

MUSIKWISSENSCHAFTLICHES SEMINAR
DETMOLD/PADERBORN

DETMOLDER HOFTHEATER PROJEKT

Theatre Tool

Systems Design

Draft Version 05

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Inhaltsverzeichnis

I. Introduction	4
II. User Interface Design	4
1. Toolbar	4
1.1. Simple Search	5
1.2. Extended Search	5
2. Navigation Tree	5
3. Tab View	7
3.1. Repertoire-Tab	7
3.1.1. „Work“-Section	8
3.1.2. „Source“-Section	10
3.2. „Playschedules“-Tab	13
3.3. „Persons“-Tab	14
3.4. „Expensess“-Tab	16
3.5. „Revenues“-Tab	18
3.6. „Custom Items“-Tab	19
3.7. „Search Results“-Tab	19
III. Data Design	21
4. DB-Structure	21
5. Property-Files	22
6. MEI and TEI Subsets	24
6.1. Works	24
6.2. Sources	25
6.3. Persons	30
6.4. Playscedules	32
6.5. Expensess	36
6.6. Revenues	38
7. Relation-Diagram	39
IV. Process Design	40
8. getDBStructure.xql	41

9. getRevenuelItems.xql	41
10. getExpensesslItems.xql	41
11. getScheduleslItems.xql	41
12. getCustomlItems.xql	41
13. getWorks.xql	41
14. getSource.xql	41
15. getMonthsForSelectedYear.xql	41
16. getScheduleTable.xql	41
17. getPersonsForSelection.xql	41
18. getPersonOverview.xql	41
19. getIssueNames.xql	41
20. getIssueTable.xql	41
21. getMonthsByRevenueYear.xql	41
22. getRevenueTable.xql	41
23. searchWorks.xql	41
24. searchPersons.xql	41

Abbildungsverzeichnis

1. Relation-Diagram	40
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Teil I.

Introduction

The tool is designed for visualizing, loading and searching archived information e.g for theatre in defined time period. The Informations are encoded in the formats of the Text Encoding Initiative (TEI) and Music Encoding Initiative (MEI) and saved in the XML-Database. Database structure and time period can be defined in the property files.

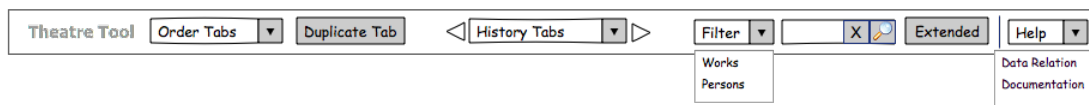
Teil II.

User Interface Design

The User interface contains three parts: toolbar with search functions, navigation tree and tabview.

1. Toolbar

Layout



Action Paths and Results

1. Select an item in "Order Tabs" combobox —> all opened tabs will be reordered; default: "Stapeln". (disabled)
2. Select an item in "Duplicate Tabs" button —> selected tab will be duplicated. (disabled)
3. Select an item in "History Tabs" combobox —> selected tab will be activated; alternative navigation - with arrows.
4. Select an item in "Filter" combobox and enter search term in search field -> select search icon -> a new tab will be opened with search results.
5. Select "Extended" button -> a window will be opened for enter search filters. (disabled)

6. Select an item in "Help" combobox:
 - a) "Data Relation" —> open a windows with data relations diagram;
 - b) "Documentation" —> open a new browser tab with systems design document.

1.1. Simple Search

Simple search function contains a filter field (work title or person name) and search field with search icon as button.

Action Paths and Results

1. Select an item in "Filter" combobox and search field is empty -> select search icon -> a new tab will be opened with all persons or works.
2. Select an item in "Filter" combobox and enter optionally search term in search field -> select search icon -> a new tab will be opened with search results.
3. An item in "Filter" combobox is not selected and search term in search field is entered or empty -> select search icon -> a information window will be opened: "Please select the searchfilter!"
4. If search field are not empty -> select "x" -> clear search field.

Validation and Constraints

1. "Filter" in combobox should be set;
2. Upper case and lower case are equal;
3. For all person names variants and for all work title variants will be searched.

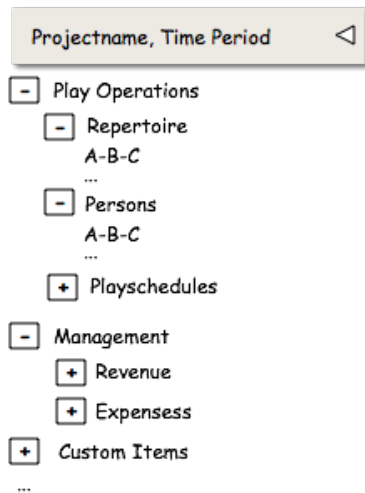
1.2. Extended Search

This function is disabled.

2. Navigation Tree

The Navigation Tree contains two subtrees preliminary called: "Play Operation" and "Management". The "Play Operation" subtree contains information about the theater and its public relations work. The "Management" tab contains any information about the inside organization of the theater.

Layout



Action Paths and Results

1. Click for any end-node —> a new tab will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs" combobox will be created.
2. Click to arrow in title bar -> navigation tree will be hide.
3. If navigation tree is hidden, click to title bar -> navigation tree will be opened for item selection; select an item and cclick to section field -> navigation tree will be hide again. Click arrow to open the navigation tree.

Validation and Constraints

1. "Projectname" and "Timeslot" will be generated from property file: dbStructure.xml.
2. "Repertoire" tabs: show all works with all title variants in alphabetic order.
3. "Playschedules" end nodes are years generated from property file: dbStructure.xml.
4. "Persons" tabs: show all persons with all name variants in alphabetic order.
5. "Revenues" and "Expensess" end nodes are years generated from property file: dbStructure.xml.
6. Cutom tabs end nodes are name generated from property file: dbStructure.xml.

Data sources and targets

Sources	getDBStructure.xml getRevenueItems.xml getExpensesItems.xml getSchedulesItems.xml getCustomItems.xml
---------	--

3. Tab View

Execution

One click for end node in navigation tree, or click link in relation data fields in sections, or click in search result table row a new closable tab will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs" combobox will be created.

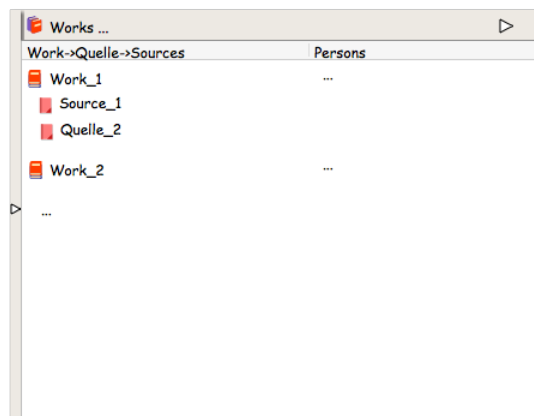
3.1. Repertoire-Tab

Execution

Click for "Repertoire" end-node in navigation tree —> a new tab will be opened. Tab contains a content section and navigation tree.

If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs" combobox will be created.

Layout



Widgets description

Table tree contains two columns: works -> sources and persons.

First column

Show works with one or more sources. Sources are optional.

Second column

Show all persons for this work. Persons are optional.

Action Paths and Results

1. Click for one work or source —> a new section will be opened.
2. Click to arrow in title bar or right side arrow from tree -> navigation tree will be hide.
3. If navigation tree is hidden, click to title bar -> navigation tree will be opened for item selection; select an item and click to section field -> navigation tree will be hide again. Click arrow to open the navigation tree.

Validation and Constraints

Work titles are alphabetical sorted. "The", "Der", "Die", "Das", "Le", "La", "L'" are ignored.

3.1.1. „Work“-Section

Execution

Click for one work in "Repertoire" tab navigation tree —> one section will be opened.

Layout

Work: ...

Show XML

Load XML

Title Types

Uniformtitle (language): ...
Titel (language): ...
Alternativtitle (language): ...
Subtitle (language): ...
...

Persons

Profession/Function: Name
Profession/Function: [Name](#)
...

General Data

[Deutschen Nationalbibliothek Page](#)
[Weber-Gesamtausgabe Page](#)
Language(s):
Instrumentation:
Creation:
Description:

Debut Performances

Event	Date	Place	City
-------	------	-------	------

Play Operations and Management

Playschedules

Jahr	Monat
...	Monat

Revenues

Year	Months
...	Month

Expenses

Year	Months
...	Month

Widgets description

Work section contains following sections: "Title Types", "Persons", "Generally Informations", "Playschedules", "Revenues", "Expenses".

Action Paths and Results

1. Select button "Show XML"-> a window will be opened with xml content.

2. Select button "Load XML"-> a window will be opened for save xml content. (disabled)
3. Click on name link in „Persons“ section a new tab with detailed information will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.
4. Click on extern link in „Generally Information“ section a new browser tab with detailed information will be opened. Extern links are "Deutsche Nationalbibliothek" and "Weber-Gesamtausgabe".
5. Click on link in „Playschedules“, or „Revenues“, or "Expenses" table a new tab with detailed information will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Validation and Constraints Only exists data fields will be show.

Data sources and targets

Sources	getWorks.xml
---------	--------------

3.1.2. „Source“-Section

Execution

Click for source in "Repertoire" tab navigation tree —> one section will be opened.

Layout

Source: ...

Show XML Load XML

SignaturSingle Sources

Title: ...

Title Types (Work)

Uniformtitle (language): ...

Titel (language): ...

Alternativetitle (language): ...

Subtitle (language): ...

...

Persons

Profession/Function: Name

Profession/Function: [Name](#)

...

General Data

[Répertoire International des Sources Musicales \(RISM\)](#)

Libraries:

Provenance:

Creation:

Summary:

Debut Performances

Event	Date	Place	City
-------	------	-------	------

Source: ...

Show XML

Load XML

Signatur

Single Sources

Title	Signatur
Title_1	...
Title_2	...
...	...

Physical Data

Titlepage(s):

Cover:

Scribe:

Condition:

Inventory Number:

Page Number:

Dimension:

Persons

Name

[Name](#)

...

Generally Information

Contents:

Annotations:

Language(s):

Creation:

Summary

Debut Performance

Event	Date	Place	City
-------	------	-------	------

Widgets description

Source section contains tow tabs: Source and Single Sources.

Source tab contains following sections: "Title Types", "Persons", "Generally Informations", "Playschedules", "Revenues", "Expenses".

Single Sources tab contains following sections: "Physical Data", "Persons" and "General Data".

Action Paths and Results

1. Select button "Schow XML"-> a window will be opened with xml content.
2. Select button "Load XML"-> a window will be opened for save xml content. (disabled)
3. Click on name link in „Persons“ section a new tab with detailed information will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Source tab Click on extern link in „Generally Information“ section a new browser tab with detailed information will be opened. Extern links is "Repertoire International des Sources Musicales"(RISM).

Validation and Constraints

Only exists data fields will be show.

Data sources and targets

Sources	getSource.xql getSourceDetails.xql
---------	---------------------------------------

3.2. „Playschedules“-Tab

Execution

Click for „Playschedules“ end-node in navigation tree —> a new tab will be opened. For each exists month one closable section will be created. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Layout

Playschedule ...

Show XML Load XML

Settlement ...

Date	Performances
...	Title_1, Personname
...	Title_2
...	

Facsimile(s)

Page 1 of ...

Playschedule ...

Widgets description

Name	Mandatory/Optional
Settlementl	O
Date Column	O
Performances Column	O

Action Paths and Results

1. Select button "Schow XML"-> a window will be opened with xml content.
2. Select button "Load XML"-> a window will be opened for save xml content. (disabled)
3. Click on name link for one person or on title for work -> a new tab with detailed information will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Validation and Constraints

Section can contains a facsimile area. Facsimile area show one or more pages.

Data sources and targets

Sources	getMonthsForSelectedYear.xql getScheduleTable.xql
---------	--

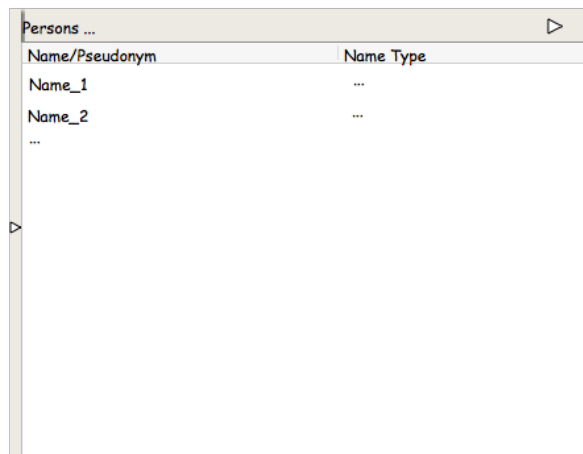
3.3. „Persons“-Tab

Execution

Click for "„Persons“" end-node in navigation tree —> a new tab will be opened. Tab contains an detailed information section and navigation tree.

If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Layout



Name/Pseudonym	Name Type
Name_1	...
Name_2	...
...	

Person: ...

Show XML
Load XML

Name Types
Regular:
Full:
Alternative:
Pseudonym(s):

Generally Information
[Deutschen Nationalbibliothek Page](#)
[Weber-Gesamtausgabe Page](#)
[Virtual International Authority File](#)
Male/Female
Date of Birth
Date of Death
Summary:

Occupation

Date	Function

Residance(s)

Date	City

Play Operations and Management

Works

Source
Source_1

Sources

Source
Source_1

Expenses

Year	Months
...	Month

Widgets description

Navigation tree show persons sorted alphabetical. detailed information section contains "Name Types", "Generally Information", "Works", "Sources", "Expenses".

Action Paths and Results

1. Select button "Schow XML"-> a window will be opened with xml content.
2. Select button "Load XML"-> a window will be opened for save xml content. (disabled)
3. Click on name link in navigation tree -> a section detailed information will be opened.
4. Click on name link in tables -> a new tab with detailed information will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.
5. Click on extern link in „Generally Information“ section a new browser tab with detailed information will be opened. Extern links are "Deutsche Nationalbibliothek", "Weber-Gesamtausgabe"and "Virtual International Authority File".

Validation and Constraints

Only exists data fields will be show.

Data sources and targets

Sources	getPersonsForSelection.xql getPersonOverview.xql
---------	---

3.4. „Expensess“-Tab

Execution

Click for "„Expensess“" end-node in navigation tree —> a new tab will be opened. For each exists month one closable section will be created. Section can contains a facsimile area. Facsimile area show one or more pages.

If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Layout

Expenses Title

Show XML

Load XML

Date	Informations	Measure(s)
...	Title_1
...	... Title_2	...
...	... Personname	...

Facsimile(s)

Page < 1 ▾ > of ...

Expenses Title

...

Widgets description

Name	Mandatory/Optional
Date Column	O
Information Column	O
Measure Column	O

Action Paths and Results

1. Select button "Schow XML"-> a window will be opened with xml content.
2. Select button "Load XML"-> a window will be opened for save xml content. (disabled)
3. Click on name link for one person or on title for work -> a new tab with detailed information will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Data sources and targets

Sources	getIssueNames.xql getIssueTable.xql
---------	--

3.5. „Revenues“-Tab

Execution

Click for "„Revenues“-" end-node in navigation tree —> a new tab will be opened. For each exists month one closable section will be created. Section can contains a facsimile area. Facsimile area show one or more pages.

If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Layout

Revenues Title

Show XML Load XML

Date	Informations	Measure(s)
...	Title_1
...	... Title_2	...
...	... Personname	...

Facsimile(s)

Page 1 of ...

Revenues Title

Widgets description

Name	Mandatory/Optional	
Date Column	O	
Information Column	O	
Measure Column	O	

Action Paths and Results

1. Select button "Schow XML"-> a window will be opened with xml content.
2. Select button "Load XML"-> a window will be opened for save xml content. (disabled)
3. Click on name link for one person or on title for work -> a new tab with detailed information will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Data sources and targets

Sources	getMonthsByRevenueYear.xql getRevenueTable.xql
---------	---

3.6. „Custom Items“-Tab

Execution

Click for "Custom Items" end-node in navigation tree —> a new tab will be opened. For each exists month one closable section will be created. Section can contains a facsimile area. Facsimile area show one or more pages.

If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Widgets description

HTML- or PDF-File will be shown.

Data sources and targets

Get file from DB.

3.7. „Search Results“-Tab

Execution

Select an item in "Filter" combobox and enter optionally search term in search field -> select search icon -> a new tab will be opened with search results. A new item in "History Tabs"combobox will be created.

Layout

Works with ...						△
Nr.	Title	Title Type	Language	Persons	Details	
1	Title_1	...				
2				
...				

Persons with ...				△
Nr.	Name	Name Type	Details	
1	Name_1	...		
2		
...		

Widgets description

Name	Mandatory/Optional
Nr Column	M
Name Column	O
Name Type Column	O
Details Column	M

Action Paths and Results

Select icon in details column-> new tab with detailed information will be opened. If one tab for clicked item is opened -> this tab will be activated. For both cases a new item in "History Tabs"combobox will be created.

Validation and Constraints

If searched information will be found in DB, a table with results will be shown.

Data sources and targets

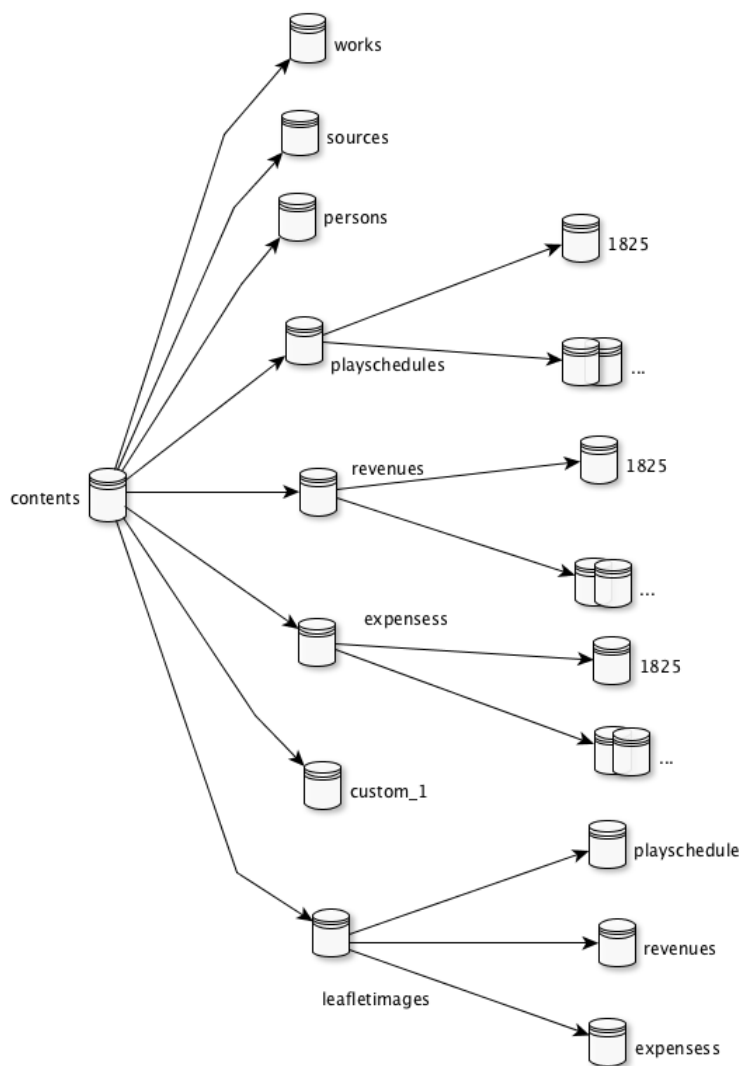
Sources	searchWorks.xql searchPersons.xql
---------	--------------------------------------

Teil III.

Data Design

4. DB-Structure

Informations, presented as MEI-, TEI-, Image-, HTML or PDF-Files, are saved in database for types (e.g works, persons, sources, ...) . For Facsimiles exists are image order. Images will be shown with a Leaflet library. For this library images must be cut (one Tool, that will be implemented in Detmold: <https://github.com/Edirom/cutImages>). The Figure shows an example for database structure.



5. Property-Files

A configuration file describe database structure and some project data for show information in GUI. File dbStricture.xml should be saved in xml-database in app/theater-data directory. Informations for key="custom" are saved as PDF or HTML other informations for defined entry-keys are saved as MEI or TEI. For details show an example configuration (Link).

DB Structure File

```

<prefs>
  <entries>
    <!--language: en = englishm de= deutsch-->

```

```

<entry key="language" value="en"/>

<!--Types of Navigation: "theatre", "other". For type "theatre"
      two items "Organization" and "Administration"-->
<entry key="navigation_type" value="theatre"/>
<entry key="name" value="Detmolder_Hoftheater"/>
<entry key="startyear" value="1825"/>
<entry key="endyear" value="1875"/>

<!--Database paths. For each path one item in navigation tree
      will be generated.-->
<!--If one item will be not shown in GUI the value is value="".-->
<!--Key words are not changeable.-->
<!--For more details please show "Systems Design" in help menu in
      toolbar.-->
<!--DB paths for repertoire item. For show repertoire work path
      must be exist, other paths are optional.-->
<entry key="works" value="theater-data-exs/works"/>
<entry key="sources" value="theater-data-exs/sources"/>

<!--Schedule paths are optional.-->
<entry key="playschedule" value="theater-data-exs/spielplaene"/>
<entry key="leafletimagesSchedule"
      value="theater-data-exs/leafletImages/spielplaene"/>

<!--DB path for persons.-->
<entry key="persons" value="theater-data-exs/persons"/>

<!--DB path for revenue.-->
<entry key="revenue" value="theater-data-exs/einnahmen"/>
<entry key="leafletimagesRevenue"
      value="theater-data-exs/leafletImages/einnahmen"/>

<!--DB path for expenses.-->
<entry key="expenses" value="theater-data-exs/ausgaben"/>
<entry key="leafletimagesExpenses"
      value="theater-data-exs/leafletImages/ausgaben"/>

<!--Definition of one or more custom navigation items. Value is
      name for navigation item.-->
<entry key="custom" value="Books"
      dbPath="theater-data-exs/info"/>
</entries>
</prefs>

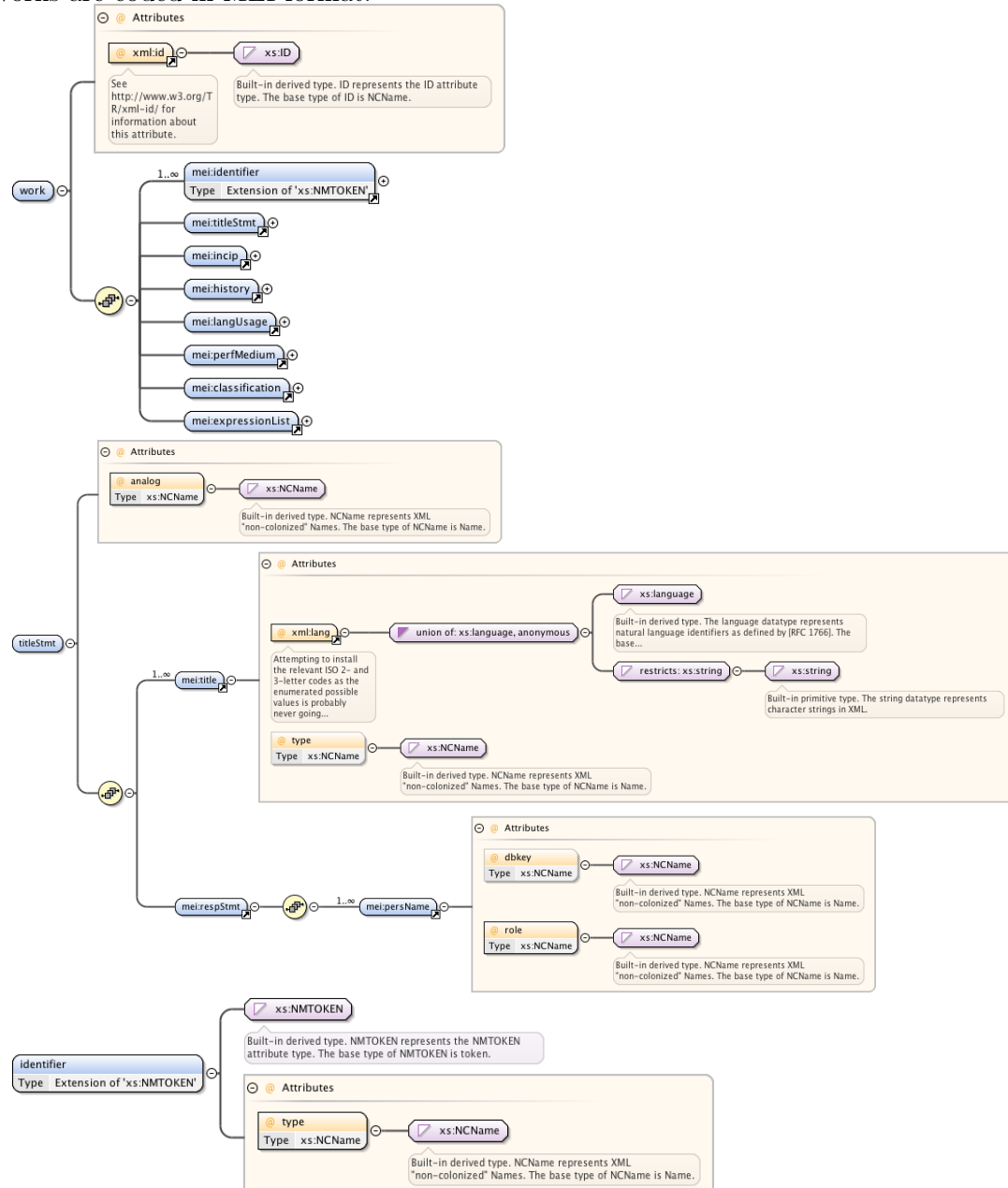
```

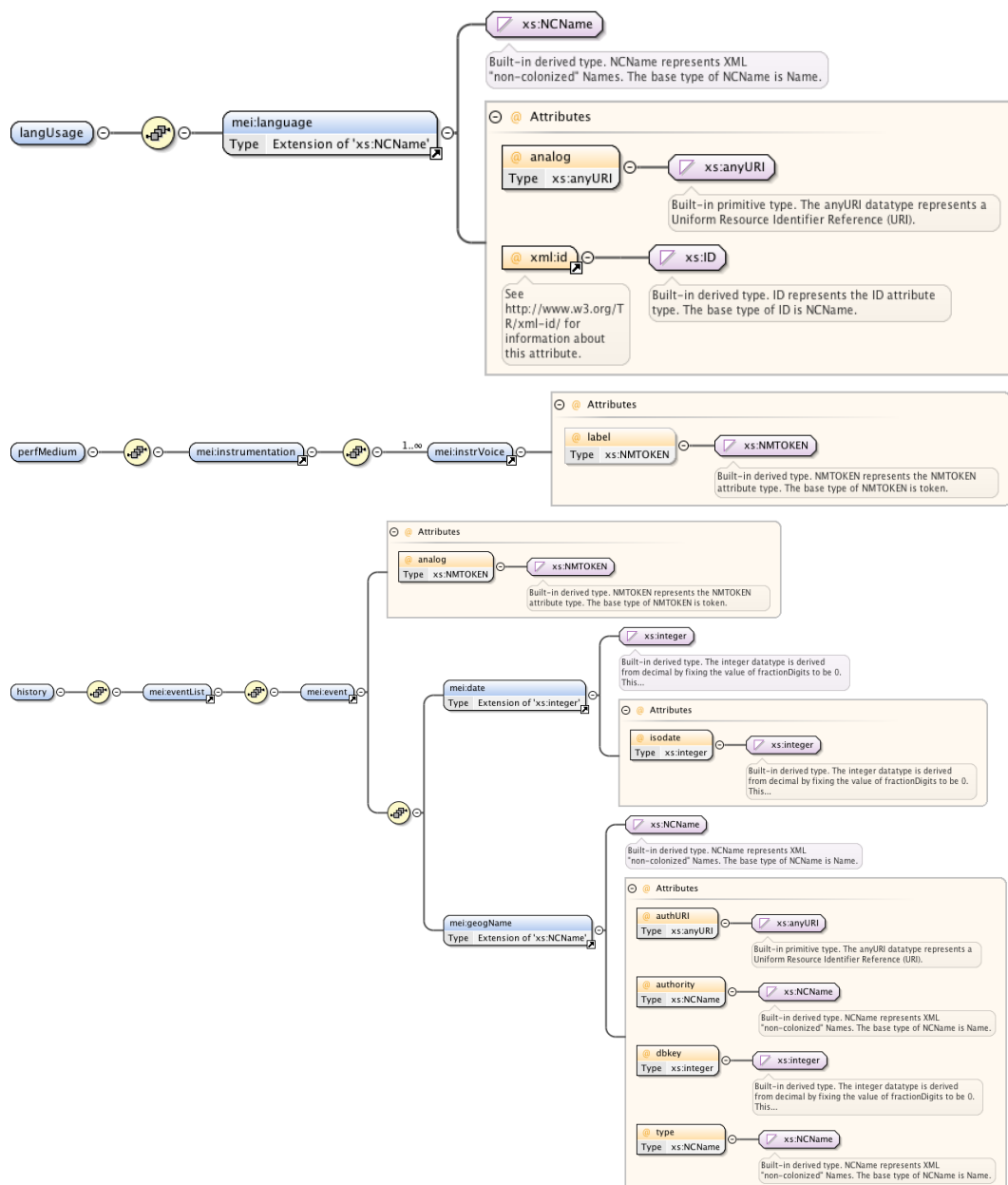
6. MEI and TEI Subsets

The GUI shows data that will be coded in MEI- or TEI-Format. Following structure for files will be support. For details show an example configuration (Link).

6.1. Works

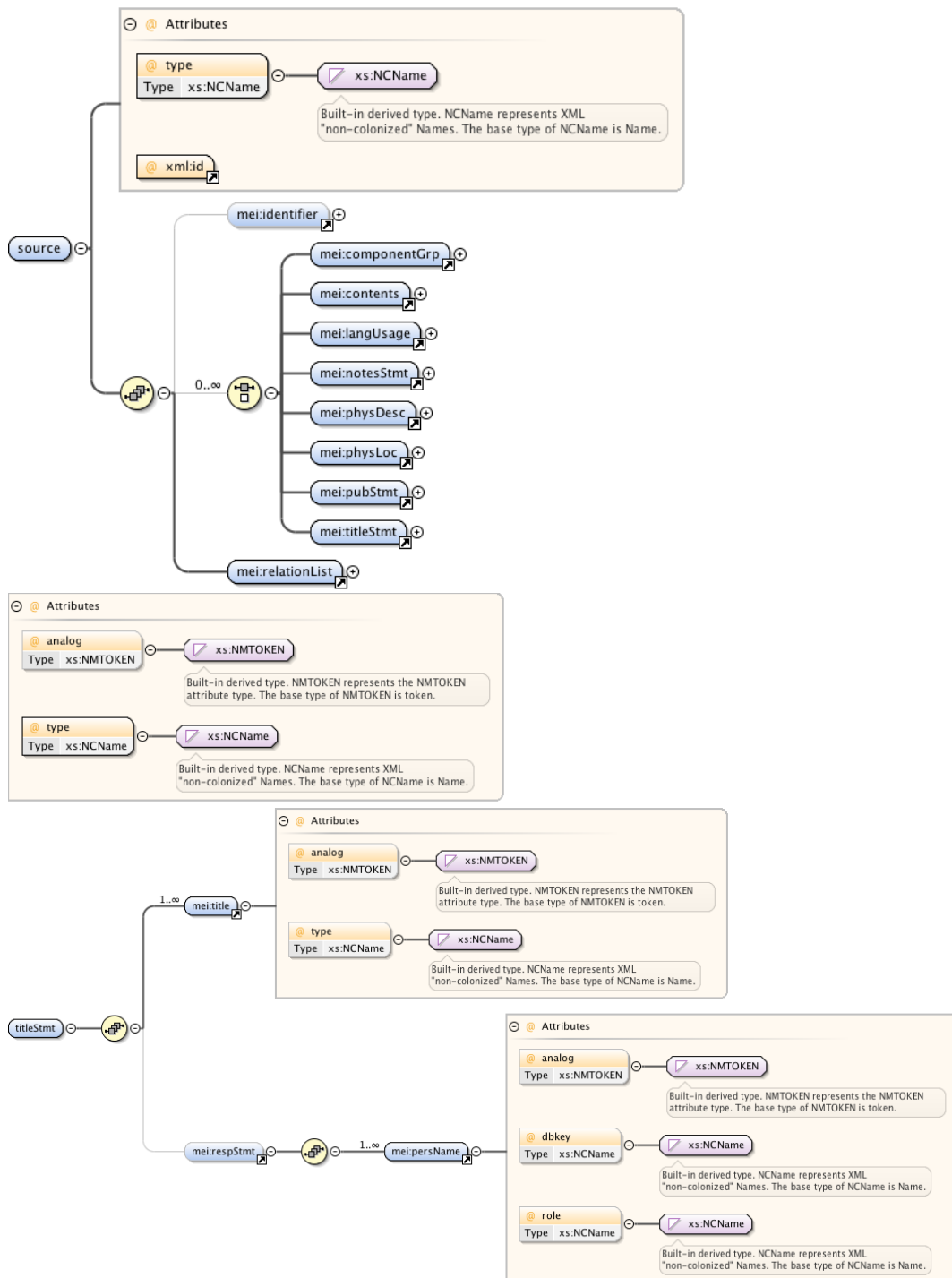
Works are coded in MEI format.

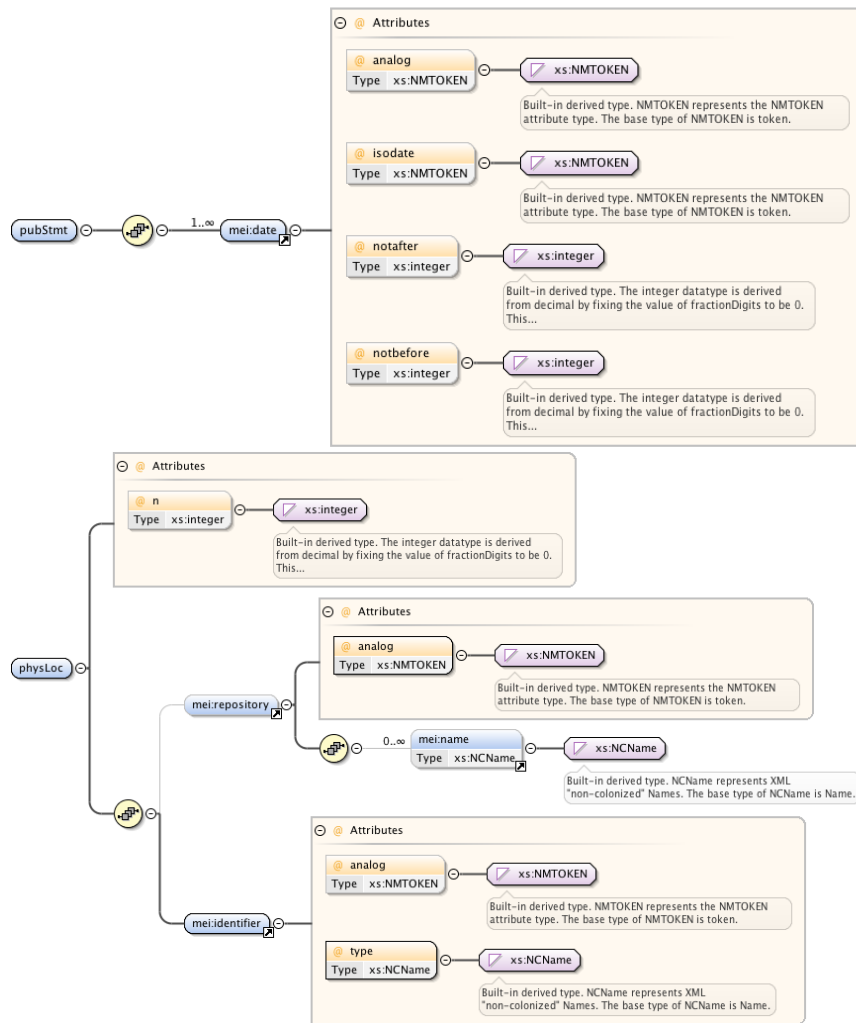


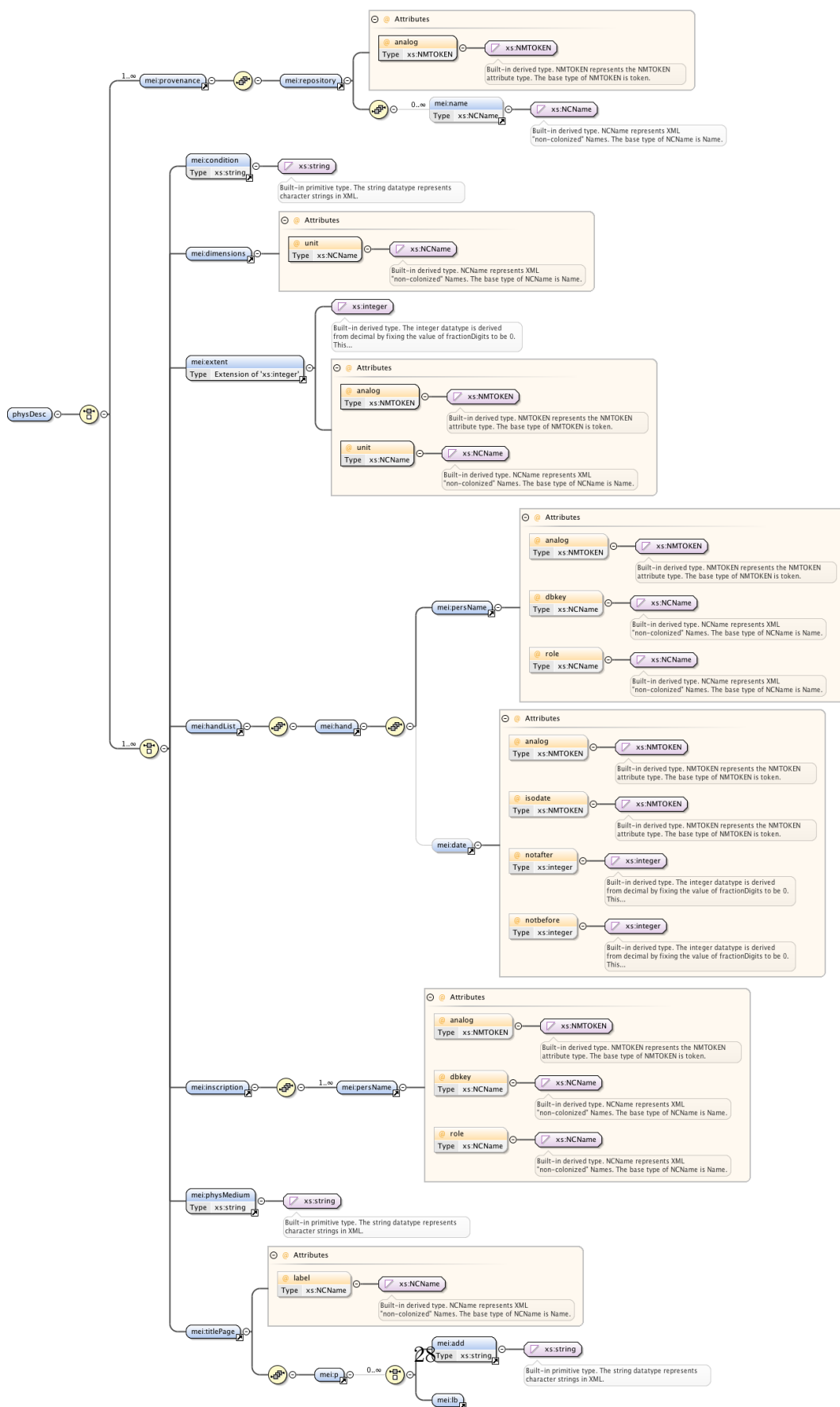


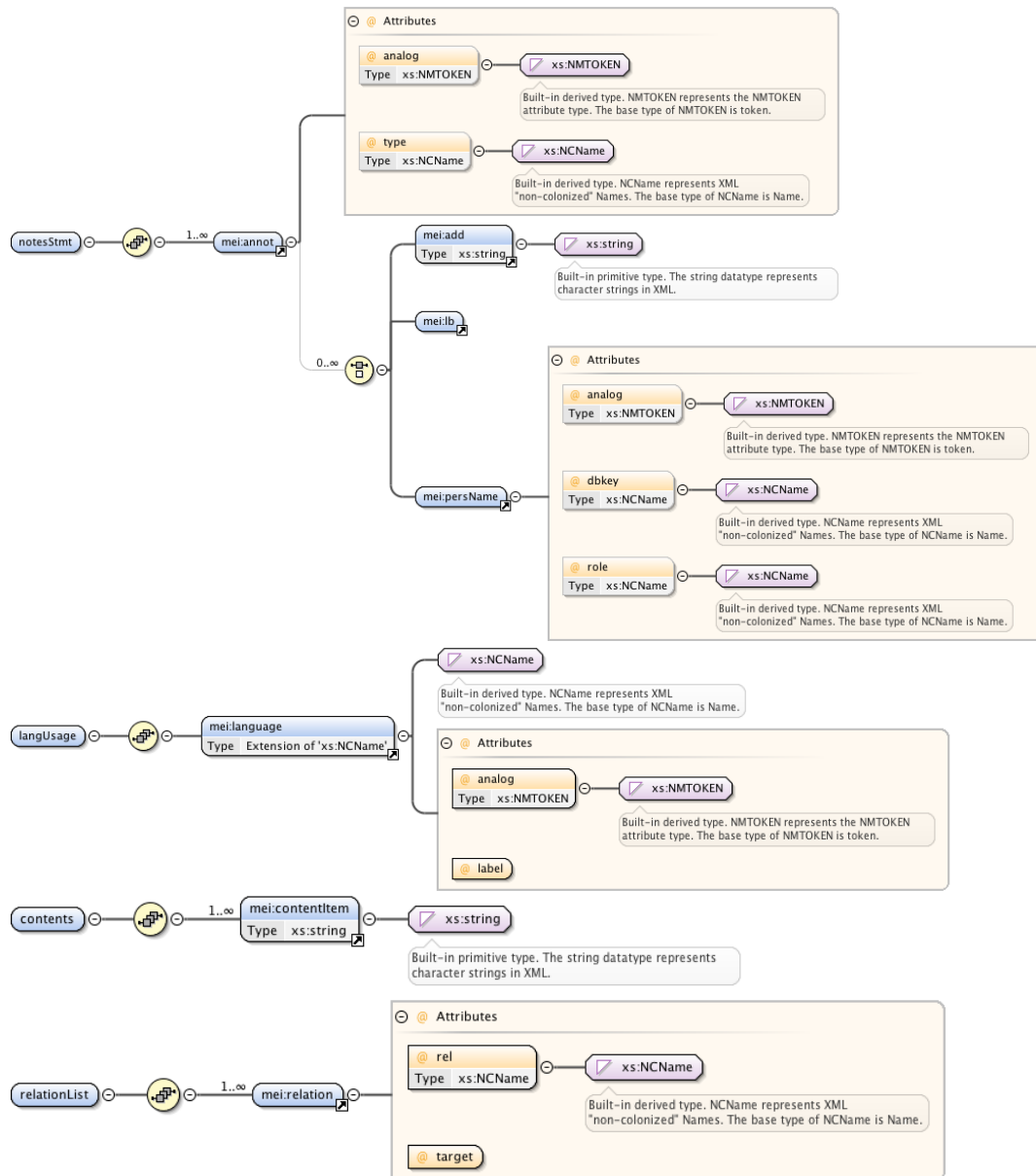
6.2. Sources

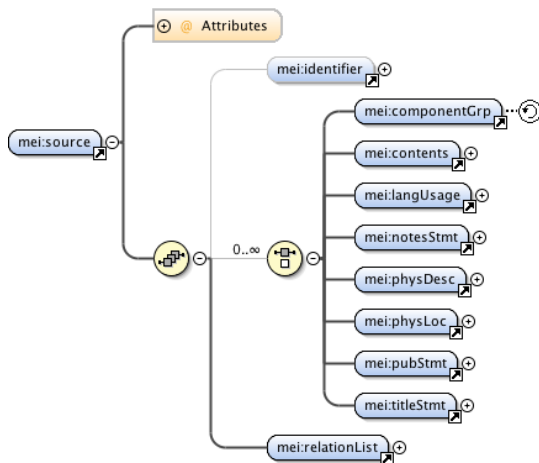
Sources are coded in MEI format.





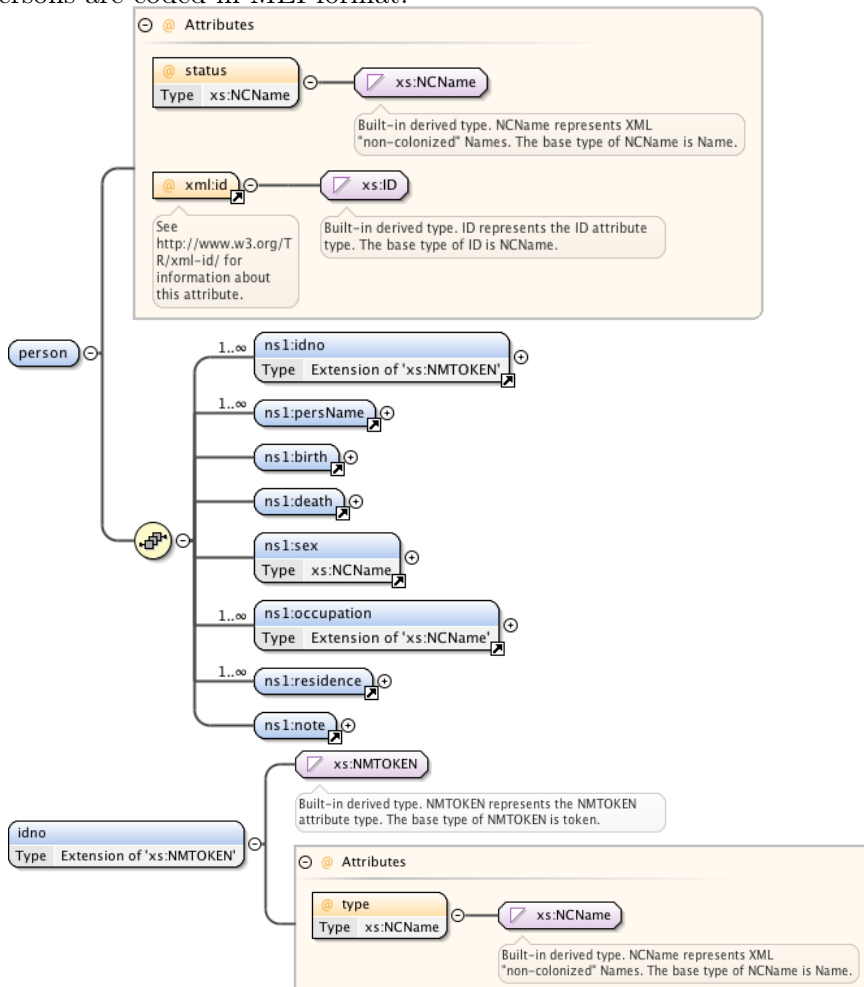


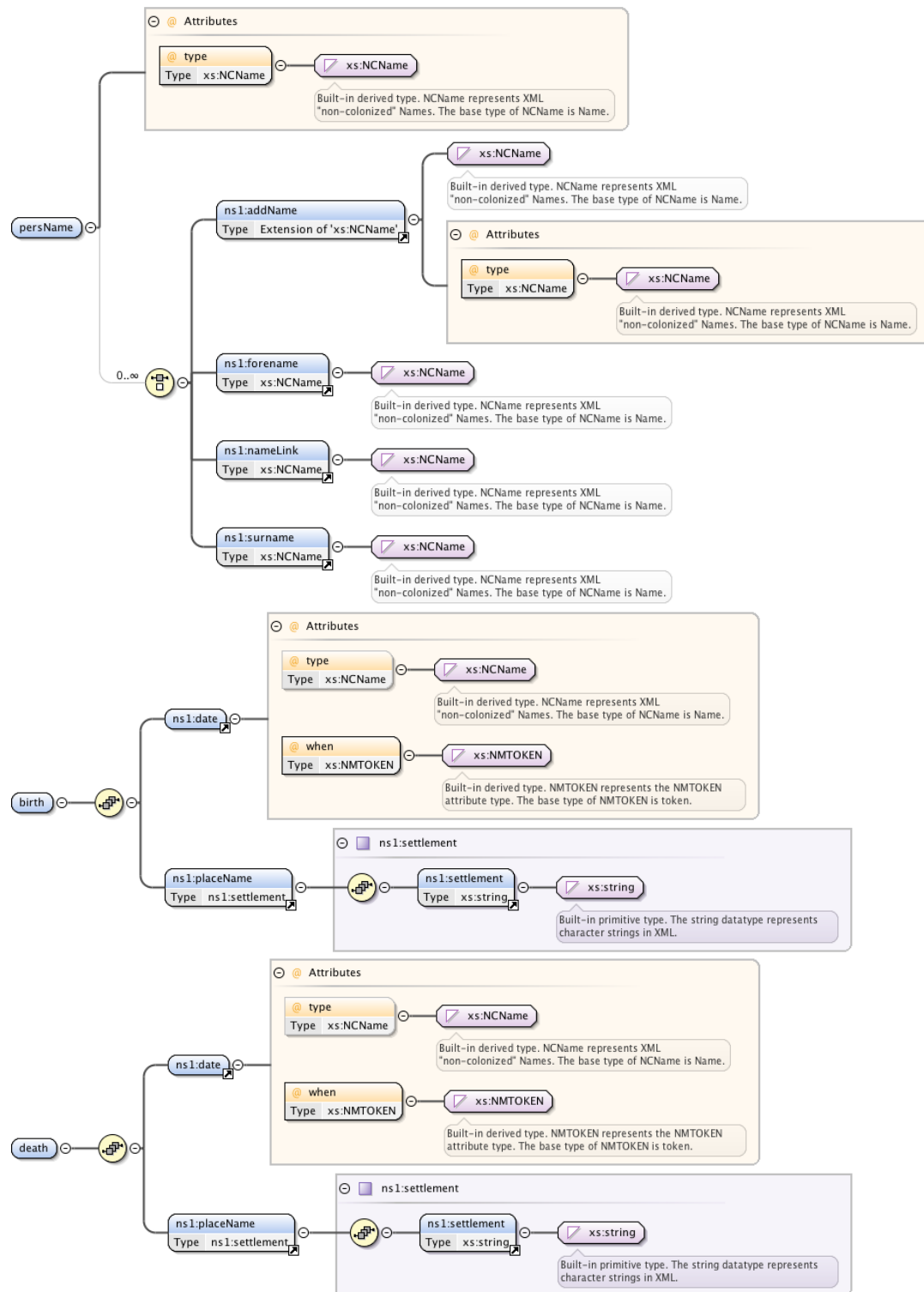


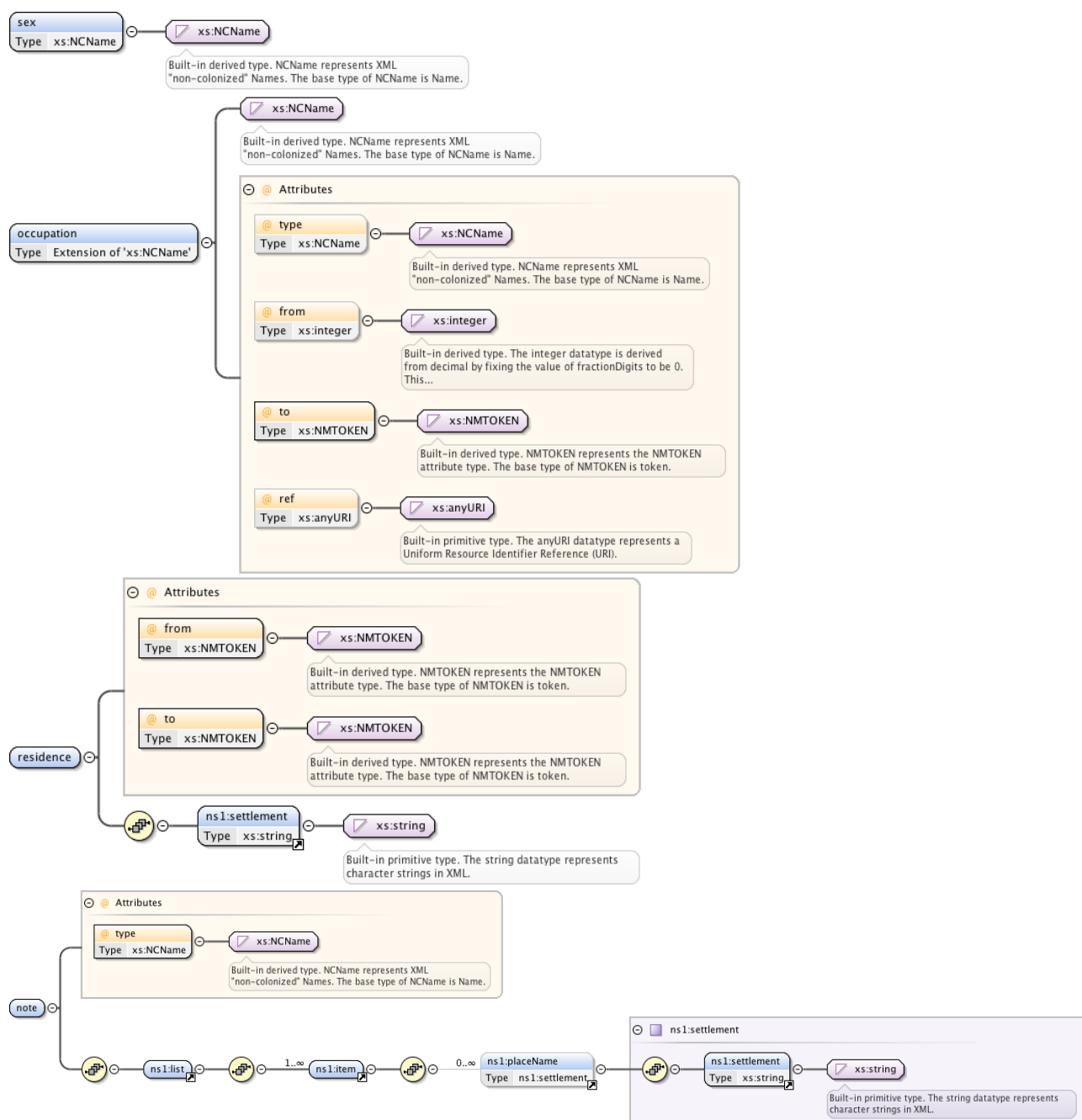


6.3. Persons

Persons are coded in MEI format.

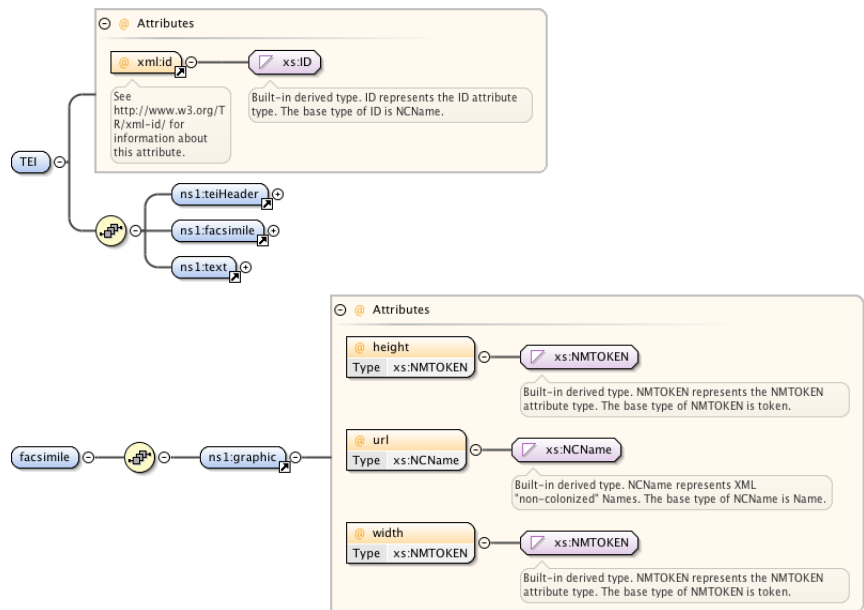


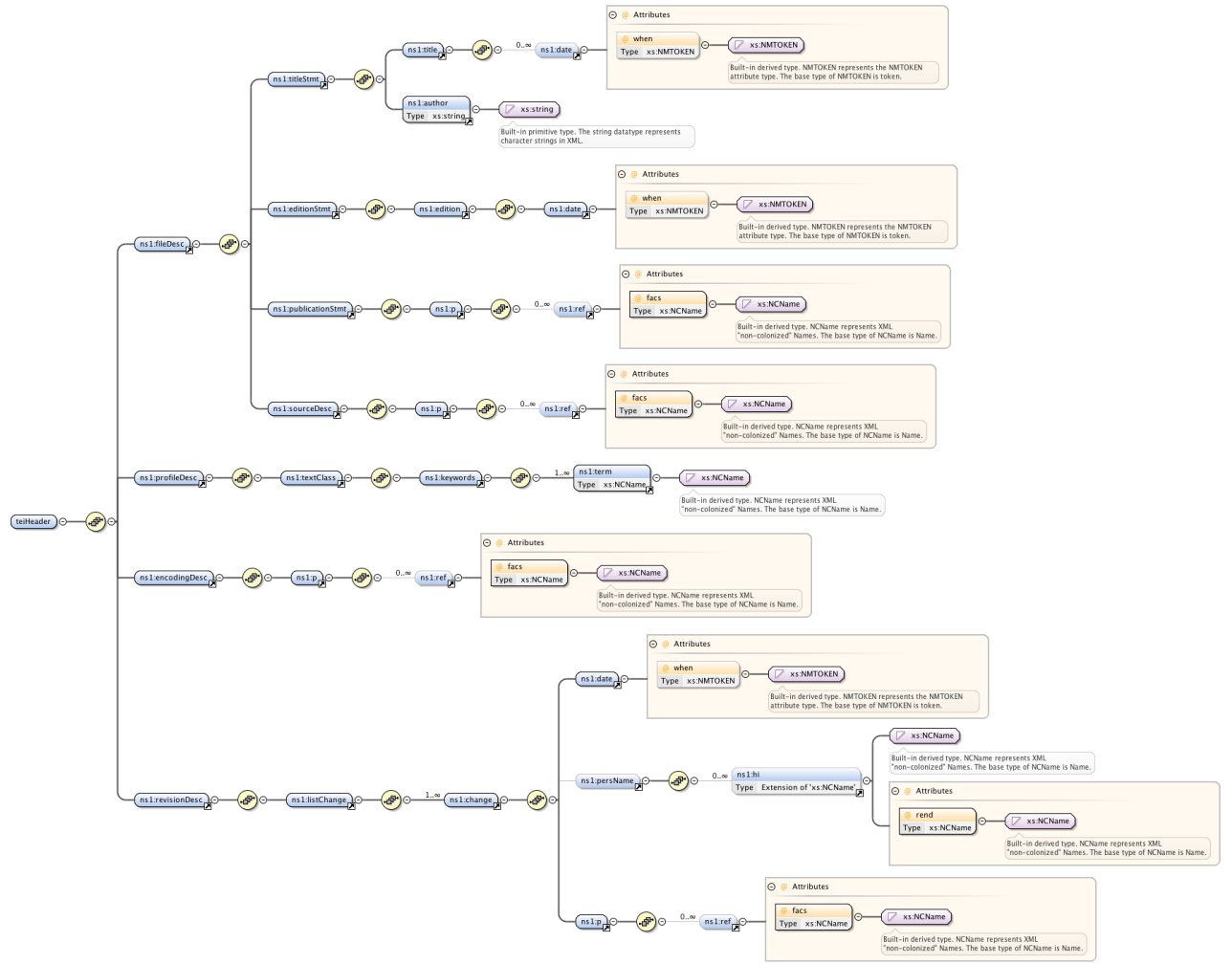




6.4. Playscedules

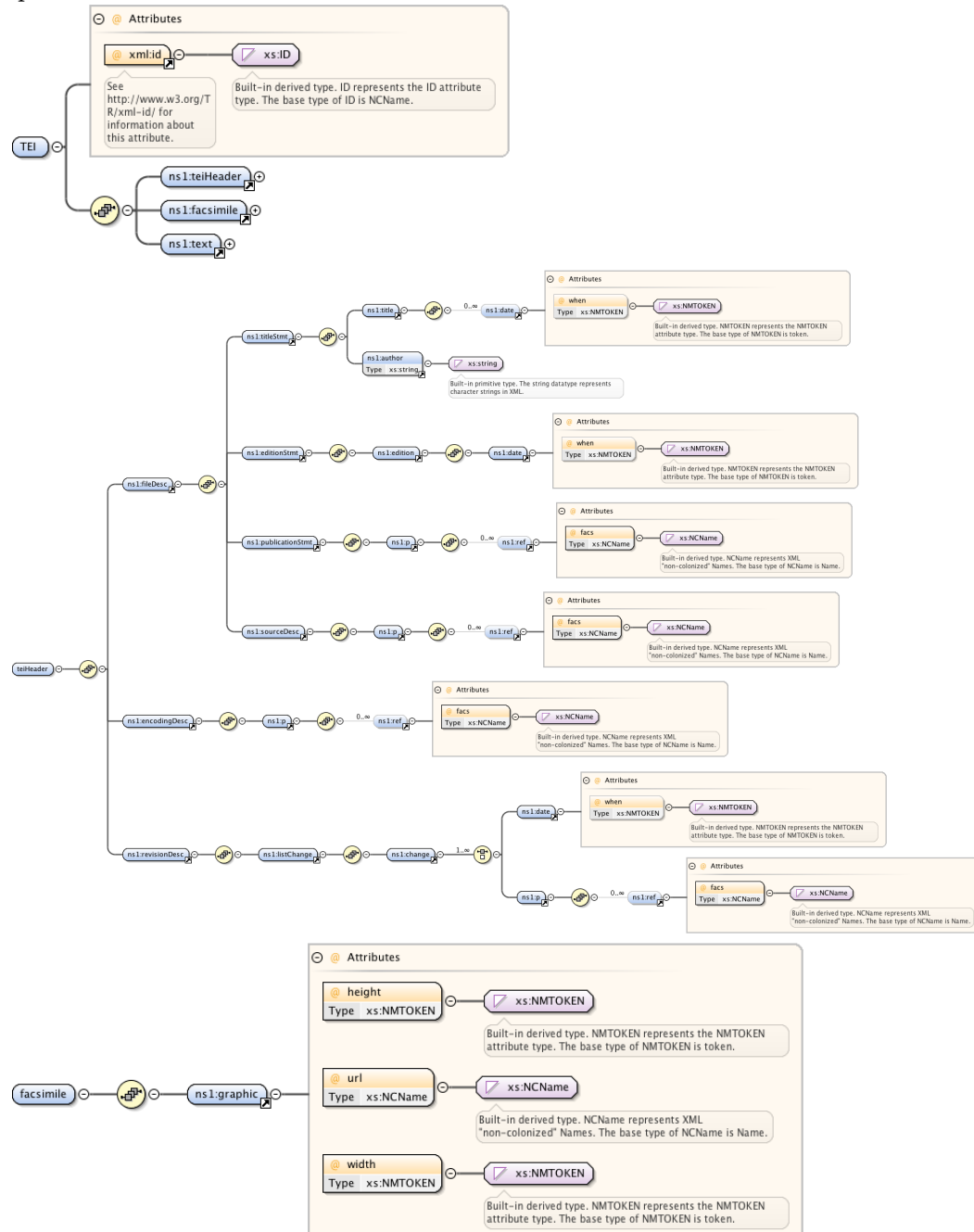
Playscedules are coded in TEI format.

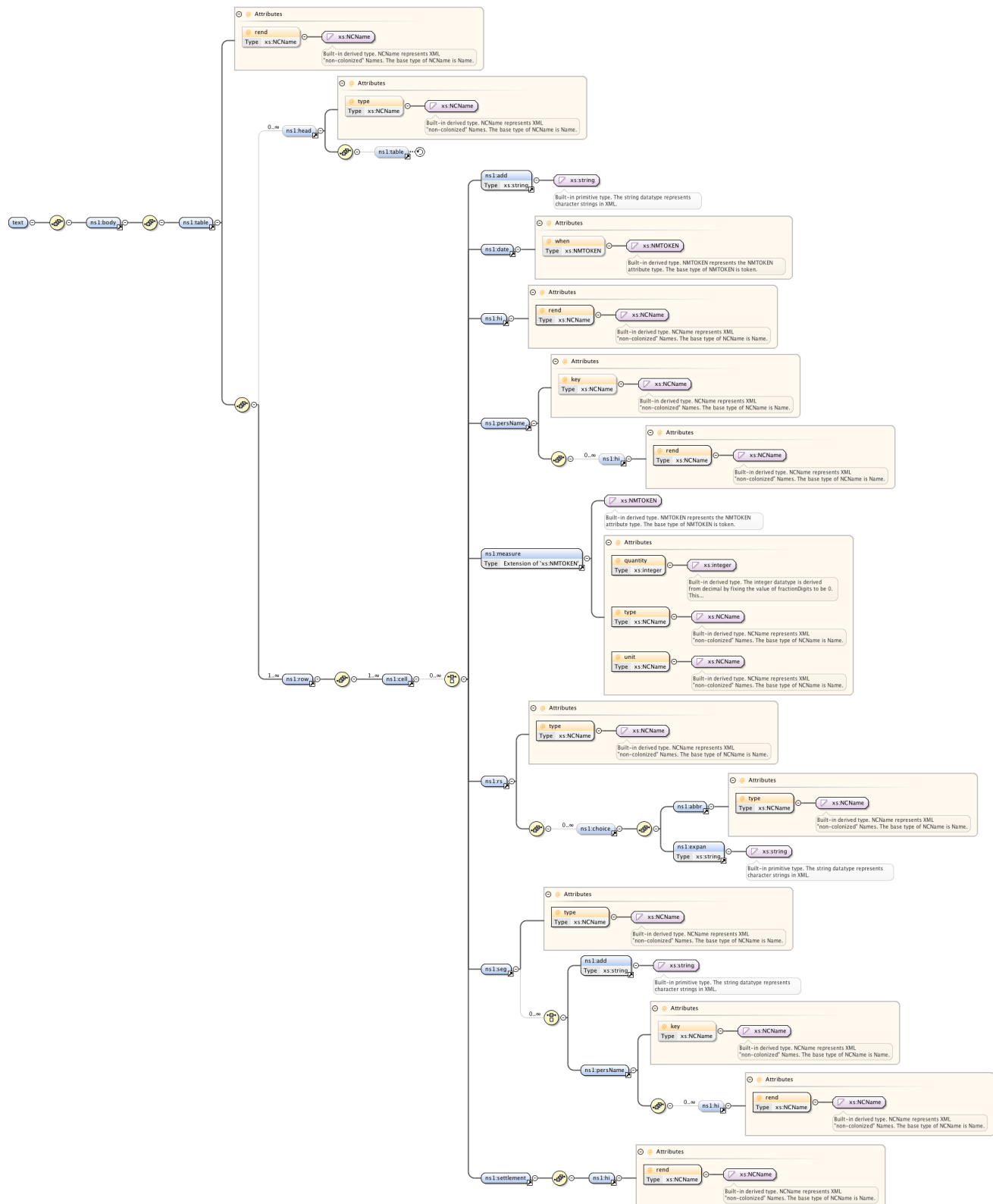




6.5. Expenses

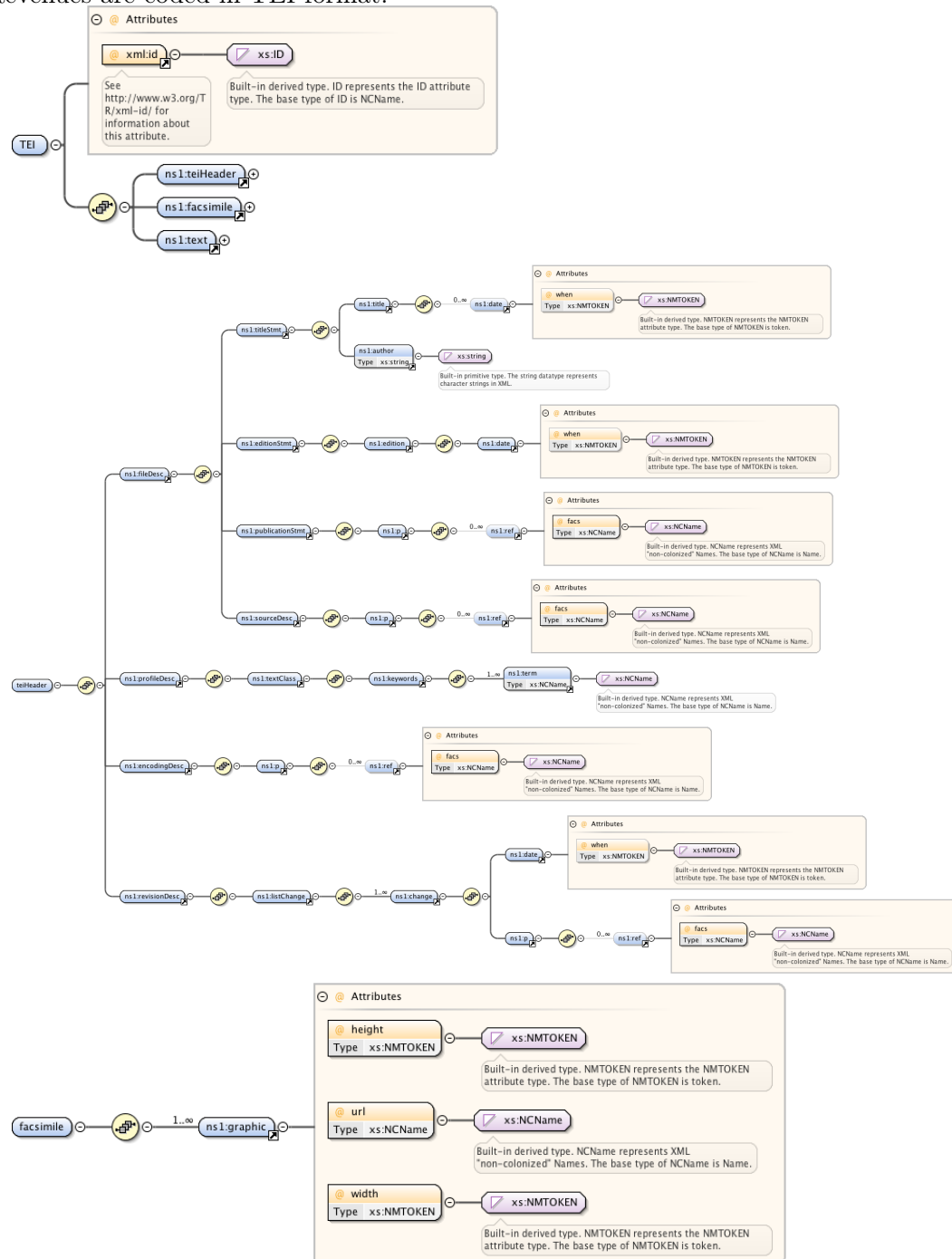
Expenses are coded in TEI format.

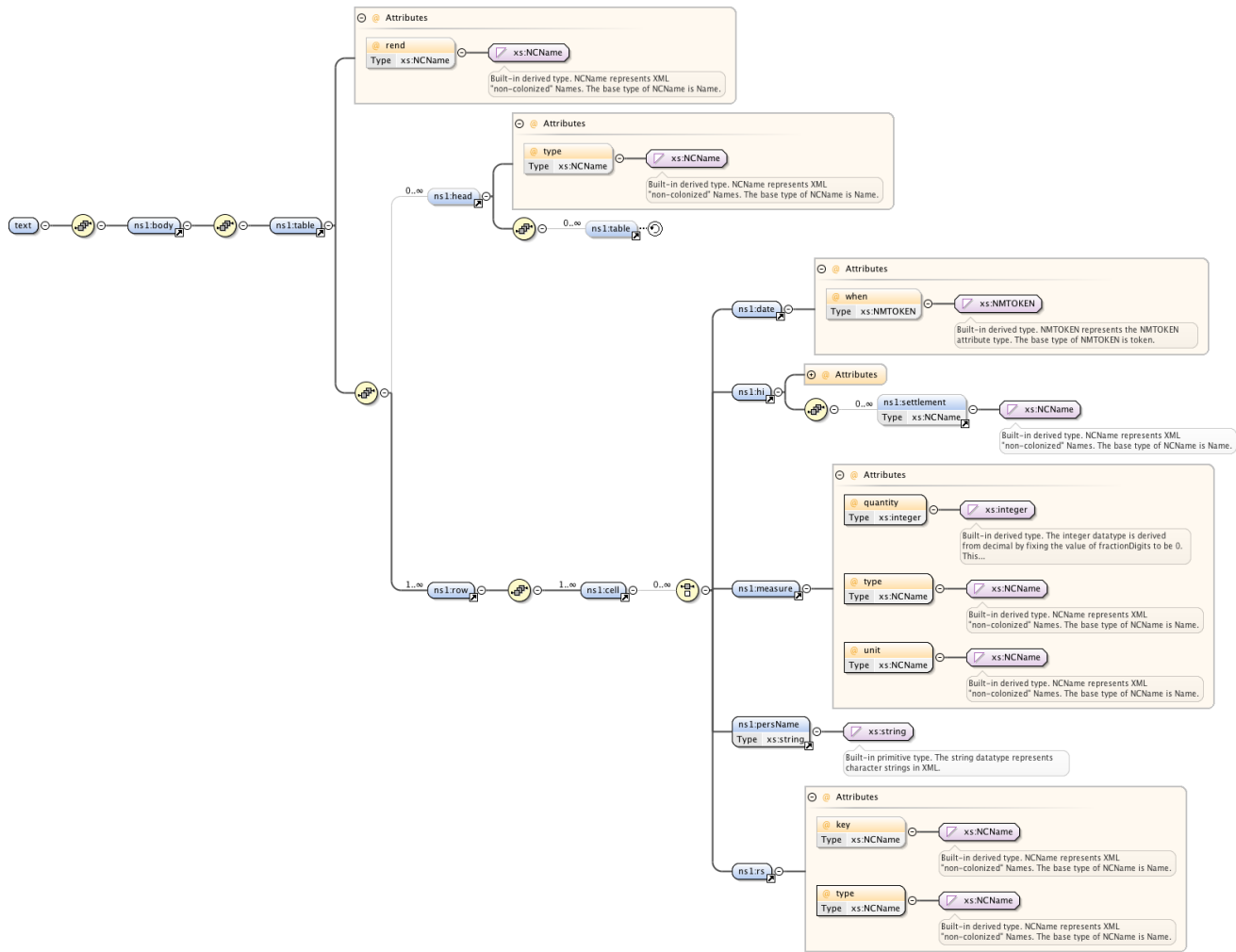




6.6. Revenues

Revenues are coded in TEI format.





7. Relation-Diagram

Following diagram shows relations between objects. Objects are linked with id's and have direction only one direction. Exception is directions between works and sources. They have references in both directions. With dotted line are references that to be done.

Teil IV.

Process Design

8. `getDBStructure.xql`
9. `getRevenuelItems.xql`
10. `getExpensesslItems.xql`
11. `getScheduleslItems.xql`
12. `getCustomlItems.xql`
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20. `getlIssueTable.xql`
21. `getMonthsByRevenueYear.xql`
22. `getRevenueTable.xql`
23. `searchWorks.xql`
24. `searchPersons.xql`