the next generation of the **IMDI** Editor with a more powerful user interface and functionality. This manual contains detailed information on how to use Arbil: create new corpus structures/session nodes, and modify existing corpora. It does not explain the internal structure of IMDI (for more information on the IMDI metadata set, please see the LAT website [http://www.lat-mpi.eu/tools/imdi/]).

For a less detailed program description, see the Arbil User Guide [http://www.lat-mpi.eu/tools/arbil/].

We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation to better meet your needs. Also, in case of problems that are not addressed anywhere in this guide, please use the Arbil Forum [http://tla.mpi.nl/tools/tla-tools/arbil].

1.2. Overview

The way you start working on your data is twofold:

a) you either create a new corpus or

b) make a copy of an already existing corpus or its branch from the server and edit it. Either way, the files you create/edit will be saved on your computer (in the so called **Local Corpus**). This enables you to work off-line in remote locations while still in the field. Changes you make in Arbil will not affect the archive.

Arbil consists of 6 working areas as shown in the figure below:

- 1) **The Remote Corpus** contains locations from the Language Archive. This is where you can view corpora and choose to import.

- 2) **The Menu Bar** allows you to access the main commands

- 3) **The Local Corpus** contains the user's main working area. This is where corpora from the Remote Corpus can be imported and edited. It's also used for creating new corpora.

- 4) **The Files /Favourites (Working Directories)**. This is where you can link directories from your computer to Arbil in order to import media files and create favourite metadata items.

- 5) **The Preview Area** shows metadata of the selected node (In the figure below, it displays the details for "New Corpus"). It changes every time a new node is selected.

- 6) **The Table Area** is where several nodes can be opened, compared, and modified at the same time (In the figure below, the three nodes from the Local Corpus are placed in a table in this area)

Note: You can customise the size of these panes. To make a window larger or smaller place the pointer on the border and drag it in the direction in which you want the window to expand or contract. It is also possible to hide the preview area by unchecking the *show selection preview* from the *options* menu.
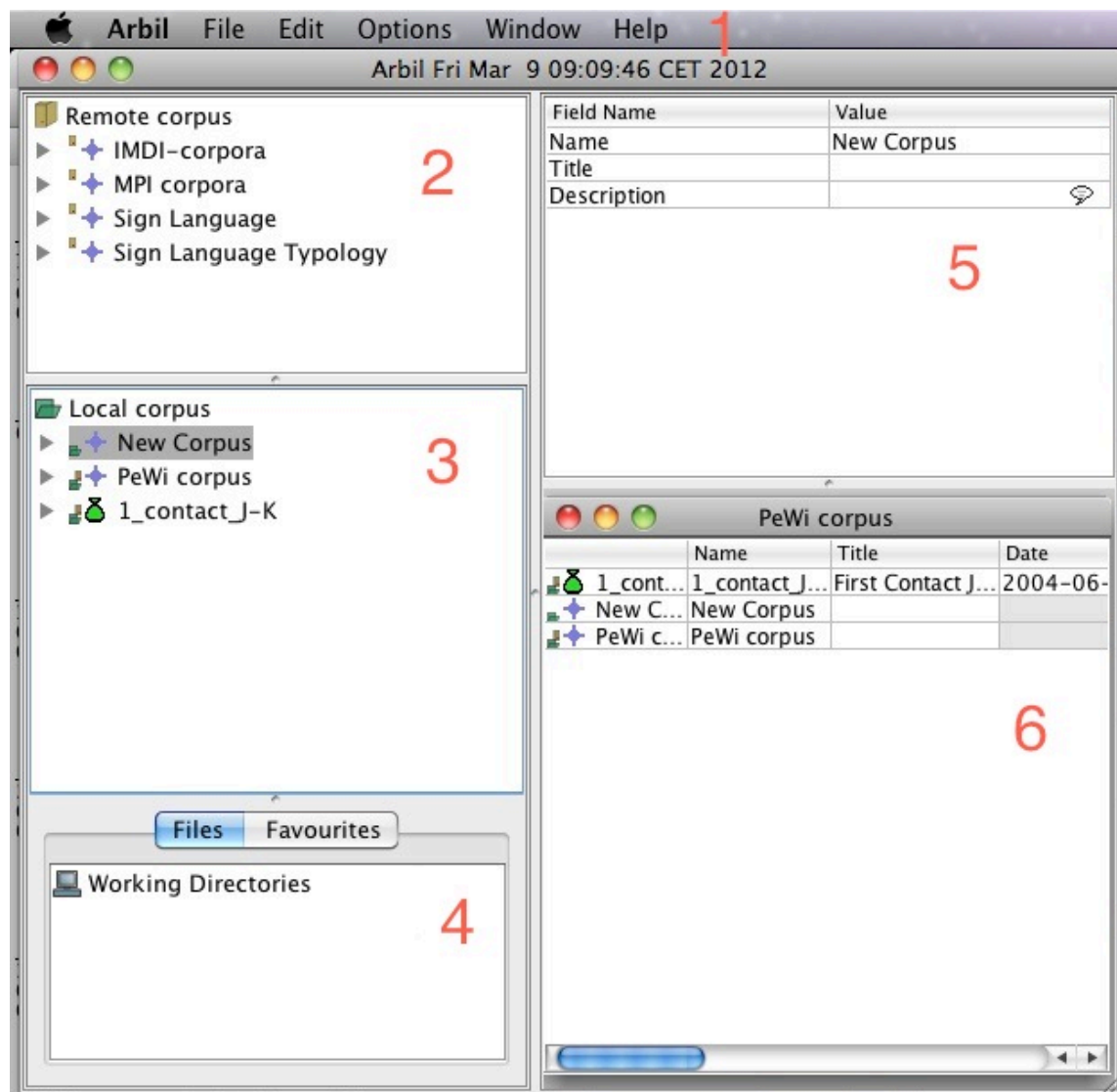

Figure 1.1. Arbil workspace

1.3. Work flow

When working with Arbil, you have to decide whether you are going to work on an existing corpus from the Remote Corpus or create a new corpus. Assuming that you intend to edit metadata in the Archive and add additional media files, you follow the steps 1-6 below.

The Arbil work flow for editing a corpus is as follows:

1) Browse the Remote Corpus and locate the corpus which you intend to edit; drag it from the Remote Corpus pane into the Local Corpus pane so as to import it.

2) Now that the corpus is located in the Local Corpus, you may edit it freely. To edit the metadata, drag the node into the Table Area (6, image 1.1) and edit the fields accordingly (editing can also be done in an external editor). This can be done with several corpora/sessions at once.

3) In order to add resources to sessions (e.g. media files and annotations), you must set up a working directory which links a folder on your computer to Arbil. This means that any media files in this folder will appear in the Working directory area so that Resource files can be added to the sessions of a corpus in your Local Corpus. To add files to your new corpus, drag and drop them from the *files* to the *local corpus* . Now you can edit the metadata following step 2.

4) Stored session elements, such as common actors, can be added to the local corpus from the *favourites*.

5) Once your metadata have been edited correctly and your desired media files have been added to your sessions, you can export the node to a directory (folder) on your computer.

In order to create a new node, add a node in the Local Corpus and follow the same steps.

Note: This is as far as you can get using Arbil.

6) Once the work is finished, Open Lamus [http://www.lat-mpi.eu/tools/lamus/] and import the directory (folder) which contains the corpora. It will then be uploaded to the archive.

Corpus and session nodes are easily edited directly in Arbil (see chapter 4 and chapter 5) but they can also be worked on in an external editor (such as Microsoft Excel or another spreadsheet program) see 7.3.
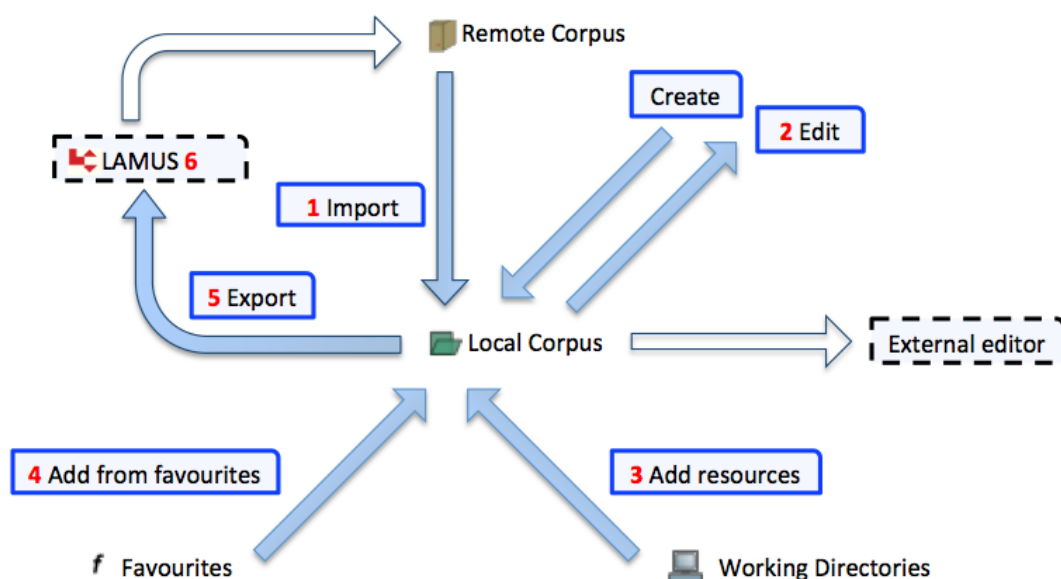

Figure 1.2. Arbil Work flow

In Arbil all work on corpora and sessions takes place in the Local Corpus tree. The various import, export, and edit operations displayed in the figure above, can usually be triggered by right-clicking on elements in the Local Corpus, or via "drag and drop" (e.g.. clicking on an element in the Remote Corpus, holding the mouse key, and dragging the element to the Local Corpus, or to a corpus node within the Local Corpus). Media files (i. e. audio and video recordings) and written resources can also be added to sessions via "drag and drop" from the Working Directories tree in the Files tab. Only for importing previously exported sessions to the local corpus root one has to access the File menu in Arbil's menu bar.

1.4. Arbil icons

The following table defines graphical icons used by Abril:

The top node of the Remote Corpus tree (read only)

The top node of the Local Corpus tree (contains local files)

Top node of the Working Directories tree (short cuts of files in the Local Corpus)

The file is in the Local Corpus (local file)

The file is on the remote server (read only)

The file is located in the local corpus but has been imported from the remote server

Corpus branch

Catalogue

IMDI session

Closed node (sub-components are folded)

Open node (direct sub-components are displayed

IMDI node that contains data

Resource without specified resource link

IMDI node with no data and the number of subnodes indicated.

Node has optional fields but contains no data

Written resource

Video resource

Audio resource

Image resource

Resource is locked and can only be opened by users with access rights.

Resource is unlocked for the user

Info file

In resources: archivable file of an unknown type

File that is not an archivable format and therefore cannot be added as a resource

The node has been added to the list of the favourites and can be duplicated via the favourites add menu

Node is currently being loaded

File not found

Cosed controlled vocabulary

Closed multiple vocabulary. Enter multiple values by inserting a comma (,) between separate entries.

Open controlled vocabulary (text can be selected from a list but new text can also be added)

Open multiple vocabulary by inserting a comma (,) between separate entries

Language selection on field (e.g. Description language)

Chapter 2. Starting Arbil

When you open Arbil for the first time the *wizard* appears and gives you the ability to configure Arbil to your needs. The first window is a welcome window, press *next* to move to the second step of the wizard. In this window you select the metadata format i.e. IMDI or CMDI; you can choose one of them or both. In this manual we will assume just IMDI. The third window gives you the ability to choose the corpora that will appear in the *Remote corpus* box. If you know the URL[1] of a corpus that you will be working on frequently, you can add it to this list so that it will be available on the root level of the tree in the *Remote corpus box*. After finishing with *Remote locations* press *next* and then the *finish* button. You can reopen the wizard through the *help* menu by choosing *Run setup wizard*.
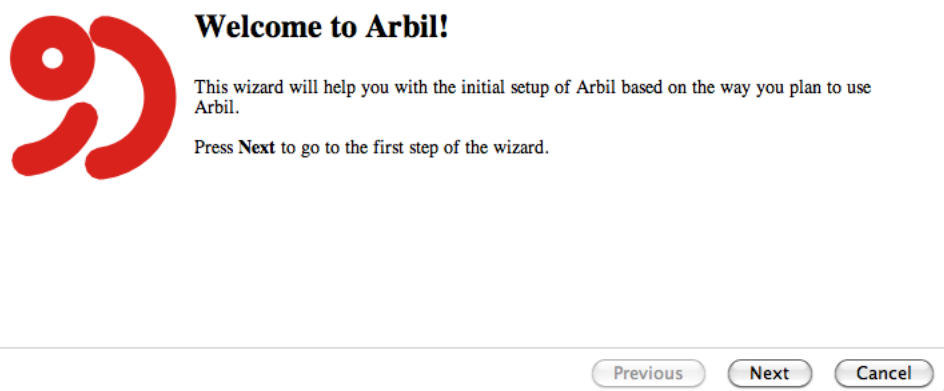
Figure 2.1. Welcome to Arbil
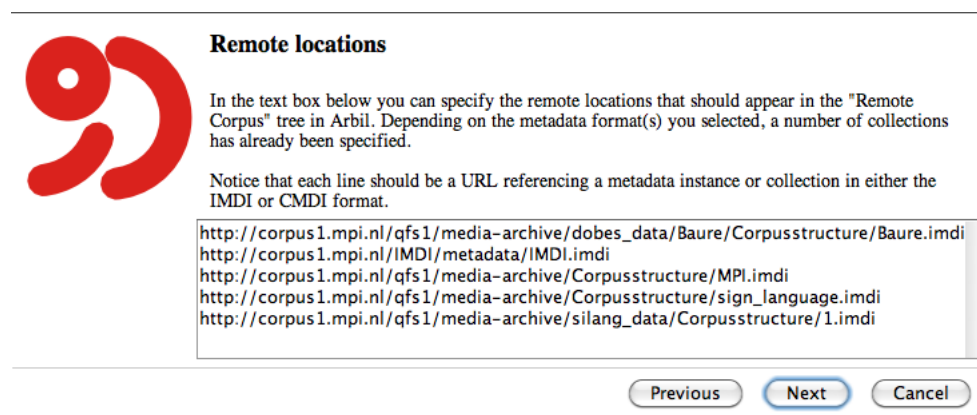
Figure 2.2. Remote locations

Starting Arbil can be done in two ways, either by webstart or by downloading the programme, see here [http://tla.mpi.nl/tools/tla-tools/arbil]. Note that webstart will not work for OpenJDK 7; in this case download the installer version.

You can copy the URL of a corpus by selecting the node in the remote tree in Arbil when the wizard is not showing, right click and select 'Copy'; or get it from the IMDI browser by navigating to the corpus, right click the node and select 'Create bookmark' and copy the URL link. Then you can paste it into the box in the wizard.

Chapter 3. Set-up

3.1. Corpus nodes, sessions and catalogues

It is important to understand the distinction between the following as these elements are essential to the internal structure of Arbil:

corpus node,

corpus session

corpus catalogue

IMDI is organized hierarchically meaning that any number of other corpus nodes can fall under each *corpus node* . These nodes do not describe resources but are meant to construct the corpus structure only. It is the *session nodes* which include information about the actors, content, media file, project, source and written resources.

A *corpus catalogue,* on the other hand, is a general descriptive element of the whole corpus.

3.2. Remote Corpus

The Remote Corpus contains all the corpora located in the archive. Currently it is not possible to add anything to the remote corpus or edit it in general. It is primarily used to view data and also allows you to import corpora to the Local corpus (discussed in Section 3.3) where they can then be modified.

It has a tree-like structure in which each node contains multiple sub-branches. To open any of them, click on the bullet to the left of the node representing the branch or double click the node itself. This can be repeated for the sub-branches as well. In this way you can view the whole structure of the corpus. If you click the bullet again, the node will fold back (the Remote Corpus is very similar in use to the web-based IMDI browser [http://corpus1.mpi.nl/]).

3.2.1. Adding and removing Remote Locations

If you want to use a corpus that is not available under remote corpus, or want to link it at root level, you can add it yourself, provided that you know the URL address of the corpus. Right click on the Remote Corpus top node and choose *Add Remote Location*. In the pop-up window enter the URL and press OK. The corpus should now appear in the main list of the Remote Corpus window.
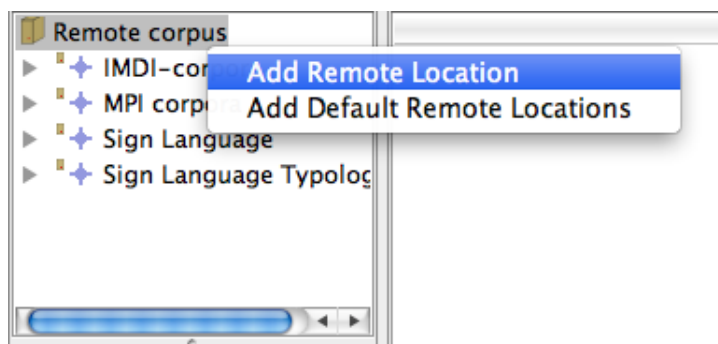

Figure 3.1. Adding a remote location

Since you might not want to use all of the corpora in the Remote Corpus, it is also possible to remove any of the locations of the Remote Corpus at the root level so as to only display the corpora that you need. This can be done at the root level only (see figure 3.1) by right clicking on the node (e.g. for MPI corpora) and selecting *Remove Remote Location*.

If you have removed some corpora, it is always possible to re-add them to the Remote Corpus by right clicking on it and selecting *Add Default Remote Locations*.

To add a subnode to the root level browse to the desired sub corpus, right click on it and choose *Copy*. Then go back to the top node of the Remote Corpus, right click on it, choose *Add Remote Location* and paste the URL in the dialogue box. The sub corpus will now appear in the Remote Corpus tree.

The corpus data on the Remote Corpus are frequently updated by researchers. To be sure that you are working with the newest version of the available data, you can update it manually on the nodes that you believe have been altered. To do this, right click on the specific corpus/session you want to update and select *Reload*. In principle, after new data has been entered into the archive, it can take up to an hour before the Archive is updated.

3.2.2. Viewing Remote Corpus Information

In general, the easiest way to view the information of a node is to drag and drop it from the remote corpus into the grey working area on the bottom right. It is also possible to right click on the selected node and choose*View Selected*. In either case, a window pops up with the desired information listed in tables. This can also enable you to view multiple nodes at the same time.

To compare *multiple* nodes, simply hold Ctrl while clicking on the desired nodes. Then drag them to the working area (or right click and select *View selected)*. You will get a similar scenario to this displayed in the figure (3.2) below.

Note: If you have an existing open table, it is also possible to add additional tree nodes of any form (i.e. sessions, corpora and files). Simply drag any unselected node from the tree structure and drop it on the table. It will be automatically added to the table as a row.
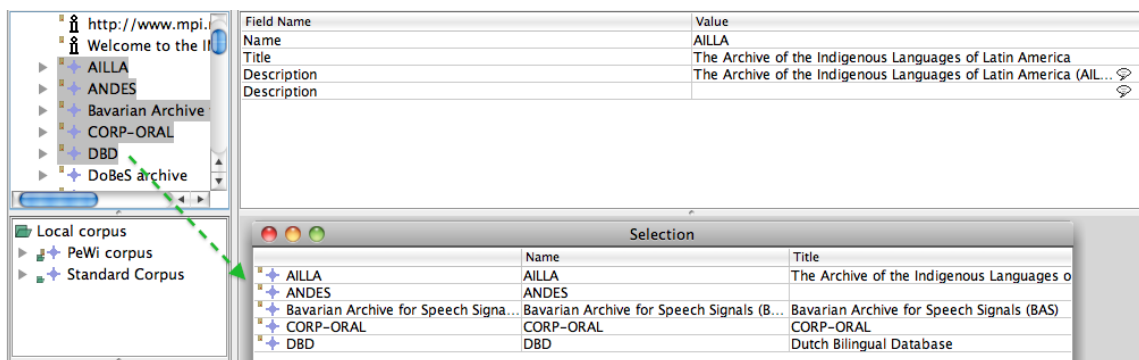
Figure 3.2. Viewing multiple selected corpora

There are also two other quick ways for viewing corpus/session information.

(1) Let your cursor rest above a corpus or session node without clicking. Information about the corpus/session will be displayed in the tooltip under the cursor.

(2) Click on a corpus/session node. Information will be shown up in the top right frame.

When viewing information on multiple corpora, each row corresponds to one corpus, while each column corresponds to one metadata element (data category). By clicking on any of the column names, you can easily sort rows alphabetically within a given table.

In a table that includes several different types of nodes (such as sessions and corpus nodes as listed in the table below) notice that not all the elements of the corpus structure are described in terms of the same data categories (column); for example, there are data categories that belong to a session but not to a corpus node. Such data fields are marked in grey and are not available this is also the case in the Local corpus (see Section 3.3).

	Name	Title	Date	Description
IMEX test session...	IMEX test session ima...	Session file to attach images to...	Unspecified	This is a session node, with so
03	03	Corp-Oral 03	2005-11-12	
02	02	Corp-Oral 02	2005-11-07	
CORP-ORAL	CORP-ORAL	CORP-ORAL		<multiple values>
AILLA	AILLA	The Archive of the Indigenous...		<multiple values>
ANDES	ANDES			The ANDES corpus aims to ma
DBD	DBD	Dutch Bilingual Database		<multiple values>
Bavarian Archive f...	Bavarian Archive for S...	Bavarian Archive for Speech Si...		<multiple values>

Figure 3.3. Not editable cells in a table

In some cases you will see that instead of a value in a cell in the table there is a caption: <multiple values>. This means that there is more than one value for this data category for this particular node. To see these values click on <multiple values> and a new window will pop up with the information shown.

3.3. Local Corpus

The Local Corpus is located beneath the Remote Corpus pane in the Arbil left frame. Remember that the Local Corpus is the main working area and that changes made in the Local Corpus will not affect the Archive. The Local Corpus serves two main functions: 1) Edit existing corpora, 2) Creating new Corpora. Section 3.3.1 explains how local corpora may be modified by either (re)editing the data from the Remote Corpus. Section 3.3.2 explains how to create and subsequently modify new corpora, session nodes or resource files.

3.3.1. Import to Local Corpus

If you have decided to work on a corpus from the Archive you first need to import it from the Remote Corpus to your Local Corpus, and then you can edit it. To do this, locate the node/session from the Remote Corpus and simply drag the item and drop it into the local corpus icon . You can also right click on the corpus node you want to import and choose *Import to Local Corpus.* In the dialogue box that pops up you can check the *Show Details and Options* box in order to:

(1) *Overwrite Local Changes* : Overwrite an existing local corpus/session node from the same original location. When is this option useful? Consider the likely scenario that you have imported a node from the Remote corpus and started editing it. If you want to reset the changes, you can reimport it from the Remote Corpus and check the *overwrite local changes* box. You can apply this option to every branch of the corpora. To do so, first checkShow details and options box; in the window that appears select the function Overwrite local changes.
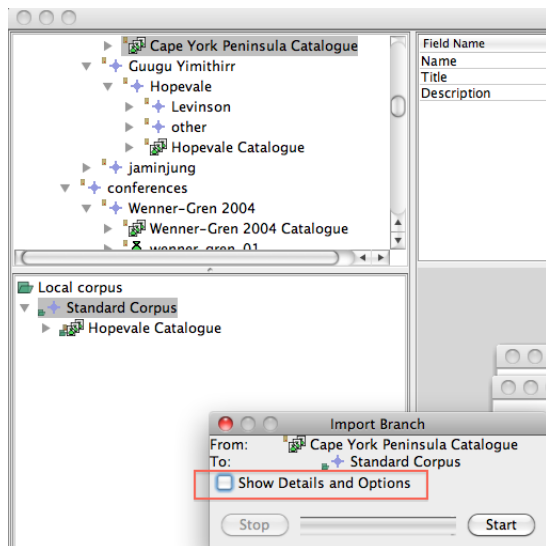
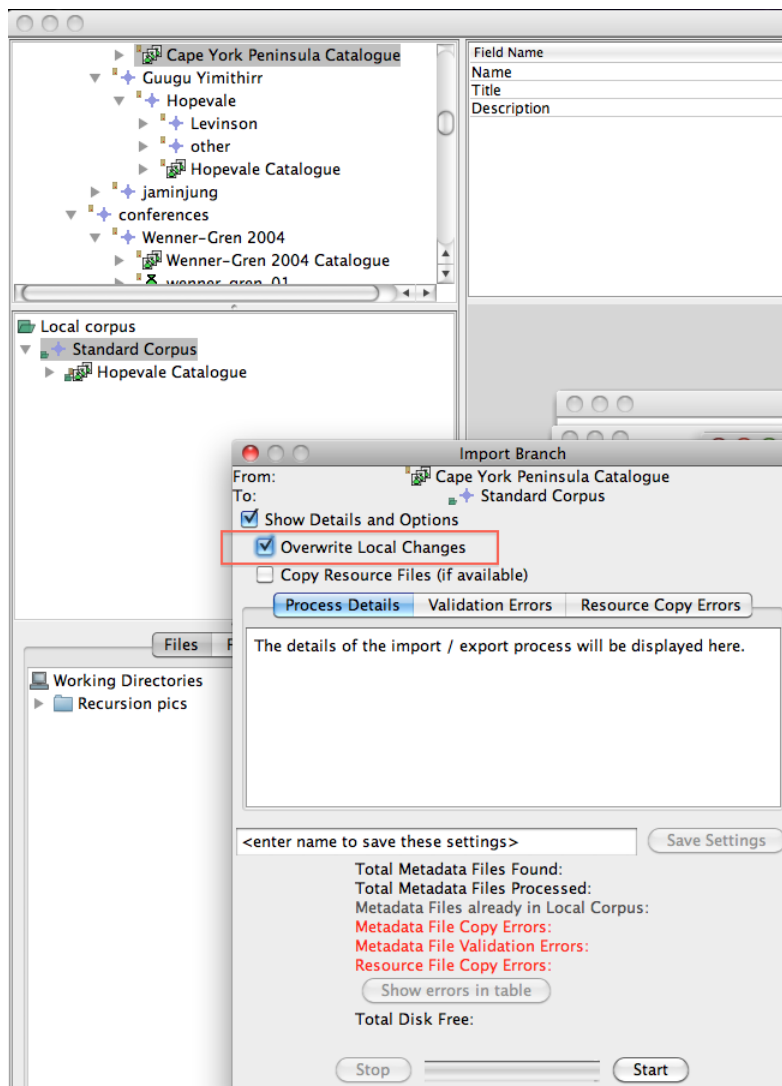**Figure 3.4. Show details and options**

Figure 3.5. Overwrite local changes

In the case that you have uploaded a corpus from your local corpus to the Remote Corpus and you want to edit it again, editing should not be done in the already existing file in your Local Corpus. In this case you have to reimport the corpus from the Remote Corpus where your uploaded it before via Lamus.

(2) *Copy Resource Files*: Import resource files to your computer. Please be aware that copying the resource files may take some time and will use disk space on your computer. When you press *Start*, the branch will be copied to your Local Corpus tree. The process can be interrupted by clicking *Stop*. Note that Arbil cannot deal with resources that need authentication.
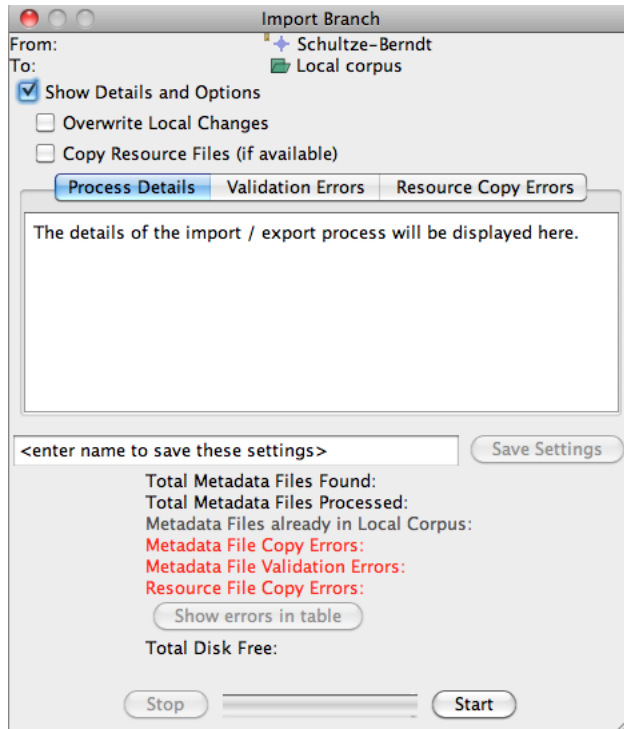

Figure 3.6. Importing a corpus branch to Local Corpus

3.3.2. Creating corpus and session nodes

Instead of copying an existing corpus or corpus nodes from the Remote Corpus, you can also create your own corpus or add session nodes in the local corpus. Moreover, you can also add a catalogue in which the general information about your corpus will be stored.

To do this, select the top node of the Local Corpus (corpus node), right click it and select the option *Add > Catalogue, Add > Corpus* or *Add > Session*. See Chapter 4

3.4. Working Directories

Beneath the Local Corpus window, you will find two different tabs: *Files* and *Favourites*. This section describes *Files* and its *Working Directories* while Section 3.5 focuses on *Favourites*. This window is responsible for linking a folder from your computer to Arbil so that media files can be transferred into your corpus. It is advisable to have one or more folders on your computer that contains all the necessary files that you would like to upload to your corpus. This way, you can simply link this folder and retrieve all the necessary files.

The option *Files* is selected by default. Its *Working Directories* are meant to keep at hand the resources that you want to add to your corpus (such as annotations, audio files, pictures etc.). To add a new Working Directory, right click on the Working Directory node and select *Add Working Directory*. Now browse to the

directory you want to add, select it and click *Open*. In the figure 3.8, the directory "Recursion pics" is about to be added to the Working directory, so as to access the media files present in this folder.
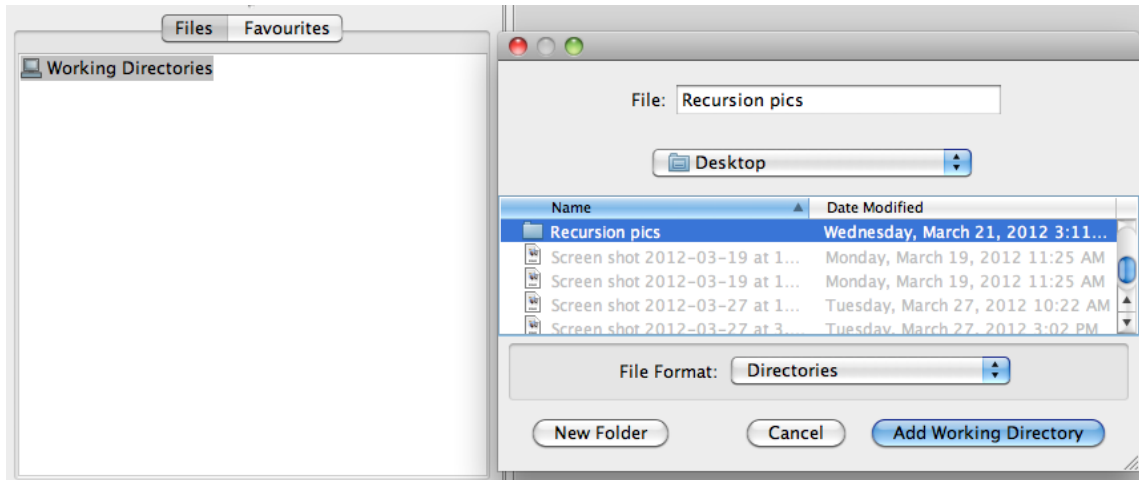

Figure 3.7. Add working directories

After linking a directory to Arbil, you will have access to the folder. To import the media files (e.g.. Droste.jpg) to a session of a corpus, simply drag and drop them into a session of a local corpus.
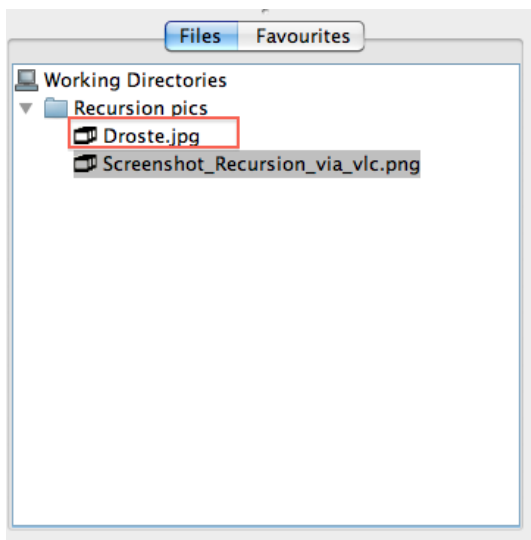

Figure 3.8. Linked folder

Note: If you right click on Working Directories, you will also see that it is possible for Arbil to show you all hidden files (option *Show hidden files*). This option is useful when you want to include corpus files which are normally hidden in your file manager.

Browsing through Working Directories is very similar to browsing through the Remote or the Local Corpus. To open/close a folder click on the bullet or double click on its name. If you have added or modified the content of a directory outside Arbil, by right clicking on the Working Directory, you can update its content in Arbil (the *Reload* option).

Viewing file information is done in the same way as it has been described in Section 3.2.2. (Viewing Remote Corpus Information). Remember that if you place the cursor over a file, an information window will appear that will give you a file description, including the information about whether the file is archivable or not. Archivable files can be uploaded to the server. Image 3.7 shows an example of an archivable file:
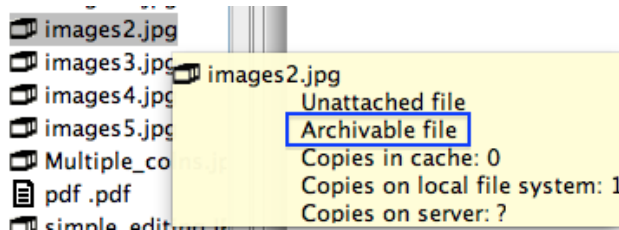
Figure 3.9. Archivable file

Editable files from the Working Directory can also be opened by external applications. Right click a given file (e.g.. audio file, picture) and select *Open in External Application*.

If the file is not archivable, the   icon will appear. If you hold the mouse pointer on the file, you will see the following information:
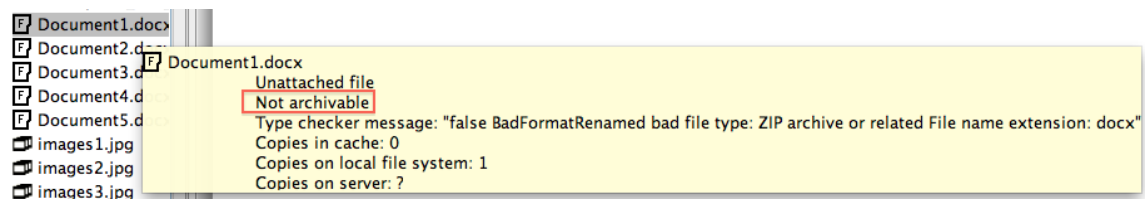

Figure 3.10. Unarchivable file

For the list of accepted file types and formats, check the LAMUS manual [http://www.mpi.nl/corpus/html/lamus/apa.html].

A file that is not supported by Arbil can be kept in Arbil and still be added to a Session, overriding the decision of the internal type checker. Right click on it and select *Override Type Checker Decision*, a pop up window will appear where you have to choose if this is a *media file* or a *written resource*; the   will then change into an icon of either a Media file or a Written Resource file and can be added as a resource file. To open the file right click it again and select *Open in External Application*. Beware that overriding the type checker decision can cause your corpus not to be accepted into the archive (rejected by Lamus).

3.5. Favourites

The tab *Favourites* is meant for storing session elements that you would like to re-use in new sessions, such as *actor, language elements, location* etc. Session elements that can be saved in Favourites are: IMDI sessions ( ), actors, content elements etc). If you have a number of elements in your Favourite List and you are not certain what the content of a given element is, you can always place the cursor over it and wait for the tool tip (information window) to appear.
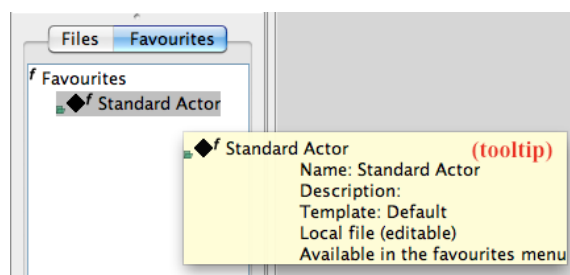

Figure 3.11. Favourites List

3.5.1. Adding elements to favourites

In order to add an element from the local corpus to the Favourites List, right click its node and choose *Add to Favourites List*. The element now appears in the Favourites List. You can also just drag them from the corpus tree structure, right down to the Favourites List. If this element is needed again, you can place it into a preferable location in your Local Corpus either by dragging it from the Favourites list or Copy/Paste it in one of the Local Corpus (sub)branches.
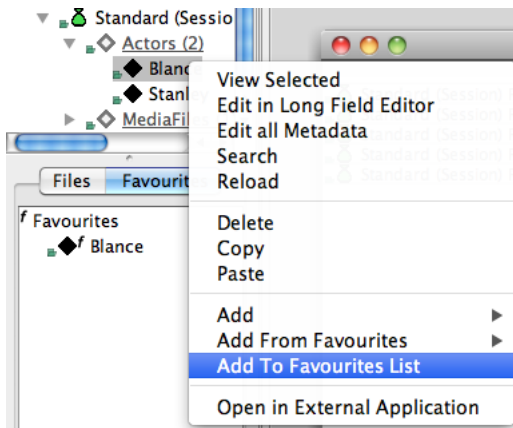

Figure 3.12. Adding to favourites via menu

3.5.2. Adding Favourites to other elements

The items in the Favourite List can be viewed and edited in the same way as the elements of the Local Corpus (right click and View/Edit Selected). This means that if you make changes to your favourites you have to right click on them and select Save Changes to Disk to make them permanent (or use Ctrl/cmd+S). The favourites which have been edited turn in blue which indicates this element still has to be saved locally.

Once you have completed your Favourites list, you can start using it. Let's say you want to add a particular Actor to a session - in order to do this choose the session in question, right click it and choose *Favourites*, *Add from Favourites* and click on the right actor. You can also do this by "drag and drop".
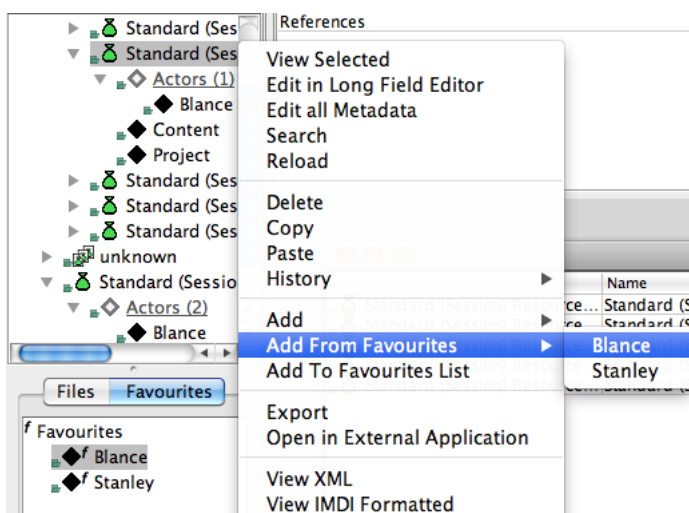

Figure 3.13. Adding favourites to a Session

Chapter 4. Editing the corpus structure

This chapter focuses on how to develop the structure of the Local Corpus.

4.1. Adding a new corpus node

Once you have created/imported a corpus, you can add new corpus branches to any corpus node of the Local Corpus. To do this, right click on a corpus node, scroll down to *Add* and choose *Corpus*. A new corpus (*Standard Corpus*) will be created in the tree structure directly under the node you clicked on. Notice that at the same time a window pops up, in which you can edit the metadata of the new corpus node (such as corpus name etc.).
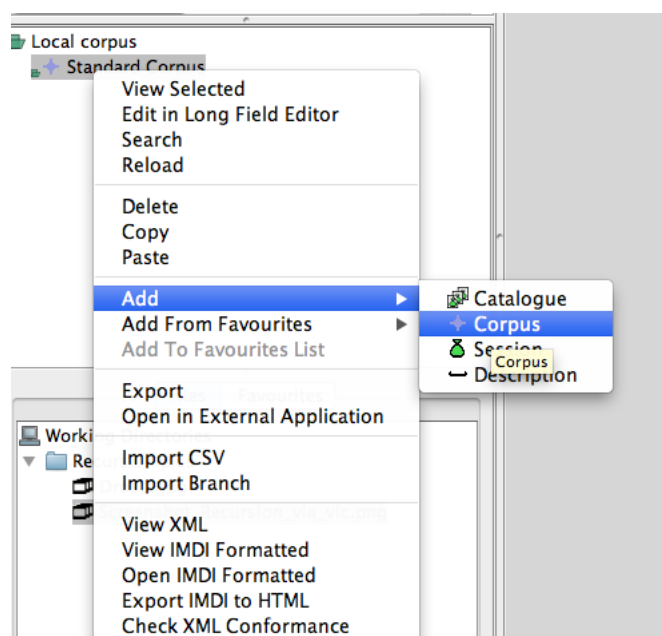

Figure 4.1. Adding a new corpus branch

4.2. Adding a new session node

In addition, a new session node can be added to each corpus node. Right click on a corpus node, scroll down to *Add* and select *Session* (figure 4.2). A new session will be created in the tree structure directly under the branch you have clicked on. Notice that at the same time a window pops up, in which you can again edit the metadata of that session.

Remember that media files can only be added under Session nodes. For a more complete description on how to add media files to sessions, see Section 4.7.
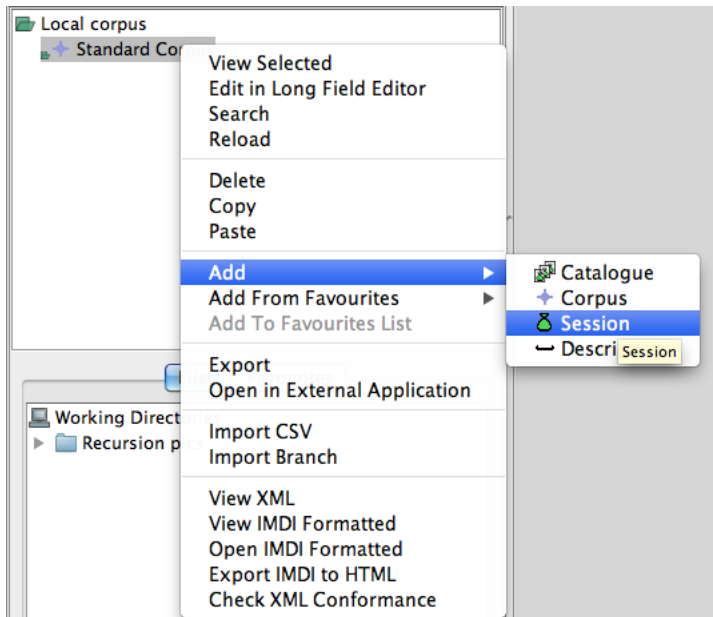
Figure 4.2. Adding a new session node to a corpus branch

4.3. Adding a new catalogue node

The catalogue node is generally meant to provide extensive information about the corpus and its sub-branches (remember that the metadata window of a regular corpus node only contains three fields to begin with). In this node you can insert various types of information about your (sub)corpora. It is available only for the corpus nodes, not the sessions. An example of all the fields contained in a catalogue is displayed below. It is highly advisable to create a catalogue for corpora! To add a new catalogue to a corpus branch, right click a corpus node, scroll down to *Add* and choose *Catalogue*. A catalogue will be created in the tree structure directly under the node.
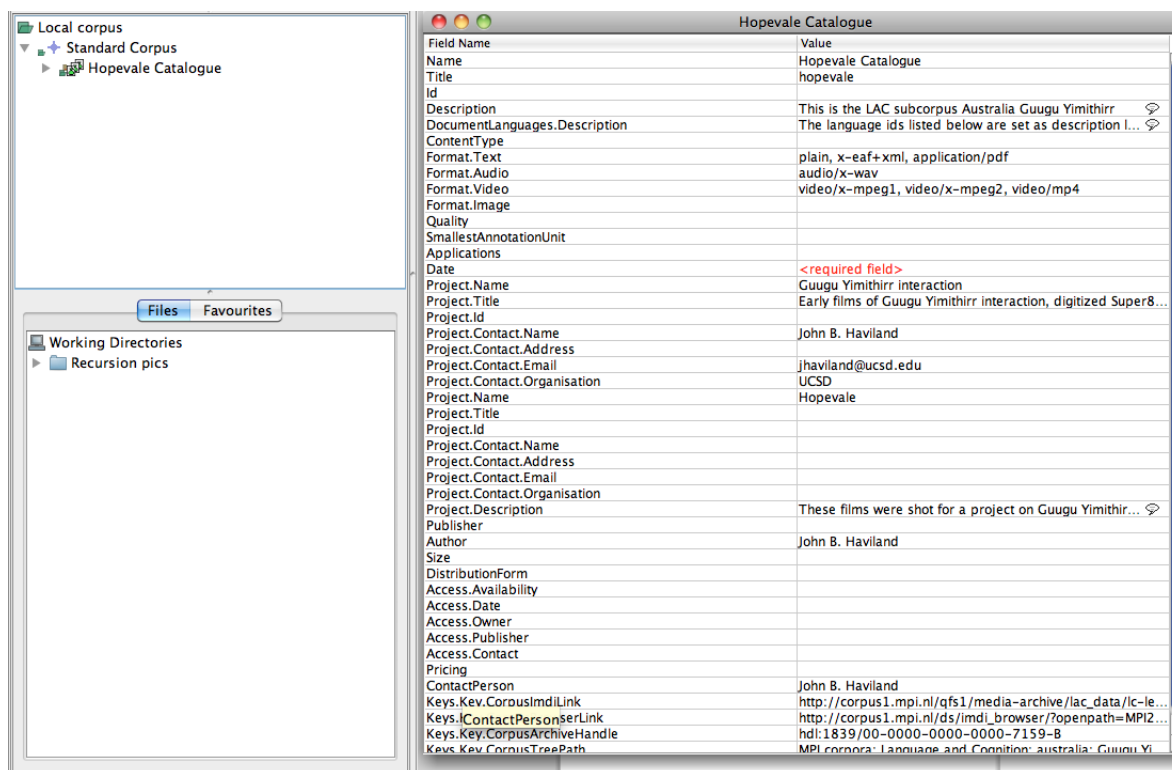
Figure 4.3. Catalogue

Note:A corpus node can only have one catalogue. If you already have a catalogue and decide to create a new one, your old one will be replaced by the new one.

4.4. Adding other components

As shown above, you can add session nodes and catalogues to corpus nodes. Moreover, you can also add additional elements to session nodes and catalogues. If you right click on a catalogue > add, you will see a list of items available in the context menu. Notice how some elements have the ◆ icon, whereas others have a icon ↵. The ◆ icon represents a component that will be displayed in the hierarchy whereas the ↵ icon adds a new field (discussed below).
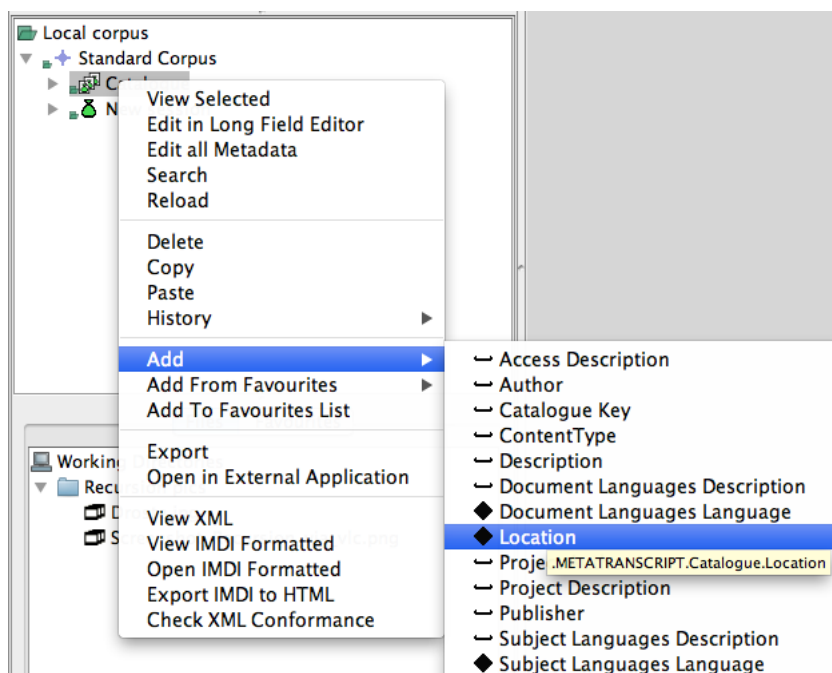
Figure 4.4. Catalogue context menu

4.5. Adding more field components

Generally, every corpus/ session/ catalogue contains a particular set of fields which can be edited. Adding
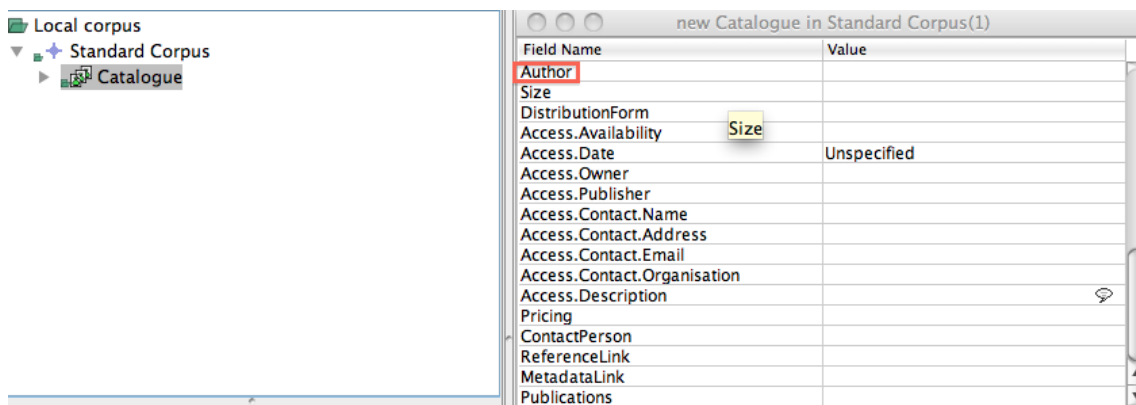⊐ elements implies adding a new metadata field to the selected node.

Figure 4.5. Standard field name

For example, the standard field name includes one field for author. You might want to add an additional
'author' field. To do this, right click on a catalogue, Add > (e.g.. Author). Some fields can be added multiple
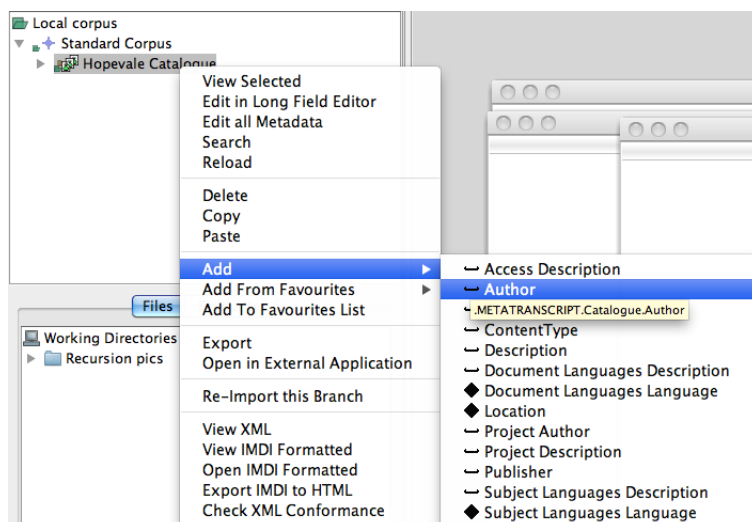times, others can be added only once.

Figure 4.6. Add new metadata field

4.6. Add field with custom name

In case you want to add a field with a custom name to a node in a session right click on the node name in the tree structure and select *Actor Key* (in the example of an actor node). The new field appears as *Keys.Key.Standard Template Key* in the list of the field names. In order to change the name of this new field right click on it, choose *Open in External Editor* and right-click the *Change key name* button and then *OK*. After you have changed the name, click on *Apply* for the name to change. Note that the new name will always start with Keys.Key., which is there by default. Only *key* fields can have their name changed. Note that you can add a field with a custom name (*key* option) only in *Session, Content, Actor, Media File, Written Resource and Source*.

After you have added and customized the new key field(s) and you wish to use it other nodes, you can create a favourite for this node so that you can re-use it instead of repeating the whole process for every new node.

4.7. Adding resource files to a session

There are two ways of adding resource files (e.g. audio, video etc.) to a session:

(1) The easiest way is to drag and drop a given element from the Working Directory to a session node. All information about the resource (e.g.. its size, type etc.) will be filled in automatically.

(2) It is also possible to add it by right clicking on a session node and choosing *Add >Media File* or *Add > Written Resource*. In the latter case however you will have to fill in manually the location of the file, its media type, format and size in the window that will appear.

Note that not all file types are archivable. If a file is not archivable, you will not be able to drag and drop it (any problem with the file will be illustrated by the   icon).
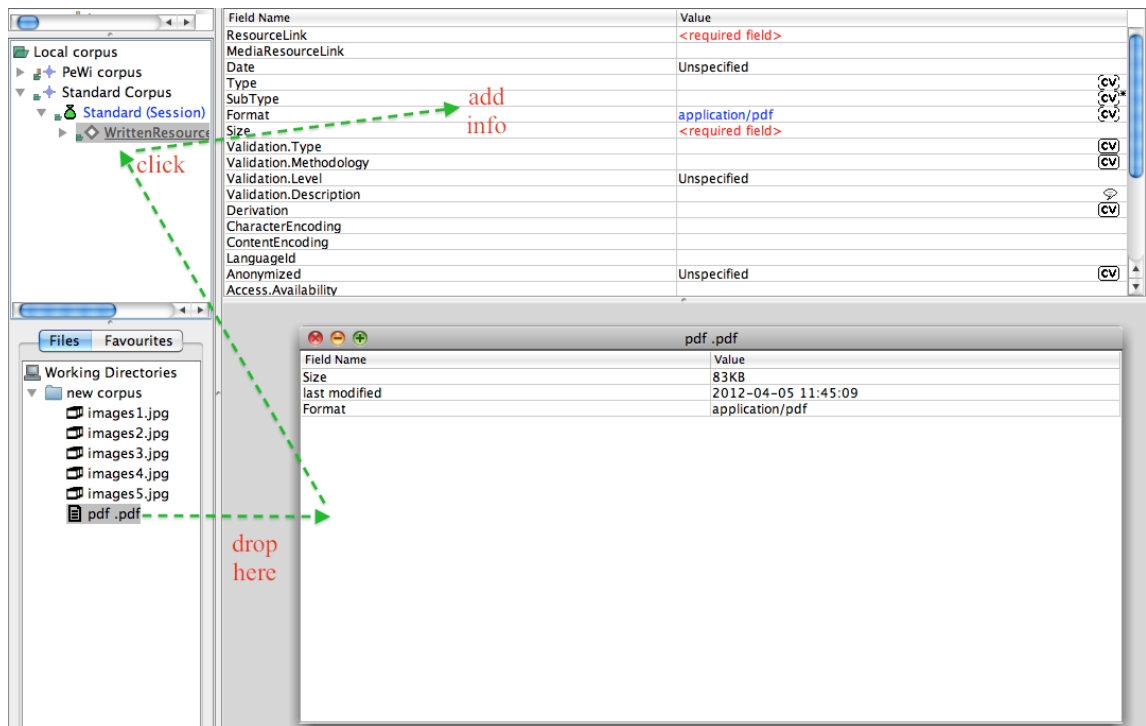
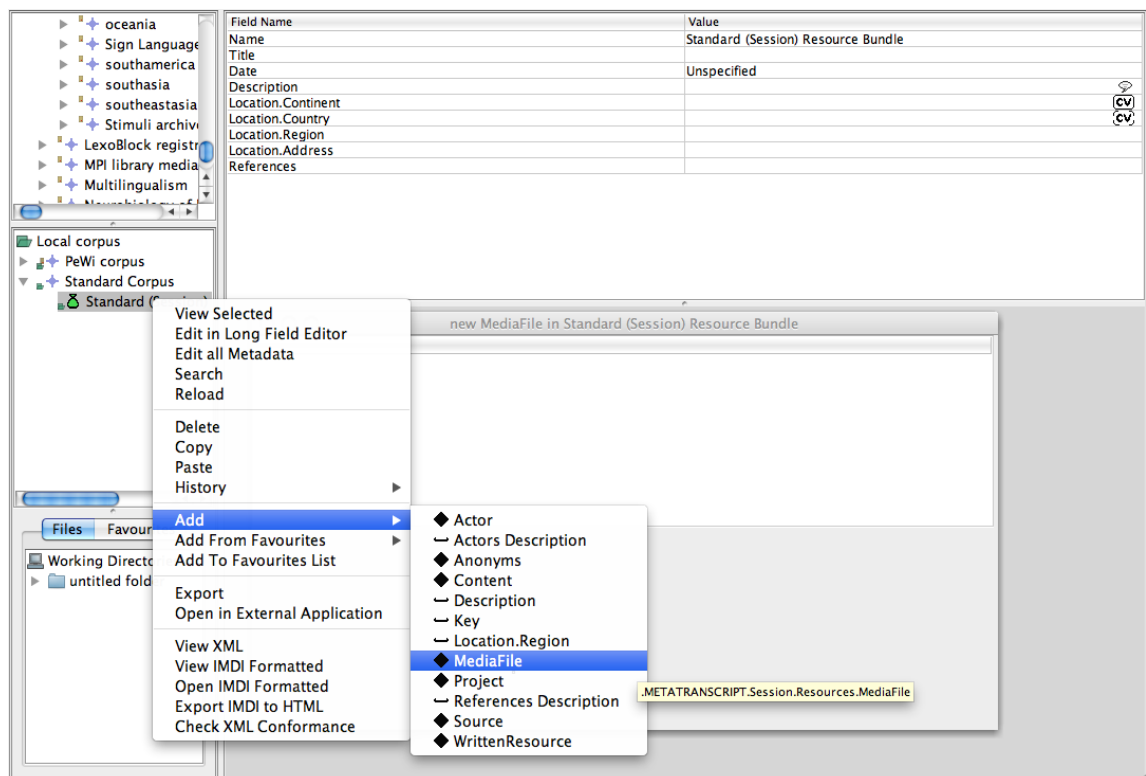**Figure 4.7. Adding a written resource by dragging and dropping**

Figure 4.8. Adding a media file via the menu

It is also possible to add resources, either from a remote location, i.e. the archive or the web, manually. This can be done by right clicking on a node that supports a resource location (IMDI media file or written resource) select "insert manual resource location" and add the URL in the window that appears.
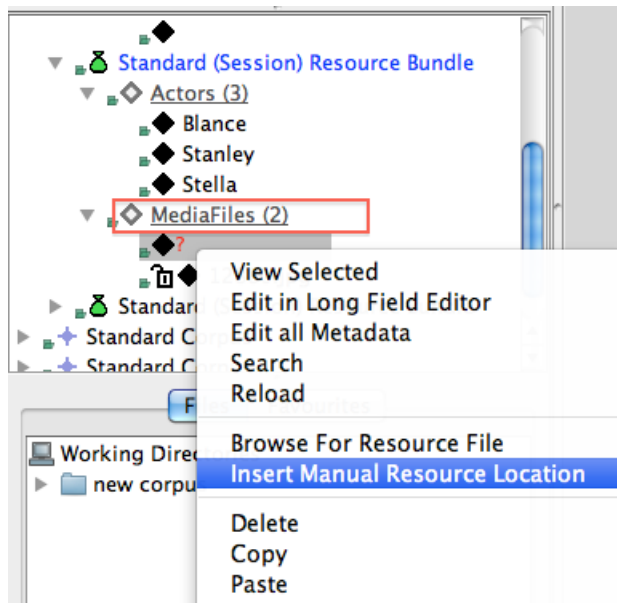
Figure 4.9. Insert manual remote resources

4.8. Moving corpus and session nodes

Arbil allows to move both corpus and session nodes from one location to another. To do it, select in your Local Corpus a corpus/session you would like to move and drag and drop it to the new location. It is also possible to move subnodes of sessions, e.g. Actors, across sessions.

4.9. Deleting corpus elements

In order to delete corpus branches, sessions or session components, right click on a chosen element and select *Delete*. If you want to remove several elements at a time, choose them all while holding the Ctrl (or Shift) button. Right click on the selected elements and chose *Delete*. In each case you will have to confirm the deletion.

4.10. Saving changes

The changes to your files are not made automatically. You have to save them yourself. To save the changes made in your local corpus, right click on the node and choose *Save Changes to Disk* or use the key short cut (i.e. Ctrl+S/cmd+S).

Chapter 5. Editing the metadata

5.1. Editing one cell

To edit a corpus or session just click on it (A), or select it and choose *view selected* (B). In the window that appears, click on the field you want to change. Type in the new value and press *Enter* to go to the next value. If the value you have typed is too long for the cell, the *long field editor* will open automatically in order to edit this value.section 5.2
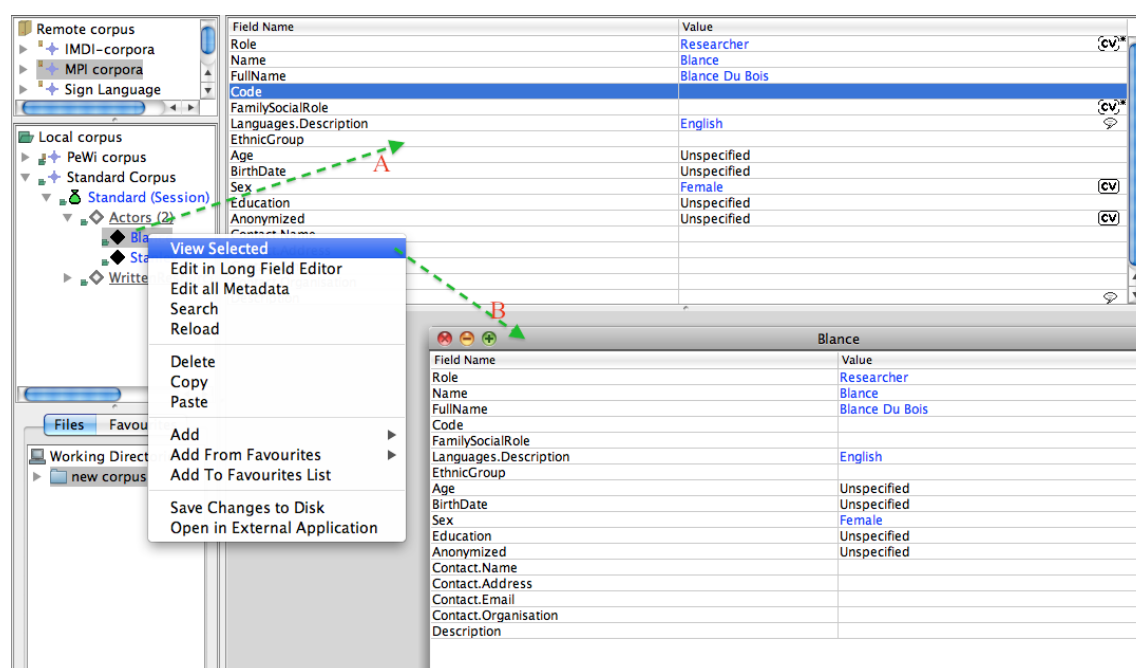

Figure 5.1. Editing

Some of the cells have either an open [cv] , [cv]* or a closed [cv] , [cv]*vocabulary (figure 5.2). In both cases when you double click the field you need, a drop-down menu will appear showing you available default values. In the case of open vocabulary fields, you are permitted to type your own value (if, for example, you would like to have "grandfather" as a family role but you cannot find it in the list). In closed vocabulary fields, however, it is only possible to choose from the list (e.g. sex: male/female). Notice that when you enter a value that is incorrect, the text will be shown in red; otherwise it is in blue. In the case of [cv]* you can add multiple values (either from the drop down, or your own) by inserting a comma (,) between the values (typing the first letter of the new value will offer a suggested value from the drop down). In controlled vocabulary fields 'type-ahead' functionality is available; to confirm a suggestion, press ENTER or type a comma in multi-CV to add another value.

Figure 5.2. Closed vocabularies

In some descriptive elements, you will also see a drop-down menu from which you can choose a language which you use to describe the data information. To do so, click in the right corner of the field.

Figure 5.3. Choosing a language, click on desired language

5.2. Long field editor

The Long Field Editor (LFE) allows the user to edit long values, such as descriptions. The LFE works either automatically or manually. In the case you want to add a long description in a cell you can right click on the field in the table and select *Open in Long Field Editor*. In the window that appears you can add and edit the text. In the case that a field already contains a long value and you wish to edit it, double click on it; the LFE will open automatically.

The LFE can be opened on a selected node by right clicking on it and selecting *View/Edit in Long Field Editor*. The LFE opens on the first field under the node, you can then navigate in the fields by using the *previous* and *next* buttons (1). The field you are currently in appears on the top of the LFE (2). The text appears and can be edited in the white area (3).

Changes made in the LFE get applied to the field as soon as the LFE is closed or by pressing the *previous* or *next* buttons.
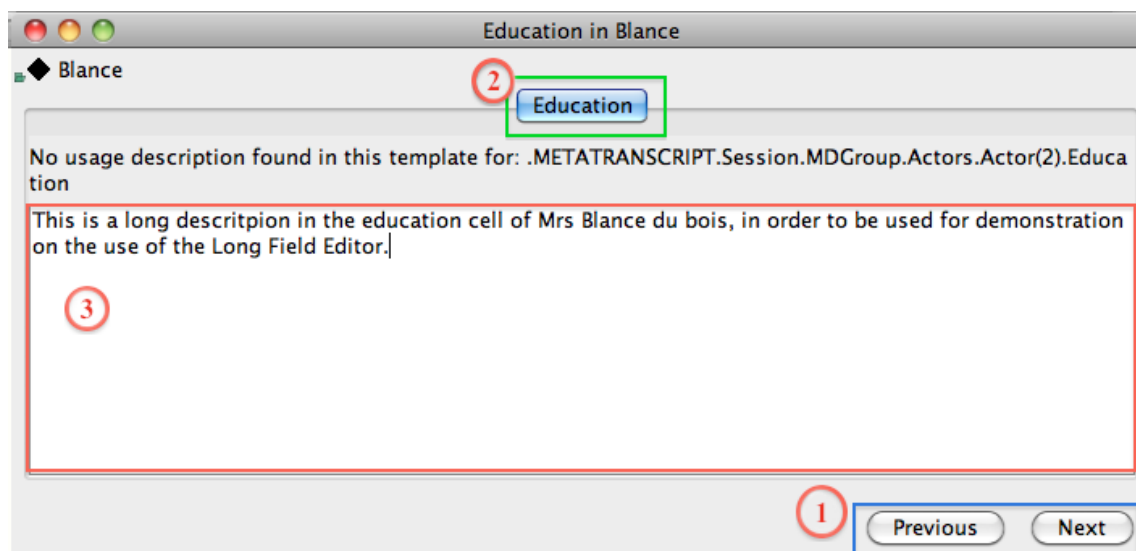
Figure 5.4. Long Field Editor

5.3. Editing multiple cells

It will often be the case that a piece of information (e.g.. continent, country, address etc.) has to be repeated across the sessions. Instead of typing this data in every session, you can copy-paste it at once into all the relevant fields. Choose the relevant sessions by holding Ctrl and clicking on them. Then right click one of the selected items and choose *View/Edit*. You will see a window appearing in which you can edit the sessions.

To edit the selected sessions, take the following steps:

1. Fill one of the session fields / choose a default value from the drop-down menu that you need (e.g. Country). If one of these session fields is already filled in with the relevant information, skip this step.

2. Right click on one of the selected cell and select *Copy*.

3. Select the fields where you want to paste the copied information (one by one) by holding Ctrl and clicking on them. Right click on one of the selected fields and chose *Paste*.
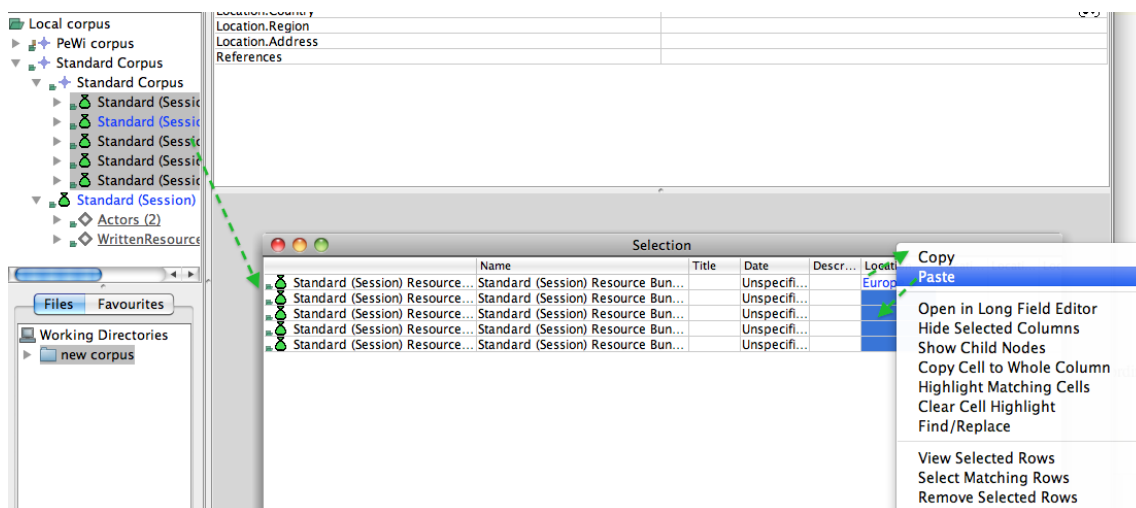

Figure 5.5. Pasting data into multiple cells

If you want to copy a value into <u>all</u> the cells of a certain column, select the field you want you copy, right click it and chose *Copy Cell to Whole Column*. All the cells in the column will be changed accordingly. Note, however, that this option is only applicable to one column at a time.
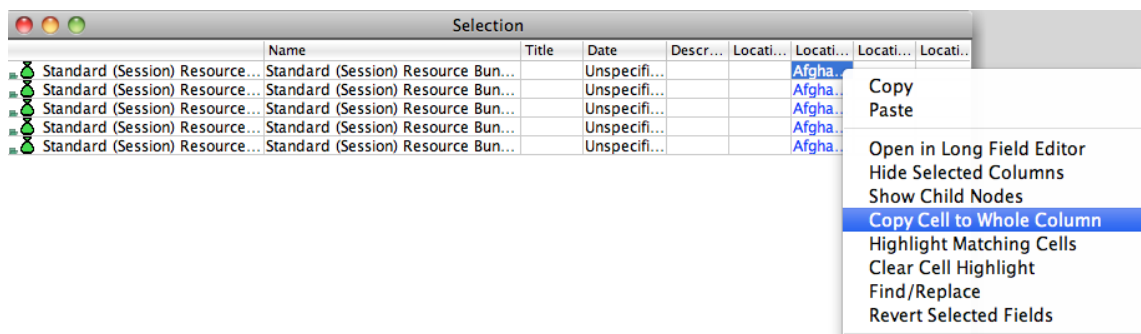
Figure 5.6. Copying the value of a cell to all the cells of a column

It is also possible to simultaneously copy-paste values to multiple columns. To do that, while holding Ctrl (or cmd), select the relevant cells of a metadata file, right click one of them and choose *Copy*.
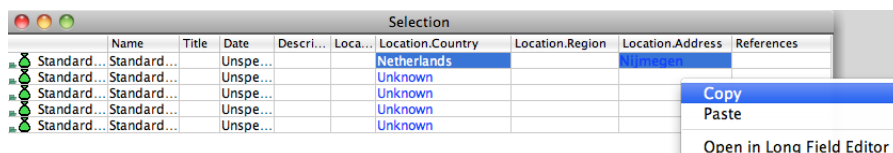

Figure 5.7. Copying values from columns in one metadata file

Now choose the cells within the selected columns in to which you want to paste the copied value by Ctrl (or cmd) clicking on them (you can also draw a box over them with the cursor), right click one of the cells and select *Paste*. The values will be pasted into the appropriate columns.

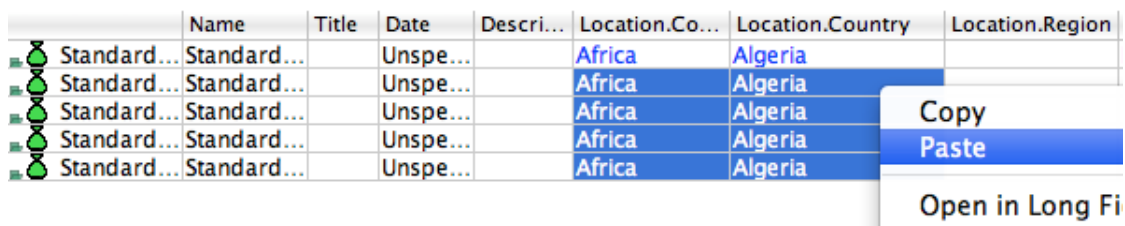Note that you cannot copy-paste data from different rows, only from different columns.

Figure 5.8. Pasting values from two columns into several metadata files

5.3.1. *Find* and *Replace*

Another option in editing cells is the *Find and Replace* option activated by pressing CTRL+F when in a table, or by right clicking on a cell and selecting "Find/Replace". In this case a line appears at the bottom of the table with two boxes (figure 5.7); the left box is used to define the term you intend to find in order to replace. Replacing is not done by typing in each cell you intend to change, but by adding the new term in the right box. By pressing the *Find Next* key the term specified in the first box is highlighted in the table, you can either change it by pressing the *Replace Selected* key, or skip it and move to the next by pressing *Find Next*. Once you have moved to the next term in the table, you cannot go to a previous. In that case you will have to select a previous cell to start from and continue searching.

Figure 5.9. Find and Replace

5.4. Editing All Metadata of a Subnode

It is also possible for the user of Arbil to get access to all metadata under a node in a hierarchical order (figure 5.10), as the order of the (sub)sessions, so as to edit them. To do this, right click on a session on the tree view and select "*edit all metadata*" (this function cannot be used on Corpus nodes). Editing can be done in all cells in the way it has already been described.

Figure 5.10. Edit/view all metadata

5.5. Customizing Column Views

When viewing/editing multiple elements in a table, sometimes there are a lot of columns to go through. It is possible to reduce them by choosing which columns you want to see or which columns you want to hide. Right click the header of any column i.e. "Name" and select the option *Edit This Column View*. In the window that pops up, you can select columns that you want to show *(Show Only)* or hide *(Hide)* (if you check only the *Hide* column, the unchecked names will appear in the window). It is important to know that the column(s) which disappear from this particular window, are not removed from the corpus itself.
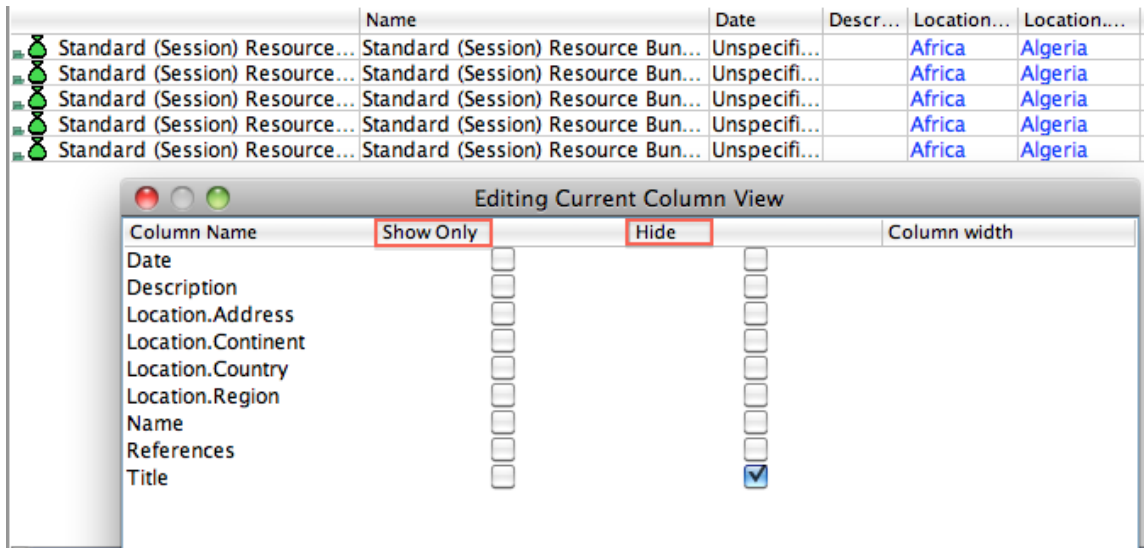
Figure 5.11. Choosing columns

So let's say that you have *Date* and *Description* marked as *Show only* (figure 5.12). This means that if you would now use this window to check out a node that has other categories than the ones selected with the option *Show only*, then these categories will not be displayed. So the window in this particular example will only have two columns.

If you have a table with: Name, Title and Description and you set the Description to Hide, it means that Description will never be shown. But if the elements that you add to the window have other categories, these will still be displayed and the number of columns will increase accordingly (assuming that you don't use the show only option).

One more option of customizing the column view is the function *Limit View to Current Columns*, which you will find by right clicking the header of a column. When chosen, this mode will freeze the current columns view, meaning that no matter what element you add to the window, only the current categories (columns) will be shown.

It is also possible to set the width of the columns by dragging the right or left edge of the column. This applies to arbitrary open tables as well as saved column views.
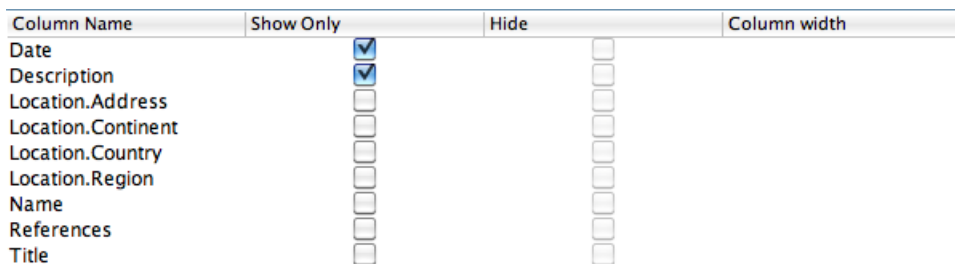

Figure 5.12. Editing column view

It is also possible to hide a column from the current view. To do this, right click the column that you do not want to be displayed and choose *This column* and then *Hide Column*.
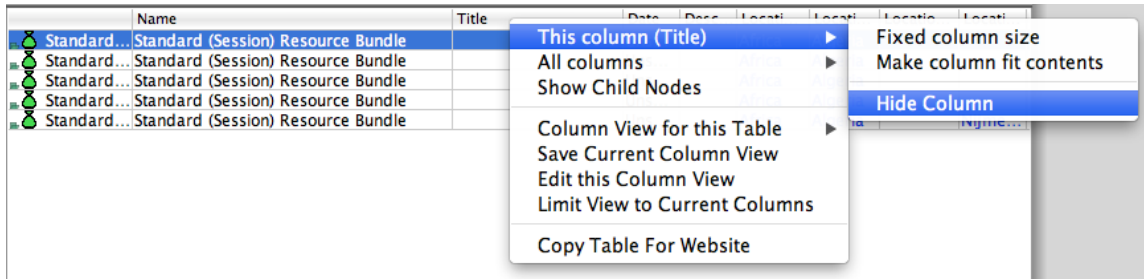
Figure 5.13. Hiding one column

Once you have hidden the unnecessary columns, you can save this view by right clicking any of the headers of the columns and choosing *Save Current Column View*. Give the column view a name and select *OK*.
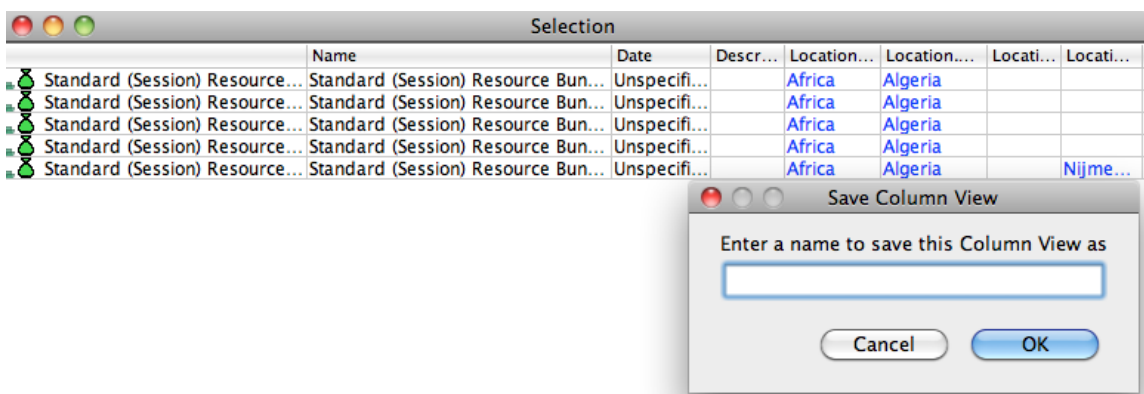

Figure 5.14. Saving Column View

Currently it is not possible to delete the column views that you create.

The view you have just saved is also applicable to other tables. Right click the header column of the new Table, select *Column View for this Table* and choose the view you want. By default, there are two views already defined and cannot be modified: <u>All</u> (i.e. all columns are displayed), and <u>Minimal</u> (i.e. displaying only *Name*, *Title* and *Description*). It is important not to forget that each view you create initially is window specific. In this way you can use different views for different windows.

It is also possible to set your modified column view as the default column view that will appear in all tables you open. To do this go to *options* in Arbil toolbar, scroll to *Column View For New Tables* and then select the preferred column view. This is now your default column view. (figure 5.15/1).
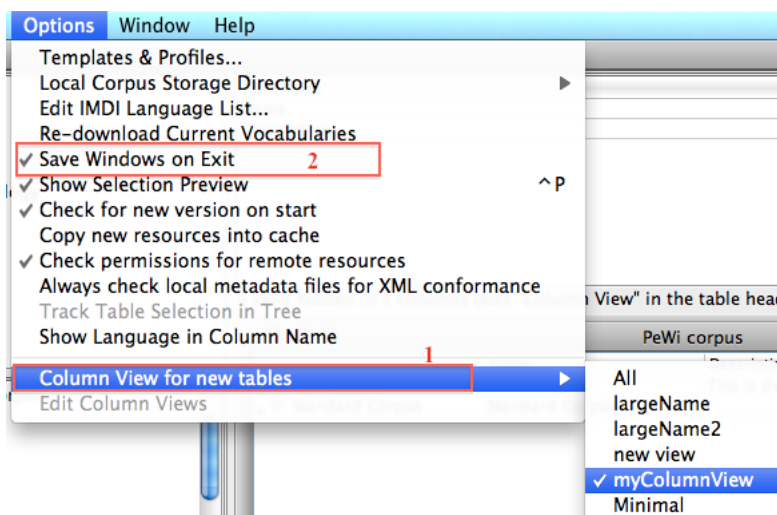
Figure 5.15. Setting new default column view

Note: Column views that have been modified and multiple open windows in the working area, either saved or unsaved, are available after closing Arbil once the programme starts again exactly in the same way they were before closing it provided the *Save Windows on Exit* is activated in the *Options* menu (figure 5.15/2).

5.6. Highlighting cells with the same value

If you want to see, which cells in a table have the same value, right click the appropriate cell and choose *Highlight Matching Cells.* Cells with the same value will be highlighted. You can do this with more than one cell - each new group of matching cells will be given a different colour. To remove the highlight, right click on a cell and choose: *Clear Cell Highlight*, which is visible in the above figure as well.
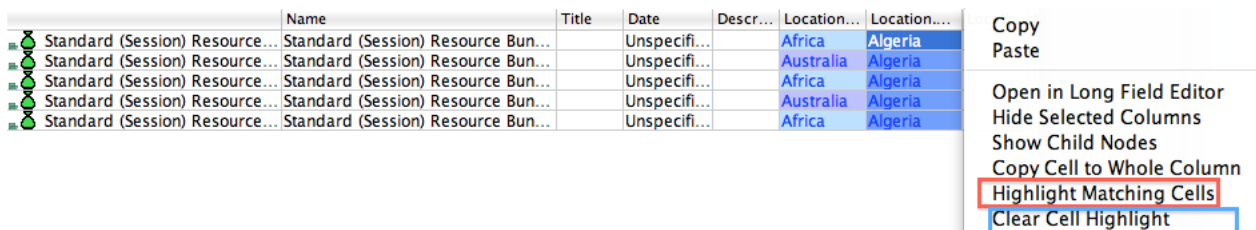

Figure 5.16. Highlighting cells

Chapter 6. Searching

6.1. Searching Local Corpus

The search option allows you to find a value(s) throughout either the Local Corpus or the Remote Corpus (paragraph 6.2). To do that, right click on a given node you want to search in and select *Search* (you might also choose a number of nodes by holding Ctrl and clicking on them). A window will appear in which you can specify where exactly you want to search e.g. within Corpus, Session, Catalogue, Actor etc.
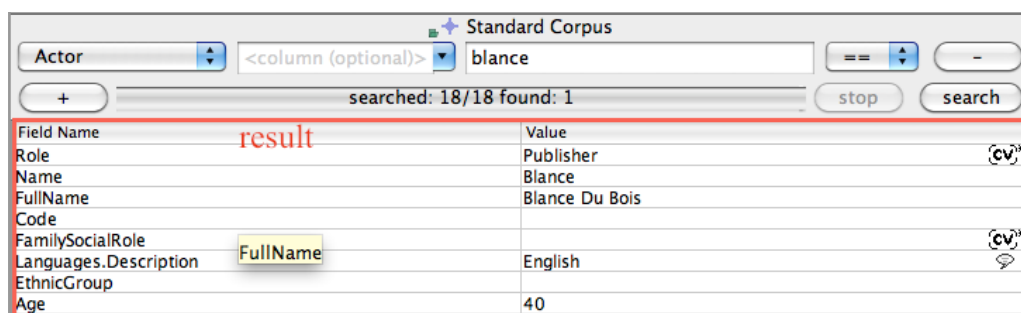

Figure 6.1. Selecting search locations

In the search window you can further specify in which column you want to search. By clicking on *column* a drop down list appears which contains pre-defined common values and previously entered column names; it is also possible to add any column name to this list, or remove arbitrary items by selecting the value and pressing *shift* and *delete*; deleted values again have to be retyped and searched for in order to appear in the drop down list again. After specifying the column (i.e. Name), give the value name you look for, e.g. "Blance", and click on *Search*.

By selecting either *Equal* (== ▼) or *Unequal* (!= ▼), you will need to specify whether your search results should match the word you filled in or rather show you where this word does not appear.

6.2. Searching Remote Corpus

In the first row of the remote search it is necessary to specify what you are looking for in the remote corpus so that the search will be narrowed down within the remote corpus (figure 6.2). The results based on the first row provide all the nodes from all the sessions with this term (green box below). These results can be reduced by specifying more values in the second search row (red box). After specifying values in the second line searching in the remote corpus is similar to searching in the local corpus.
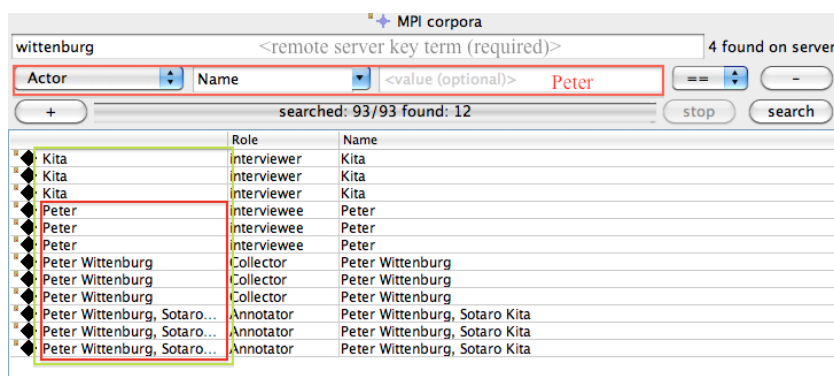

Figure 6.2. Searching Remote Corpus

Chapter 7. Exporting and Importing data

7.1. Exporting data from Arbil

After creating new corpus branches or editing corpora from an already existing archive, you can save your files and upload them to the appropriate archive. In order to do this you need to export your files from Arbil. To do this select the modified nodes or a branch that contains the modified parts, right click them and select *Export*. A dialogue box will pop up, in which you choose the location of the export and the name of the file. To complete the export, click on *Export Branch Destination Directory*.

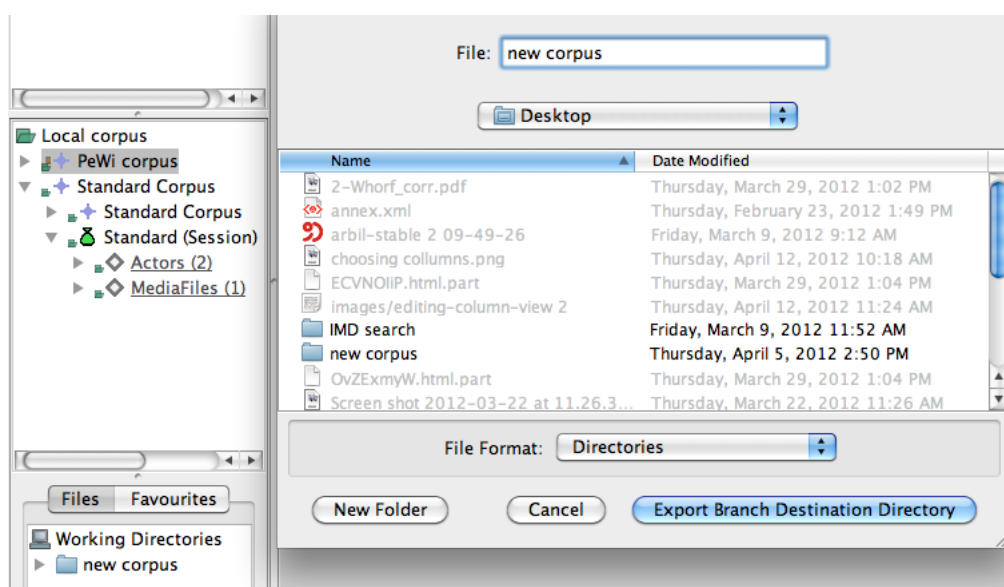**Figure 7.1. Exporting files**

The following message will appear:

Figure 7.2. Export alert message

Selecting *OK* will lead you to a new message window where, before clicking on *Start*, you can chose the option *Show Details and Options*:
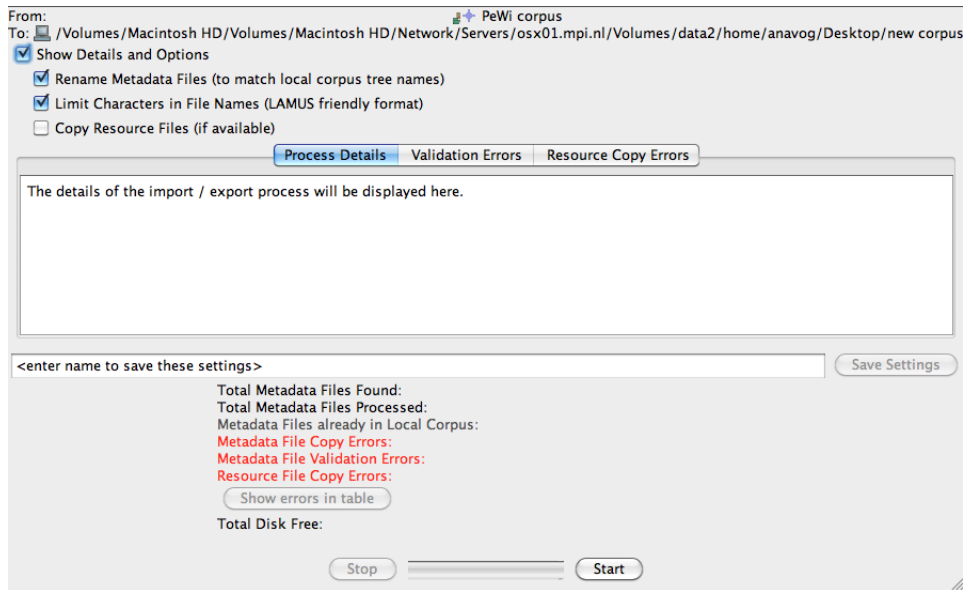
Figure 7.3. Export window with details

The options *Rename Metadata Files* and *Limit Characters in File Names* are already checked. The option *Copy Resource Files* are explained in the import to Local Corpus section (3.3.1).

7.2. Importing data into Arbil

In Arbil there is a number of possibilities to import the data. The first way to import data is from the Remote corpus to the Local corpus by right clicking on the remote corpus and selecting import to local corpus, or by "drag and drop".

In the case you want to import data from you local computer disk, or the network, you can do this from the menu bar by going to *Files*, *Import* and then selecting the data from your local disk, or the network; your data is imported at the root level.

Import Branch (i.e.. importing a piece of your corpus) gives you the ability to import part of your corpus from your disk to the Local corpus. *Reimport* (i.e.. re-importing form the remote corpus): in order to make changes to a corpus you have already exported to the Remote corpus via Lamus it is essential to reimport it to the Local corpus and select *overwrite changes*.

Import CSV (i.e. in the table format) gives you the ability to import edited data in the Local corpus in the form of a table (for details see section 7.3 below).

7.3. Using an External Editor

As has been noted already, it is possible to open, view and modify the data using external editors such as spread sheets or text editors. Overall the process is done by moving data from Arbil to the external editor, making the necessary changes, and then moving them back to Arbil.

Moving data back to Arbil however posses some restrictions; for example, if you copy multiple rows in a table, the data format cannot be pasted back into Arbil. However it can still be viewed and edited in an external editor. For this reason after editing data in an external editor, such as Microsoft Excel, you can save you your data in csv format, and then import them to Arbil by right clicking on the preferred node and selecting *import CSV*. This way gives you the ability to import the data in a table format; in any other case you will have to import the edited data column by column, but not all at once.

If cells in a table corresponding to a single metadata file are copied, then the data will be in a format that can then be pasted back into any table in Arbil, provided that the data maintains the same formatting.

To open data in an external editor i.e. Ms Excel, select and copy the data from the table , then paste them in the editor you wish to use.
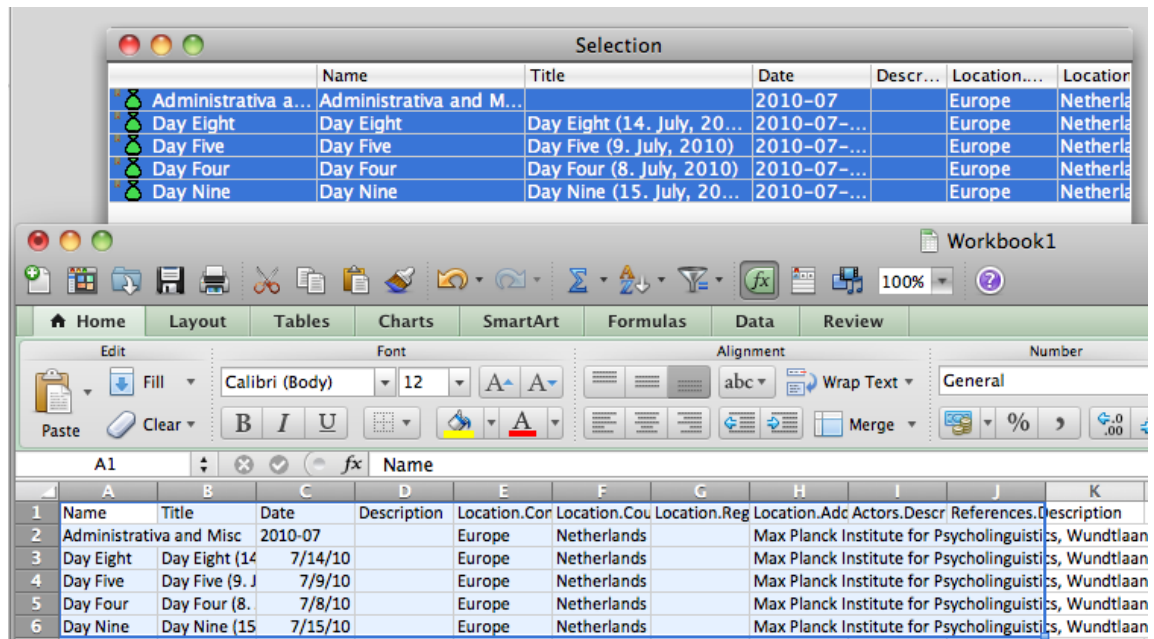

Figure 7.4. Editing data in an External editor

7.4. External application

By selecting *Open in External Application* you can view, and edit, resourses and metadata in the application that your computer chooses by default, such as a media player for a video file, or a text editor for a text file.
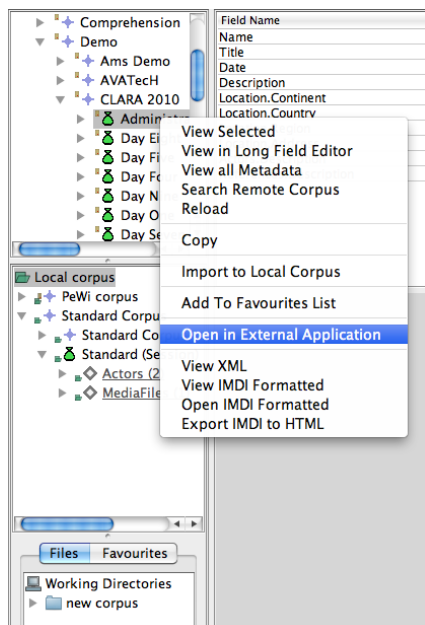

Figure 7.5. Viewing data in external application

Chapter 8. Exiting Arbil

Before exiting Arbil make sure that you have saved all your changes. This can easily be done by the key short-cut CTRL+S.

You can exit Arbil by closing the main window, or through file -> exit on Wi§ndows or Linux, or Arbil -> *quit Arbil* on Mac OS. In case of unsaved changes a message will appear and ask if you wish to *save changes before exiting*; choose *yes* or *no*, Arbil is now closed.

Chapter 9. Shortcut Keys

In Arbil you can use the following shortcuts:

Table 9.1. General shortcut keys

CTRL/CMD+A	Select all
CTRL/CMD+F	Find & Replace
CTRL/CMD+S	Save
CTRL/CMD+W	Close topmost window
CTRL/CMD+SHIFT+W	Close all windows
CTRL+TAB	Next window
CTRL/CMD+SHIFT+TAB	Previous window
CTR+P	Hide/Show the selection preview
ENTER (in the tree)	Open the current tree selection in a table
DELETE (in the tree)	Delete the selected node from the tree

Table 9.2. Table short cut keys

CTRL/CMD+A	Select all
CTRL/CMD+C	Copy
CTRL/CMD+V	Paste
CTRL/CMD+Z	Undo
DELETE	Delete the contents of the current table cell and start editing
ESC	Cancel editing of the current cell
CTRL+ENTER	Edit a cell in a new window