

# KinOath Kinship Archiver

## Version 1.1

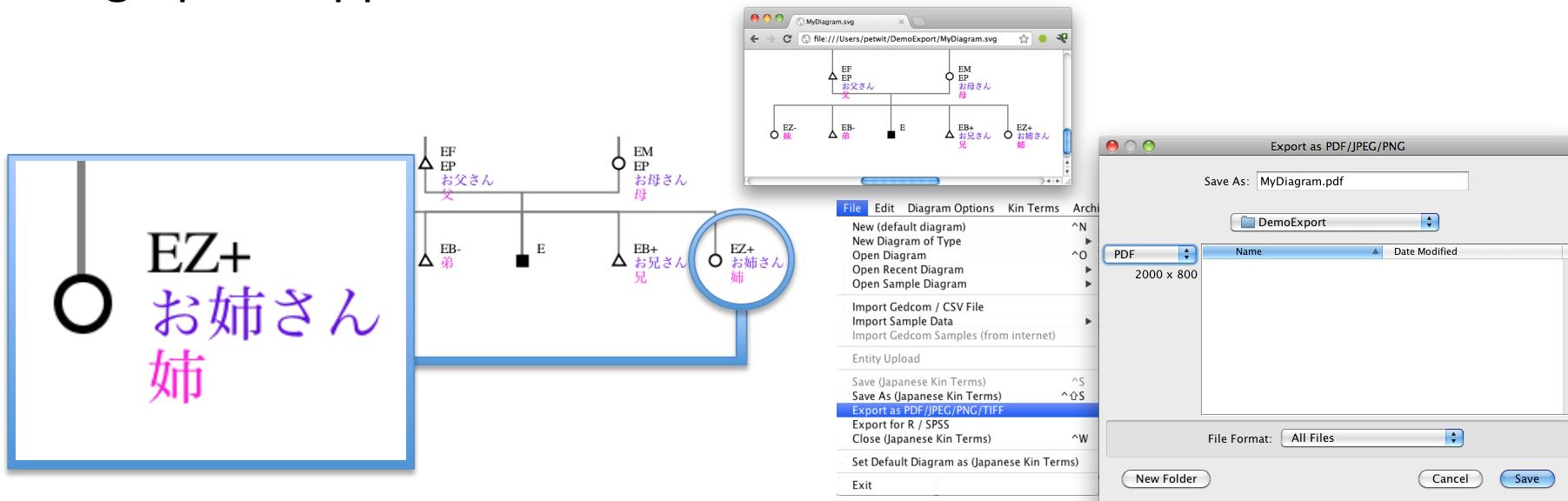
Developed by Peter Withers at  
The Language Archive, Max Planck  
Institute for Psycholinguistics, Nijmegen

# Second Stable Release in Testing

- The stable version 1.0 has been field tested.
- Formal testing has begun on version 1.1.
- Plugins have been introduced in version 1.1.
- The manual is now available on line via the website.
- The manual is also built into in the application.
- This testing version is also available for download, if you want to preview the new features.
- The change list is available on the download page.
- The todo list is also available on the download page.
- <http://tla.mpi.nl/tools/tla-tools/kinoath/>

# Publishable Diagrams

- All the diagrams produced are in a scalable vector format of publishing quality
- All diagrams can be exported into PDF format
- The working files are in SVG format that can be opened in graphics applications or viewed in a web browser



20th Oct, 2012

Peter.Withers@mpi.nl  
The Language  
Archive, Max Planck Institute for  
Psycholinguistics, Nijmegen

# Customisable Kin Data

- The kin data is defined in the Clarin component registry.
- Each data field can be defined in the ISOcat data category registry.
- <http://catalog.clarin.eu/ds/ComponentRegistry>
- <http://www.isocat.org/>
- This means that you can specify the data fields that you need for your project.

The screenshot illustrates the integration of ISOcat and the Clarin Component Registry for defining kinship data. It shows three main components:

- ISOcat Data Category Registry:** A sidebar on the left showing a table of data categories like Name, DateOfBirth, DateOfDeath, and Gender. The Gender row is selected, revealing a dropdown menu with options: Zachar, Nekeveh, "Intersex", Tumtum, Aylonit, and Saris. A red arrow points from this dropdown to the corresponding entry in the ISOcat Data Category Registry.
- ISOcat Data Category Registry:** A central window titled "Data Category Registry" showing the "Gender" entry. The "Type" field contains the value "Zachar, Nekeveh, \"Intersex\", Tumtum, Aylonit, Saris". A red arrow points from this entry to the corresponding entry in the Clarin Component Registry.
- Clarin Component Registry:** A right-hand window titled "Kinship Data" showing the "Gender" entry. The "Value" field contains "Female, Male, Female". A red arrow points from this entry to the "Edit and choose a type" dialog.
- Edit and choose a type dialog:** A modal window titled "Edit and choose a type" where the "Select type" dropdown is set to "anyURI". It lists items: Male and Female. A red arrow points from this dialog back to the "Kinship Data" window.

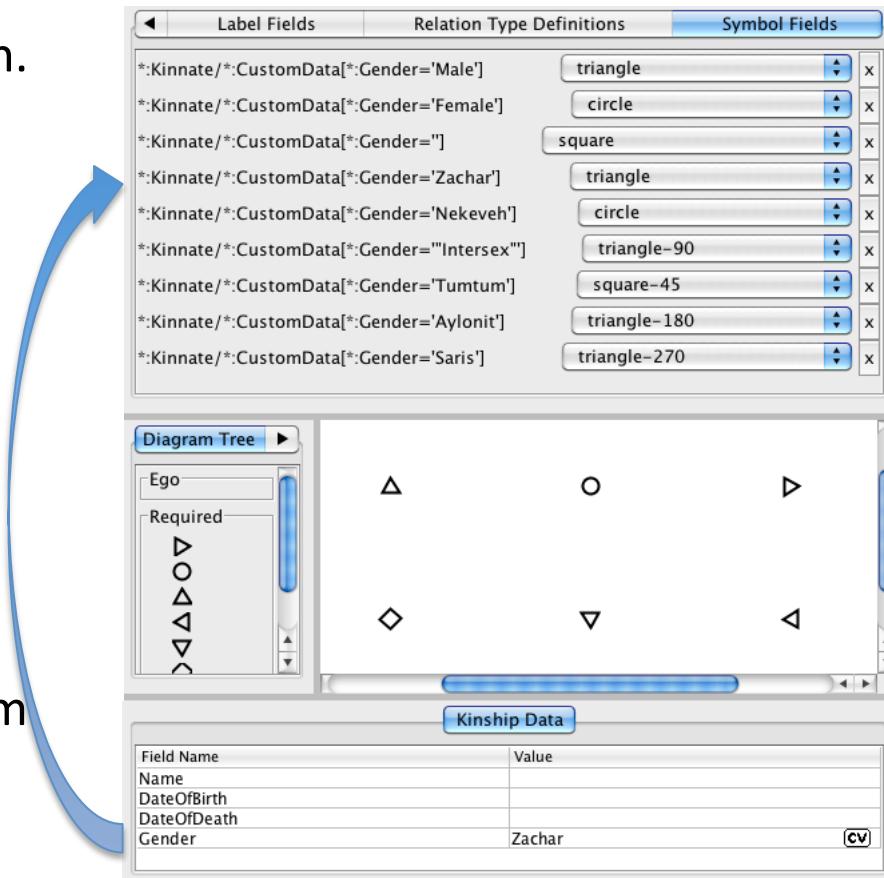
At the bottom right, the text "data from [http://en.wikipedia.org/wiki/Third\\_gender#Israel](http://en.wikipedia.org/wiki/Third_gender#Israel)" is displayed.

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# Custom Symbols

- A symbol can be any SVG definition.
- Custom symbols can only be manually inserted at this stage.
- A number of symbols are already included in the default diagram.
- These symbols can be associated with any kin data.
- The kin data field can be dragged to the symbol definition list.
- Then a symbol can be selected from the diagram definitions.



Gender data from [http://en.wikipedia.org/wiki/Third\\_gender#Israel](http://en.wikipedia.org/wiki/Third_gender#Israel)

# Custom Kin Types

- The kin types used in the application can be customized.
- Each kin type can use any string and any symbol.
- These custom kin types are stored in the diagram file.
- They can also be stored in the default diagram of the application.

Kin Type String	Relation Type	Symbol Type	Display Name	
Ef	none	circle	Ego Female	<input type="checkbox"/>
Em	none	triangle	Ego Male	<input type="checkbox"/>
Fa	ancestor	triangle	Father	<input type="checkbox"/>
Mo	ancestor	circle	Mother	<input type="checkbox"/>
Br	sibling	triangle	Brother	<input type="checkbox"/>
Si	sibling	circle	Sister	<input type="checkbox"/>
So	descendant	triangle	Son	<input type="checkbox"/>
Da	descendant	circle	Daughter	<input type="checkbox"/>
Hu	union	triangle	Husband	<input type="checkbox"/>
Wi	union	circle	Wife	<input type="checkbox"/>
Pa	ancestor	square	Parent	<input type="checkbox"/>
Sb	sibling	square	Sibling	<input type="checkbox"/>
Sp	union	square	Spouse	<input type="checkbox"/>
Ch	descendant	square	Child	<input type="checkbox"/>
F	ancestor	triangle	Father	<input type="checkbox"/>
M	ancestor	circle	Mother	<input type="checkbox"/>
B	sibling	triangle	Brother	<input type="checkbox"/>
Z	sibling	circle	Sister	<input type="checkbox"/>
S	descendant	triangle	Son	<input type="checkbox"/>
D	descendant	circle	Daughter	<input type="checkbox"/>
H	union	triangle	Husband	<input type="checkbox"/>
W	union	circle	Wife	<input type="checkbox"/>
P	ancestor	square	Parent	<input type="checkbox"/>
G	sibling	square	Sibling	<input type="checkbox"/>
E	none	square	Ego	<input type="checkbox"/>
C	descendant	square	Child	<input type="checkbox"/>
m	none	triangle	Male	<input type="checkbox"/>
f	none	circle	Female	<input type="checkbox"/>
x	none	square	Undefined	<input type="checkbox"/>
*			Any Relation	<input type="checkbox"/>

F	ancestor	triangle	Father
M	ancestor	circle	Mother
B	sibling	triangle	Brother
Z	sibling	circle	Sister
S	descendant	triangle	Son
D	descendant	circle	Daughter
H	union	triangle	Husband
W	union	circle	Wife
P	ancestor	square	Parent
G	sibling	square	Sibling
E	none	square	Ego
C	descendant	square	Child

# Custom Relation Types

- Custom relation types can be defined in a diagram.
- This can be done in the diagram settings under relation type definitions.
- The custom name, type and display style can be entered.
- The new relation type will then be available on the selected entities.
- These relations can be created by dragging the relation handles.

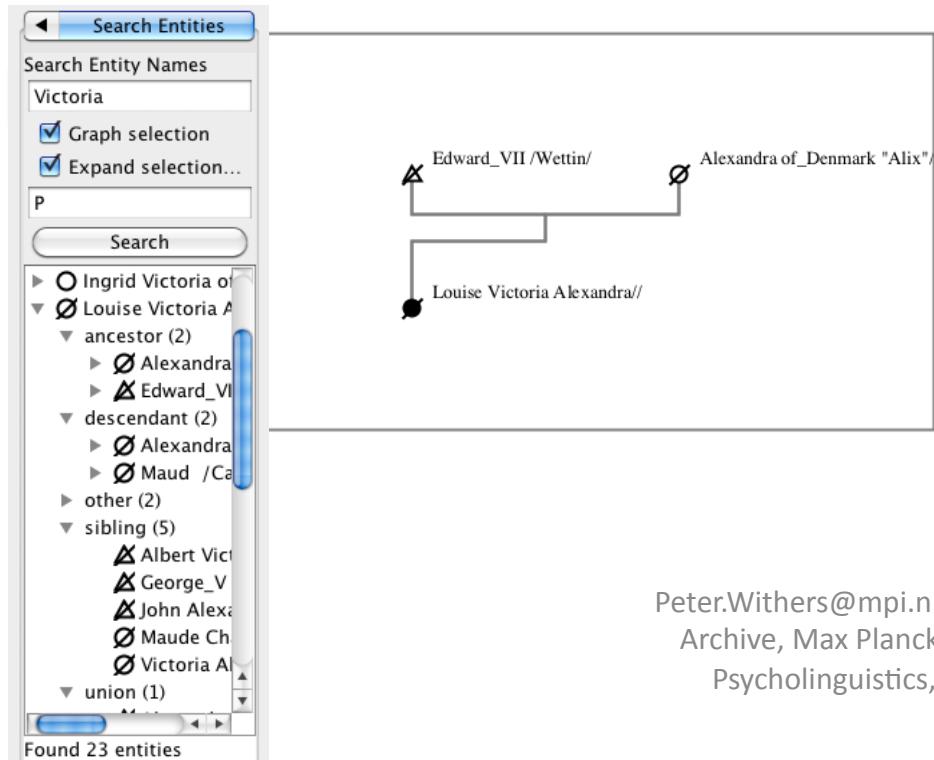
The screenshot shows a software interface with a menu bar at the top. The 'Panels' menu is open, showing options like 'Diagram Settings' which is selected. Below the menu is a table for 'Relation Type Definitions'. A row in the table is highlighted with a purple background, representing a 'SuclingRelation' with a line color of purple and a line width of 2. To the right of the table is a color palette and a 'Scan For' button. At the bottom, there is a diagram showing entities (Isabella, Sophie, Lucas, Charlotte, William, Jack) connected by lines of different colors and styles, demonstrating the use of custom relation types.

Custom Name	Data Category	Relation Type	Line Colour	Line Width	Line/Dash	Line Orient...
SuclingRelation	other		Purple	2		horizontal

```
graph LR; Isabella --- Sophie; Sophie --- Lucas; Sophie --- Charlotte; Charlotte --- William; Charlotte --- Jack;
```

# Search Tree

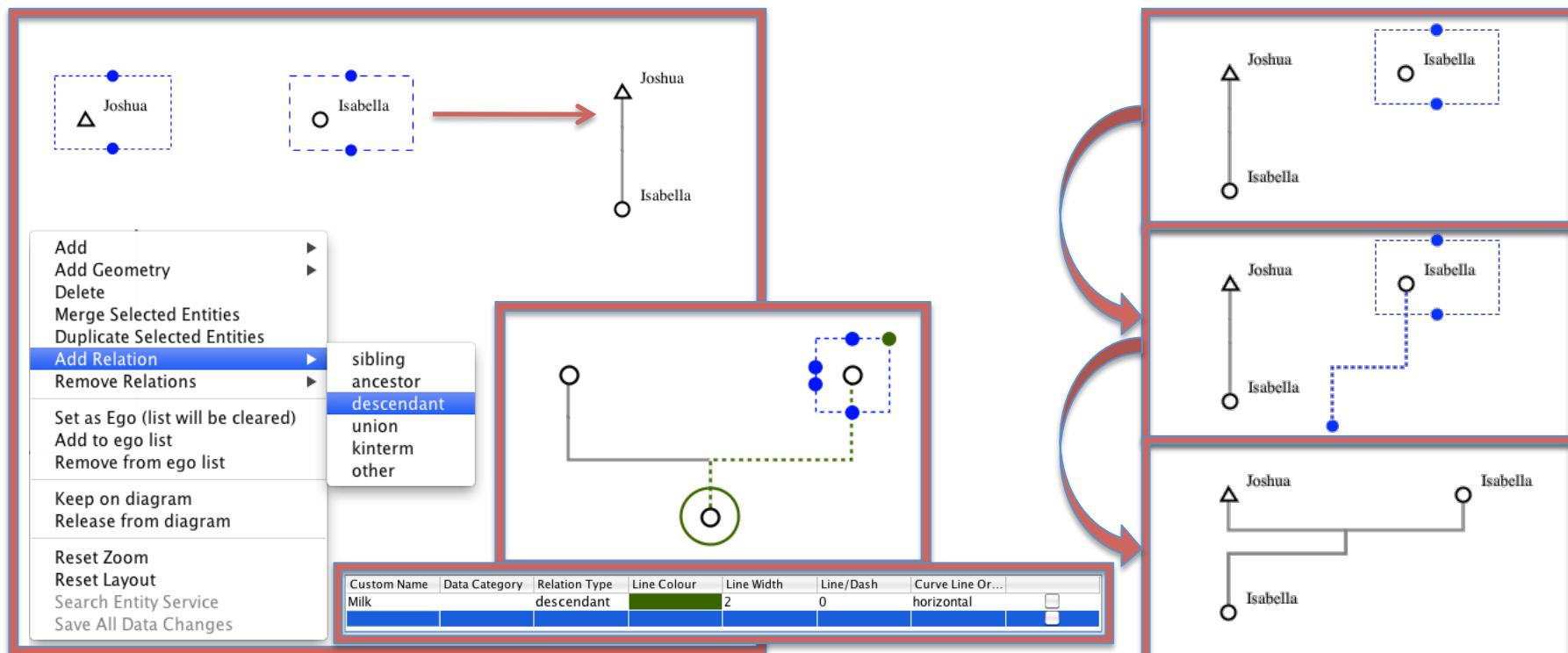
- Free text can be searched with fuzzy matching.
- The selected results can be inspected on the graph.
- The selection can be expanded on the graph by kintype string.
- As the selection changes the graph is updated by kintype string.
- The tree can also be browsed for relations.



Peter.Withers@mpi.nl The Language  
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# Creating Relations

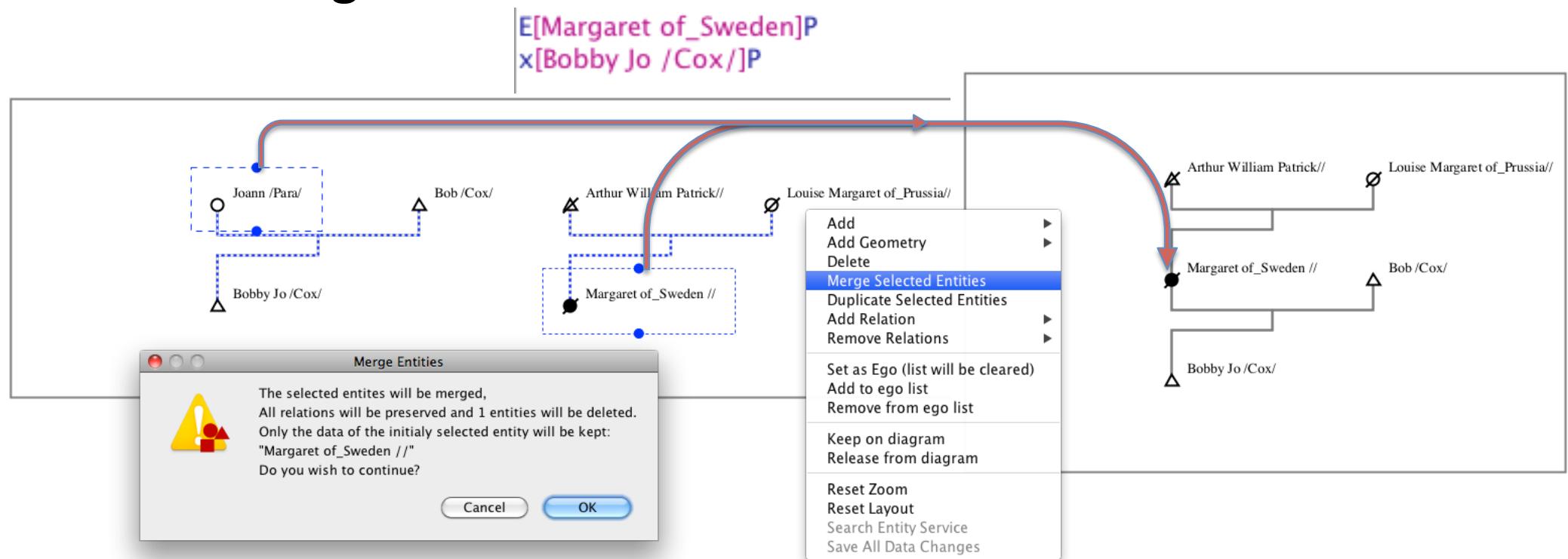
- Relations can be added via the context menu.
- Or via the drag handles of the selection.
- Custom relations are also available via the drag handles.



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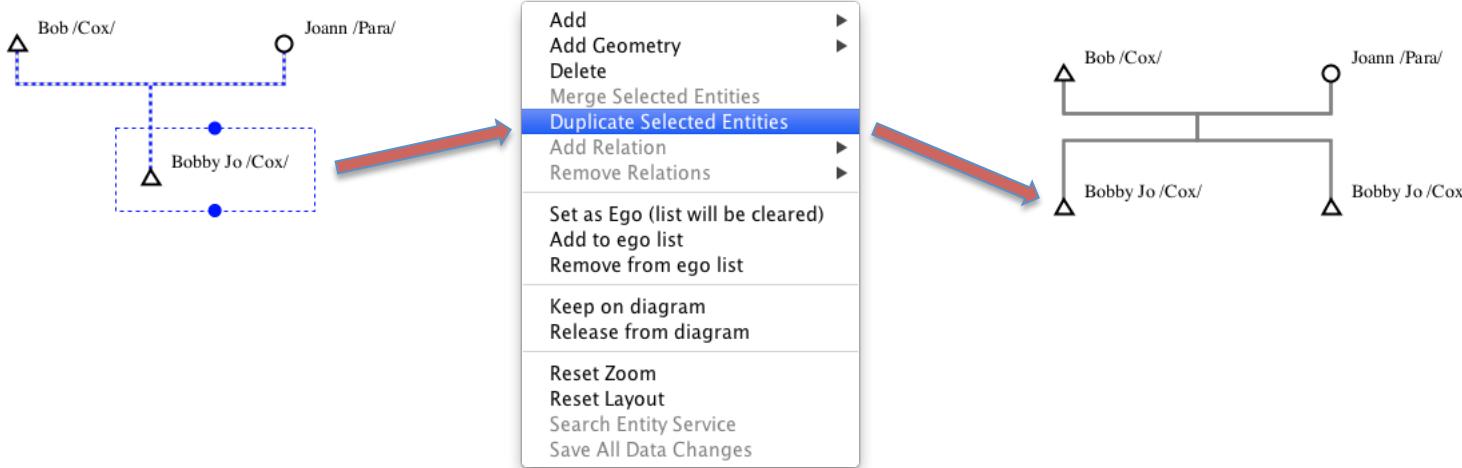
# Merge Individuals

- When duplicate entries are found individuals can be merged, keeping the relations of both originals.



# Duplicating Individuals

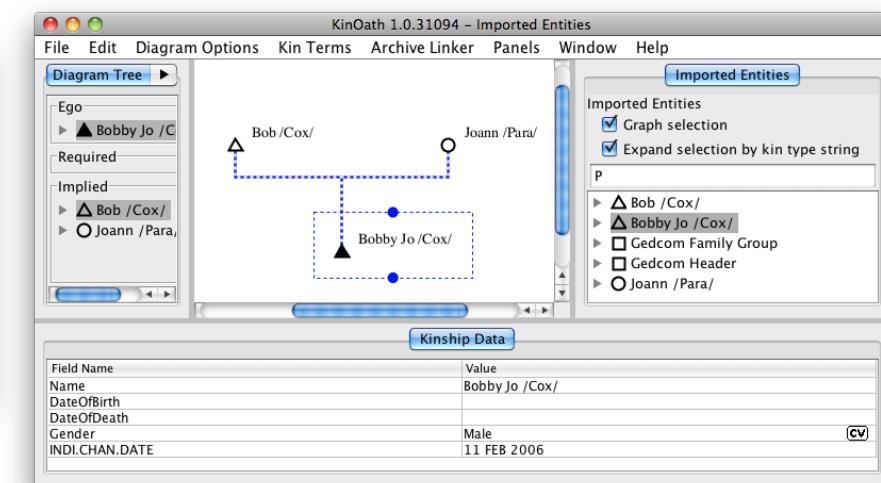
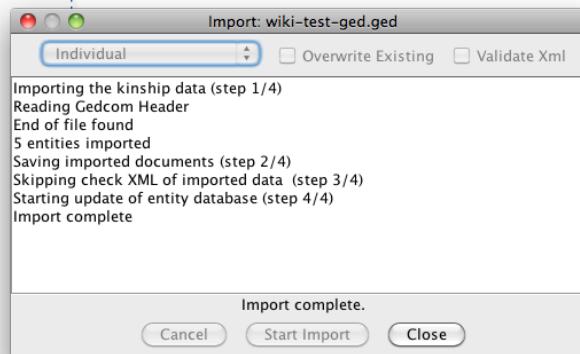
- An individual can be duplicated.
- This will duplicate all relations.
- All kin data is also duplicated.
- Both individuals can then be edited separately.



# Gedcom Import

```
sample.ged

0 HEAD
1 SOUR Reunion
2 VERS V8.0
2 CORP Leister Productions
1 DEST Reunion
1 DATE 11 FEB 2006
1 FILE test
1 GEDC
2 VERS 5.5
1 CHAR MACINTOSH
0 @I1@ INDI
1 NAME Bob /Cox/
1 SEX M
1 FAMS @F1@
1 CHAN
2 DATE 11 FEB 2006
0 @I2@ INDI
1 NAME Joann /Para/
1 SEX F
1 FAMS @F1@
1 CHAN
2 DATE 11 FEB 2006
0 @I3@ INDI
1 NAME Bobby Jo /Cox/
1 SEX M
1 FAMC @F1@
1 CHAN
2 DATE 11 FEB 2006
0 @F1@ FAM
1 HUSB @I1@
1 WIFE @I2@
1 MARR
1 CHIL @I3@
0 TRLR
```

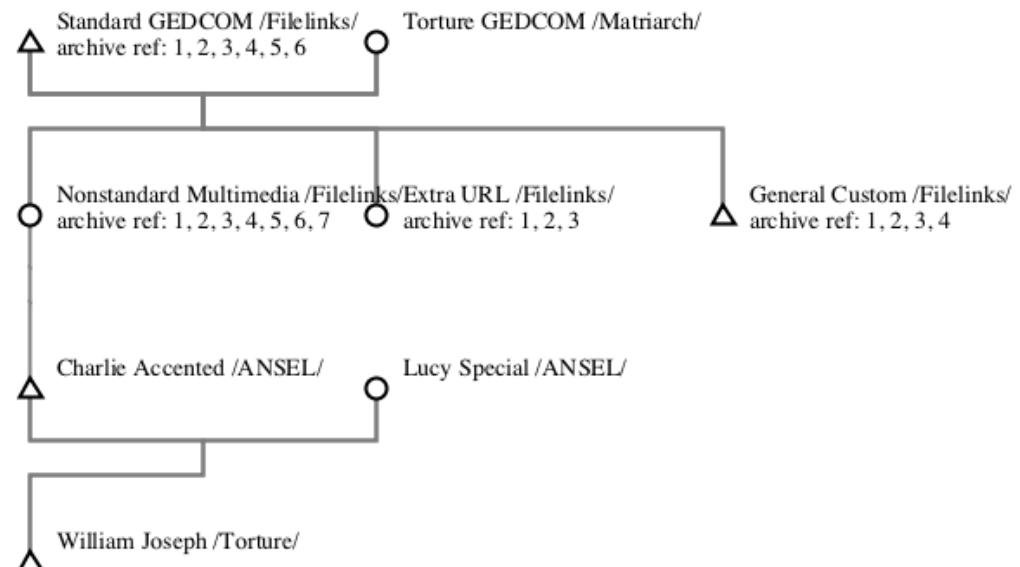


# New Import Formats

- GEDCOM import had been improved
- TIP format is now supported
- CSV import is now extended to include:
  - Optional 'ID' column.
  - If the ID column contains the same value twice, then the preceding record will be updated/appended to.
  - Lines starting with \* will be treated as comments and ignored.
  - Recommended data columns are: Name, Gender, DateOfBirth, DateOfDeath
  - Relation columns must map to the values in the ID column.
  - Recognised relation columns are: Spouse, Union, Parent, Father, Mother
  - Any other columns will be added to the kindata but not automatically used in the subsequent diagrams.
  - If the ID column exists and any row contains the string 'ID' then the current column names are replaced with current row values (for PUCK txt files).
  - If the first record does not start at zero then all relations referencing ID of zero will be ignored (for PUCK txt files).

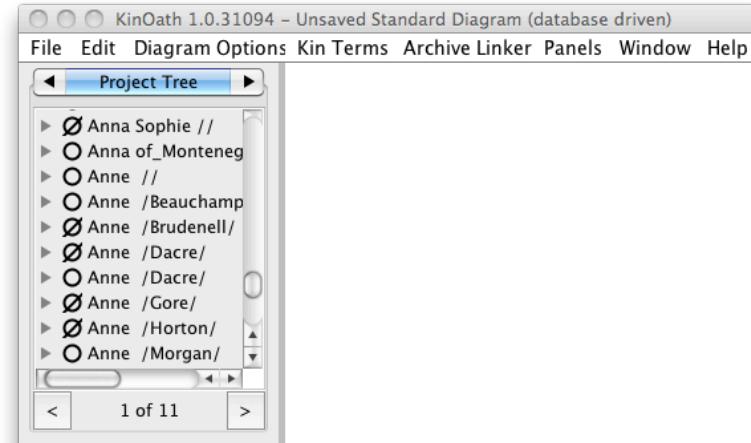
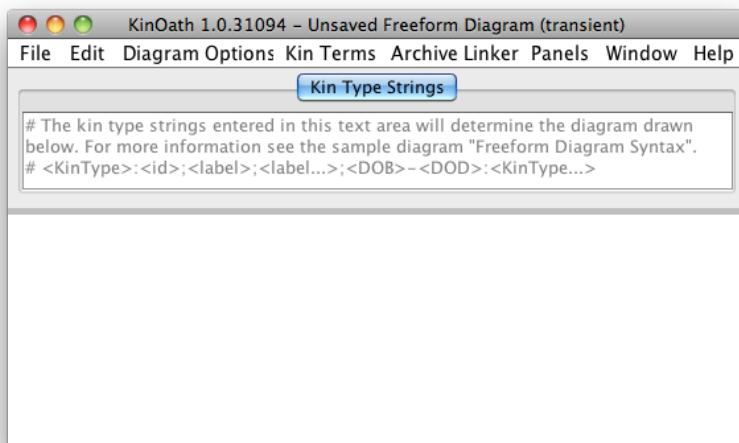
# Imported Resource Files

- Like manually created resource links, imported GEDCOM resources files are available both on the diagram and via the diagram tree.



# Freeform vs Database Diagrams

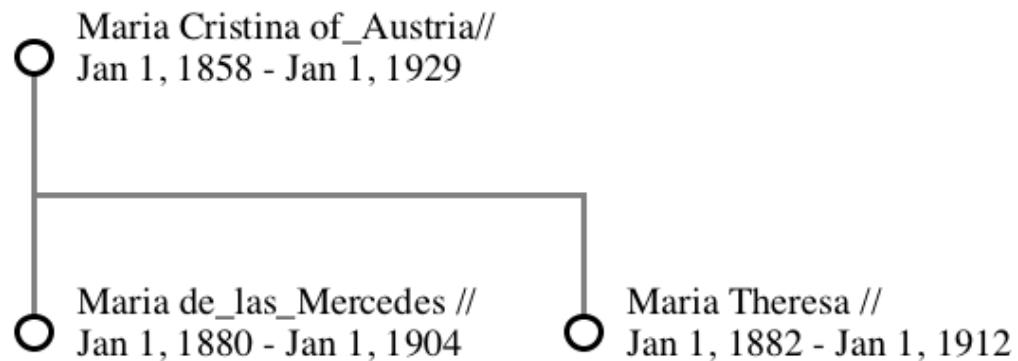
- Freeform diagrams have no kinship data records.
- The data only exists on the diagram.
- The kin type strings or kin terms definitions are the only data source for the diagram.
- Database diagrams display data from the local project.
- There are kin data files for each entity.
- Changes to kin data is reflected on all diagrams using that project data.
- Data can be imported from GEDCOM, TIP or CSV.



# Kin Type Query Syntax

- Kin type queries are used to retrieve individuals and their relations from the database.
- The kin types following a query will add any matching kin.
- For example to following query returns Maria and her daughters.

x[Maria Cristina of\_Austria]D

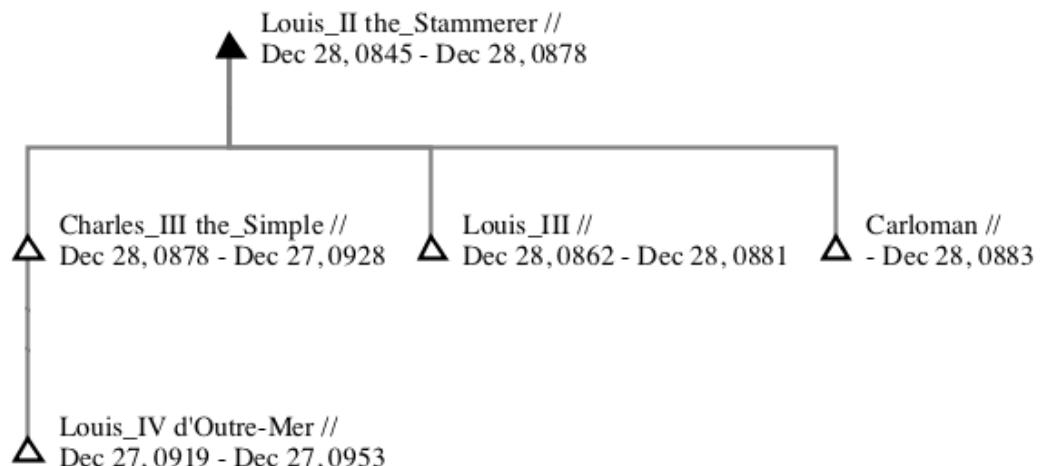


# Multiple Query Parameters

- Multiple queries can be used per kin type.
- Each condition can use:

= contains  
== exact match  
> greater than  
< less than

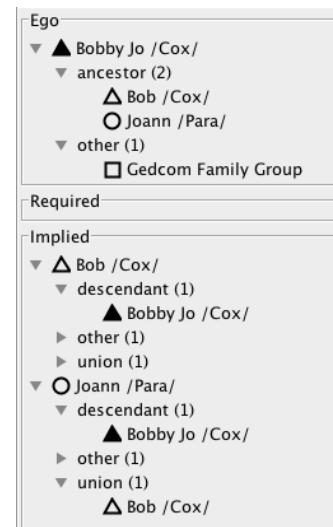
E[DateOfBirth<0850][INDI.TITL=King of France]CC



# Dragging to the Query Text

- The table is visible when an entity is selected on the tree or diagram.
- Fields from this table can be dragged to the query area to construct queries.
- Entities in the tree can also be dragged into the query, in this case the entity ID is added to the query.

E[Entity.Identifier=70596686bd36929ace97868ec7f412a8]

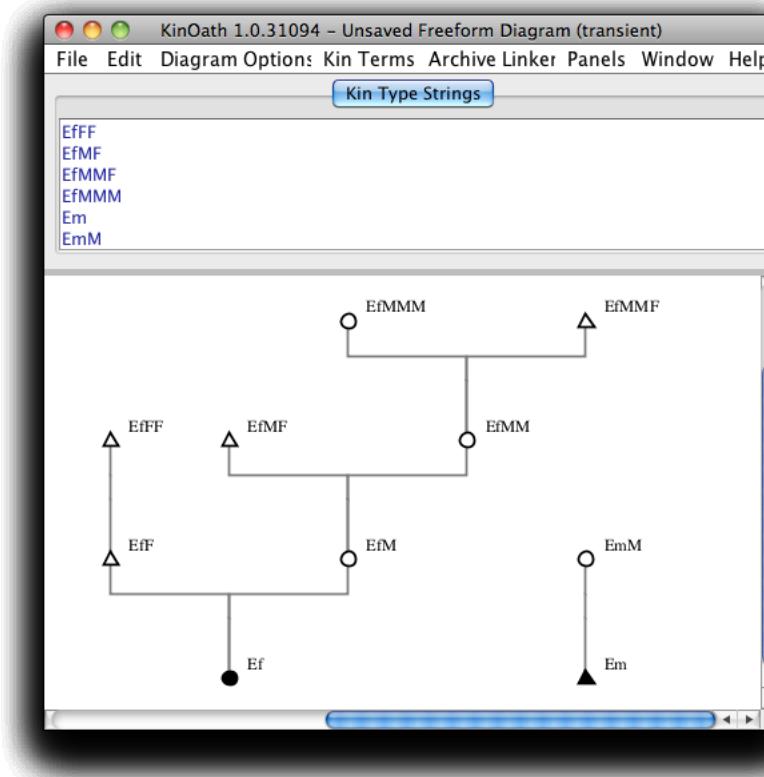


E[INDI.NAME=Louis\_II the\_Stammerer //]

Field Name	Value
NAME	Louis_II the_Stammerer //
TITL	King of France
SEX	M
BIRT.DATE	846
DEAT.DATE	879

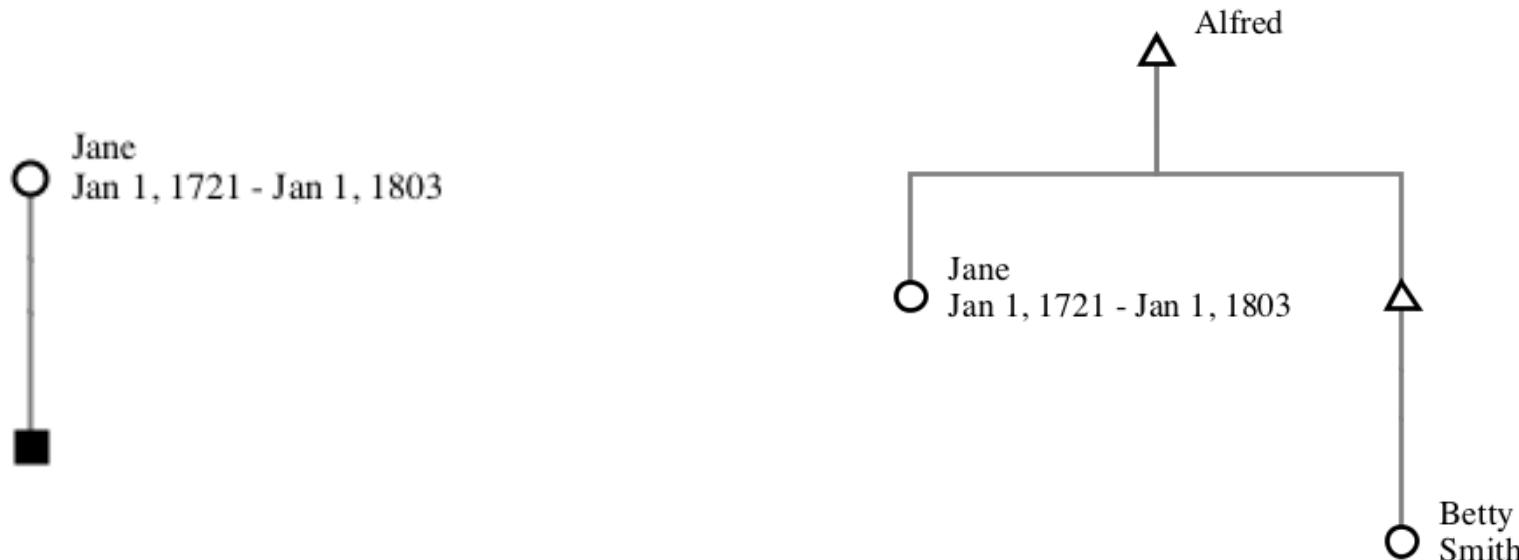
# Freeform Diagrams

- Freeform diagrams are constructed simply by entering kin type strings.
- They have no database.
- The data only exists on the diagram.
- Kin Terms can also be used to generate these diagrams.



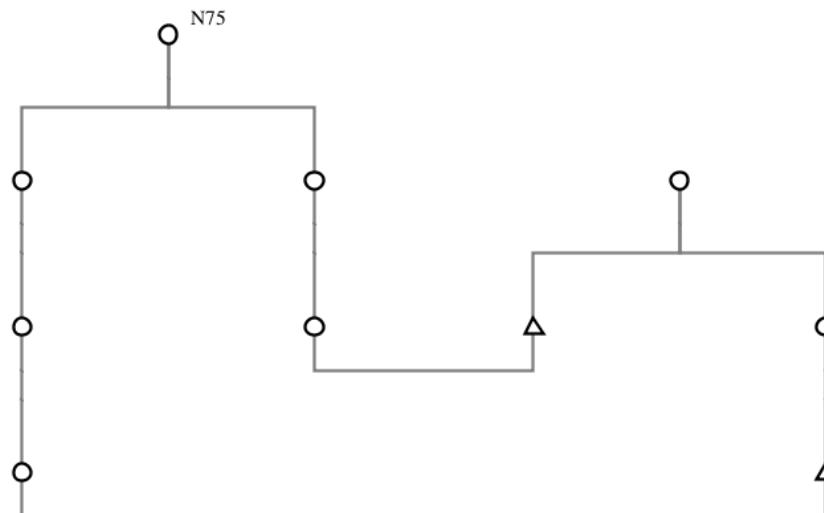
# Freeform Diagram Syntax

- The syntax allows labels, dates and identifiers to be specified.
- <KinType>:<id>;<label>;<label...>;<DOB>-<DOD>:<KinType...>
- EM:Jane;1721-1803:
- f:#3;Jane;1721-1803:F:Alfred:SD:Betty;Smith:

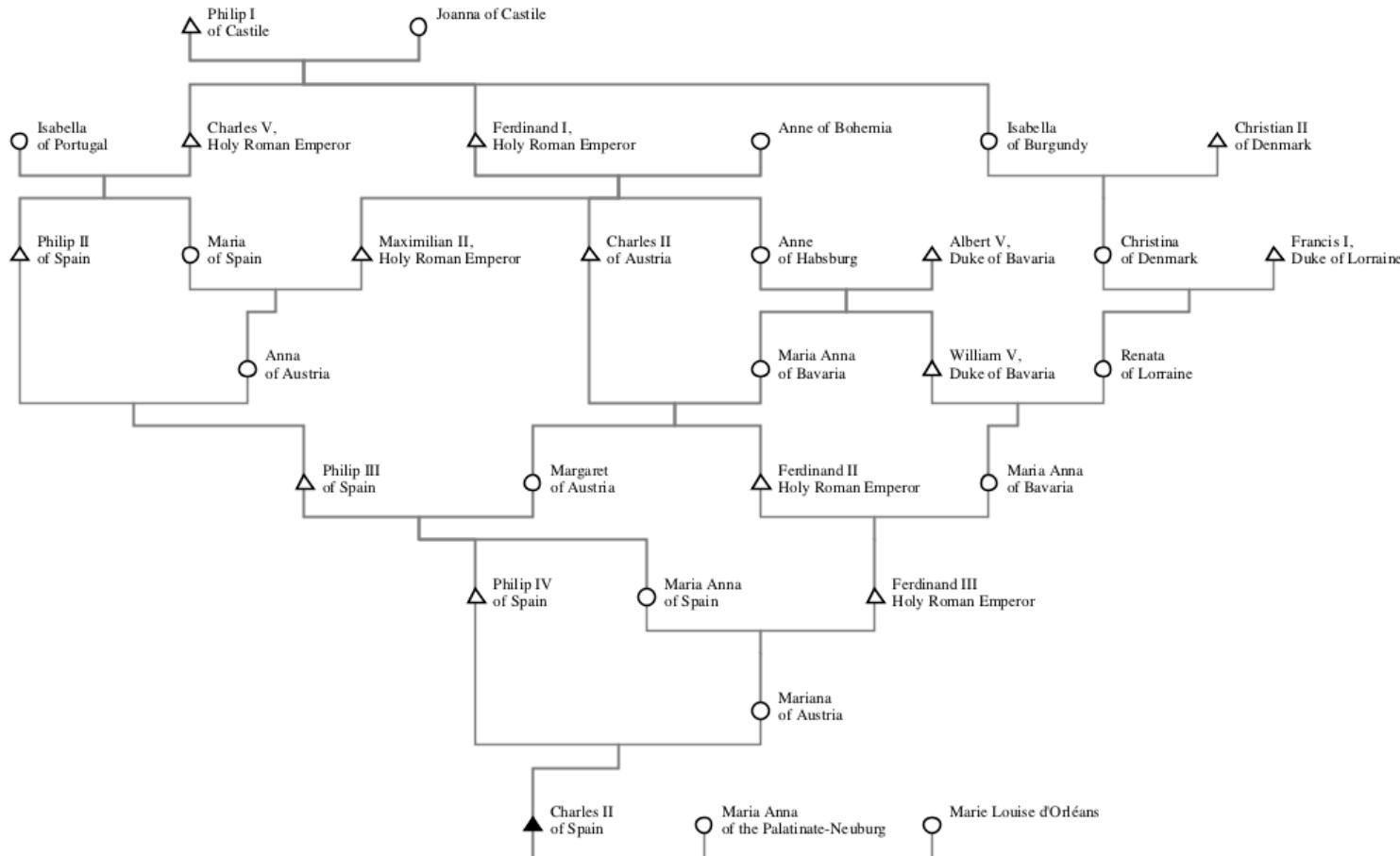


# Freeform Diagram Syntax

- By using the <id> parameter, preceding individuals can be referred to later in the kin type string.
- Here id #75 is used as a back reference to the first individual, creating a matrimonial ring.
- f:#75;N75:DDHMDSWM:MM:#75:

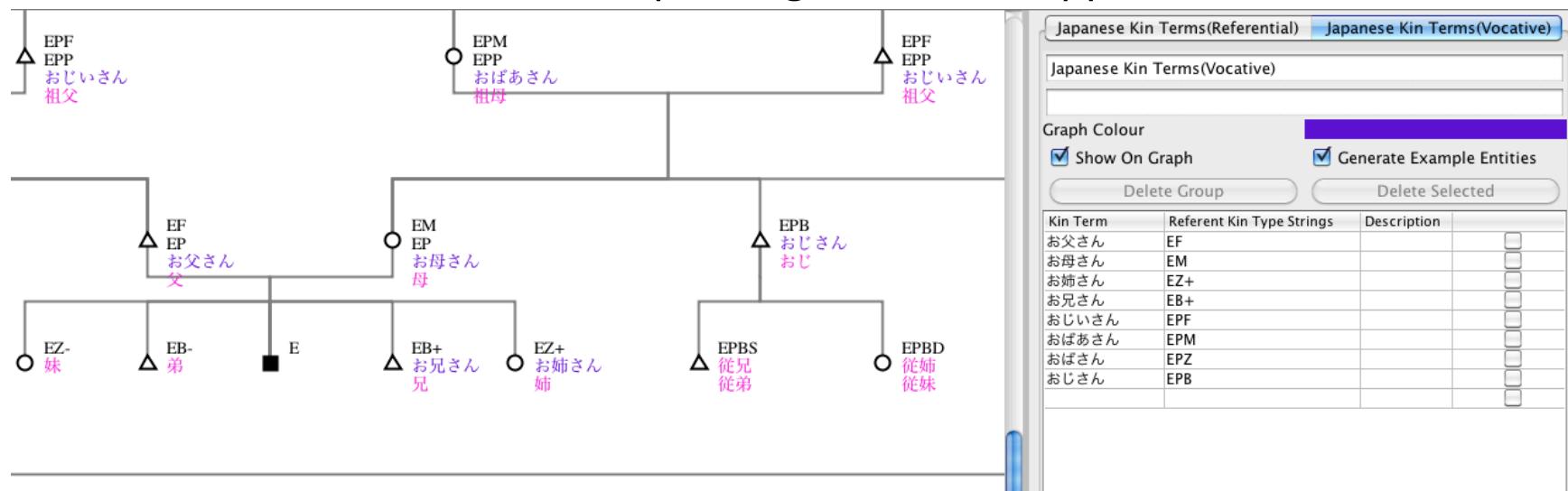


# Freeform Example: Charles II of Spain



# Kin Terms

- Kin terms can be entered into a diagram.
- They are defined with kin type strings
- A freeform diagram can be generated from these kin terms.
- They can be imported and exported.
- In the future it will be possible to overlay these kin terms onto a database driven diagram.
- There are a number of example diagrams in the application.

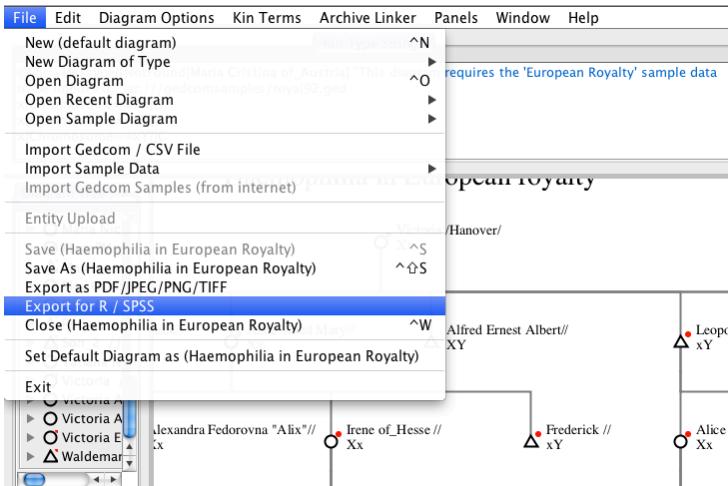


# R and SPSS

- The kinship data displayed on a standard diagram can be exported to a text file for use in R or SPSS etc.

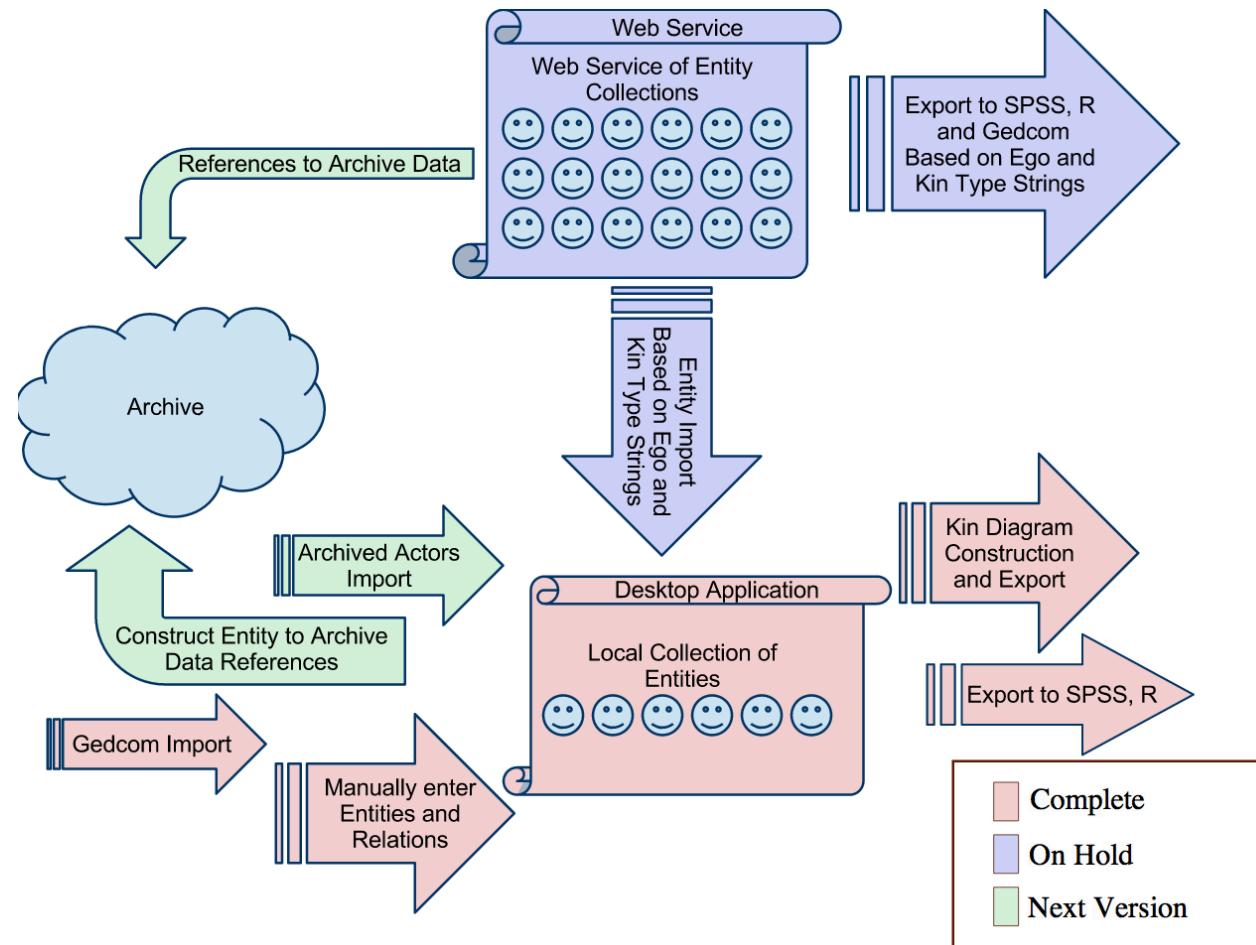
```
dataFrame <- read.table("/home/peter/Desktop/KinOathDemoR/exportedData.tab", header=T)
```

```
# get all affected parent ids
affectedIds = dataFrame$id[dataFrame$symbol_redmarker == 1]
# get all children of affected
childrenOfAffected = dataFrame[dataFrame$momid %in% affectedIds || dataFrame$dadid %in% affectedIds]
# print names of affecteds' children
childrenOfAffected$label_0
```



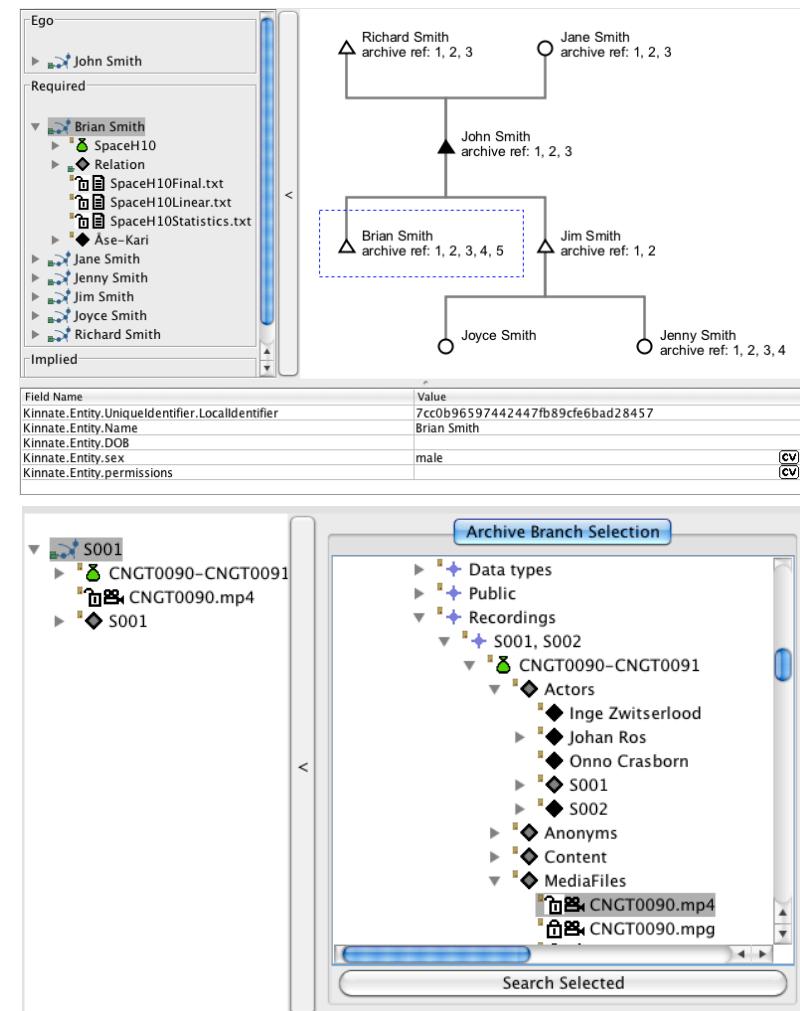
id	momid	dadid	sex	ego	dob	dot	label_0	symbol_triangle	symbol_blockstrikeout	symbol_redmarker	symbol_circle	UniqueIdentifier
1	21	42	1	0	1900	1904	Henry //	1	1	1	0	iid_1abef7dbd1c70628f07963e95f9ebf3
2	37	43	2	0	1846/05/25	1923/06/09	Helena Augusta Victoria//	0	1	0	1	iid_e6d1b28b31a0ec4c49801aa0b67955c5
3	17	44	1	0			Son_2 //	1	0	1	0	iid_f165b99134ee9c87fcf77afcdccba0
4	21	42	1	0	1889	1945	Woldemar //	1	1	1	0	iid_01af3bd99fc0f7cf5fb99999663310fb5
5	37	43	2	0	1857/04/14	1944/10/26	Beatrice Mary Victoria//	0	1	1	1	iid_d573dfdb6bc0b6f0dee7584a73f1c4c
6	29	45	2	0	1897/06/18	1918/07/18	Tatiana Nicholovna //	0	1	0	1	iid_61f27021a0f082a3e385f4090e578ad
7	14	46	1	0	1870	1873	Frederick //	1	1	1	0	iid_a08a378106e81dd103557809ed214009a
8	32	47	1	0	1907	1938	Alfonso of,Cavadonga //	1	1	0	0	iid_b79466e3fd0d8b43062e82f359d3e989f
9	37	43	1	0	1841/11/09	1910/05/06	Edward VII //Wettin	1	1	0	0	iid_15cfe4ec99e6f384eb3892468164be4
10	37	43	1	0	1858/01/26	1912/01/26	Arthur William Patrick//	1	1	0	0	iid_55158f1fe1f49fb5e03dc7c797e856b
11	37	43	2	0	1848/03/18	1939/12/03	Louise Caroline Alberta//	0	1	0	1	iid_04c5146f70f5602148f4e98a2719272
12	32	47	2	0	1911		Maria Christina//	0	0	0	1	iid_38fe23e9e198f80ec2be0370315527d
13	29	45	1	0	1904/08/12	1918/07/18	Alexis Nicolaievich /Romanov	1	0	0	0	iid_980067ddf26ec47e93a733a733c02694
14	37	43	2	0	1843/04/25	1878/12/14	Alice Maud May//	0	1	1	0	iid_67530193a0b082c0a1033446c23b55f
15	14	46	2	0	1874	1878	Mary "May" //	0	1	0	1	iid_76fbfa062514f5f0ed6a2c0133f6481f0f
16	5	48	1	0	1889	1922	Leopold //	1	1	0	0	iid_0766e3ded2212f1fdddf4be9e9d9f5cd2
17	49	41	2	0	1883	1981/01/Alice	of,Athlone //	0	1	1	0	iid_49c88d77d2264b60613021e236eb84
18	5	48	1	0	1886	1960/07/23	Alexander of,Corisbrooke //	1	1	0	0	iid_753919e9dc37611a1eb0f6080225a
19	14	46	1	0	1868	1937	Ernest Louis of,Hesse//	1	1	0	0	iid_42b0e40a5d0e02029c623d78d29482
20	32	47	1	0	1914	1934	Gonzalo//	1	1	0	0	iid_d569966a887d30b0e8939c592c8862
21	14	46	2	0	1866	1951	Irene of,Hesse//	0	1	1	0	iid_c7e01fa01d0b039a944c9fc7b1af370
22	21	42	0	0			Child_#1//	0	1	0	0	iid_2297e359f40a1761c0d48z0d449f
23	37	43	2	0	1840/11/21	1914/08/05	Victoria Adelaide Mary//	0	1	0	1	iid_cfb1646c34ff46971e9f0c3b0a853f
24	32	47	1	0	1913/06/01	1989/07/18	John Jacob//	0	1	0	0	iid_a0ef1f4210371bd32a0940794f3169e
25	29	45	2	0	1891/06/19	1918/07/18	Anastasia Nicholovna /Romanov	0	1	0	1	iid_76d0b10d50-99d531a226f479c0c3d0
26	37	43	1	0	1844/08/06	1900/07/30	Alfred Ernest Albert//	1	0	0	0	iid_cef3e056f6fe029940c13c324e53
27	14	46	2	0	1864	1918/07/17	Elizabeth "Ella" //	0	1	0	1	iid_439671a86d6cf7e7f764603d17c045c6
28	29	45	2	0	1899/05/1918/07/18	1918/07/18	Maria Nicholovna /Romanov	0	1	0	1	iid_ac255ad17cb3d7ceef79e562c98fa
29	14	46	2	0	1872/06/06	1918/07/16	Alexandra Fedorovna "Alix"//	0	1	1	1	iid_f270191b00089852dc552275213190fb
30	5	48	1	0	1891	1914	Meurice //	1	1	0	0	iid_8719d48c7f5f343a0d17007ee40d4c59
31	14	46	2	0	1863	1958	Victoria Alberto of,Hesse//	0	1	0	1	iid_7000f979e251465c17888bf0d19e060aa
32	5	48	2	0	1887	1969	Victoria Eugenie "Edu"//	0	1	1	1	iid_6e0f8317358f7605b0d50ba47c5fa1
33	32	47	1	0	1988	1975	James //	1	1	0	0	iid_f270191b00089852dc552275213190fb
34	32	47	2	0	1989		Beatrice //	0	0	0	1	iid_927249956718c9ec9ff9c8d1777005a
35	29	45	2	0	1895/11/11	1918/07/18	Olga Nicholovna /Romanov	0	1	0	1	iid_f23628a509909413df16564e9c44ba10
36	17	44	2	0	1906		May Cambridge //	0	0	0	1	iid_seeb6b2d2ba03b7f454a255deceec69a
37	50	51	2	0	1819/05/24	1901/01/22	Victoria /Hanover	0	1	1	1	iid_878658d6336994f9f24654fdb214-c7
38	49	41	1	0	1884	1954	Charles Edward //	1	1	0	0	iid_7ef2ede2b0d4f848c46c7d6f8011779
39	32	47	1	0	1908		Don Jamie //	1	0	0	0	iid_3dcde17c5371c0a7d4b0a04badf972
40	17	44	1	0	1928		Rupert //	1	1	0	0	iid_8b561f64886573a2b5164f587d02a24
41	37	43	1	0	1853/04/07	1884/03/28	Leopold George Duncan//	1	1	0	0	iid_72fd2eb4dded4353125894161fcfc8dc

# Current Status



# Archive Linking

- This is on hold until a technical agreement is reached on how to persistently link kinship individuals to the archive metadata and data.
- As a result these features will be available in initially as a plugin for the 1.1 version.
- This plugin approach will also allow custom linkers for additional data repositories.
- It is also hoped that we will be allocated time to produce a light weight kinship panel for use in other applications, such as Arbil and ELAN. Such that links can be made and utilised directly in these applications.



# Plugin Structure in Version 1.1

- The core application is being treated as a thin application.
- On top of this a plugin structure has been added.
- This allows for example:
  - External projects to create modules
  - Custom data sources
  - Specialized importers / exporters
  - Data filters / processors / transformers.
  - A greater variety of graph sorting algorithms, such as sort by clan vs descendancy etc.
- Another benefit of this plugin structure is that new features do not need to have such an impact on the core applications and its stability.

# Conclusion

- The stable version 1.0 of KinOath Kinship Archiver has already been field tested.
- Version 1.1 is currently being tested, it also responds to the initial field testing and will be the new stable version shortly.
- Archive linking will be available initially as a plugin, allowing more flexibility.
- In the current stable you can:
  - Create, view, import, export kinship data.
  - Create, view, import, export kintterms data
  - Query large datasets based on free text and kintypes.
  - Quickly create complex diagrams.
  - Customise the kin data, kintterms and kintypes to suit your needs.
- The plugin structure is now available in 1.1 to further extend the flexibility of the application.