Dealing with commodities in Navigocorpus.
Offering tools and flexibility

Jean-Pierre Dedieu (Lyon, France)
Silvia Marzagalli (Nice, France)
What is Navigocorpus?

http://navigocorpus.org

A database on shipping:
- Journeys
- Cargoes
- Taxes
- Related data on actors, shipping and trade (contracts, delivery, firms, etc.)
How we processed journeys

- A list of points stored into as many records as points:
  - Chronologically ordered
  - Stored into a specific table (« Points »)
- A point is a place:
  - Through which a ship sailed
  - Characterized by an action (in, out, transit...)
  - Characterized by a date
# A journey in Navigocorpus

Each line is a point and also a record of the database

<table>
<thead>
<tr>
<th>Pt status-class-rank</th>
<th>Indate</th>
<th>Point</th>
<th>Outdate</th>
<th>Ship class</th>
<th>Ship name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC-RS</td>
<td>A</td>
<td>Genes</td>
<td>1794=10=23</td>
<td>(Tartane)</td>
<td>Vierge de</td>
<td>Out</td>
</tr>
<tr>
<td>PC-RS</td>
<td>O 2</td>
<td>Marseille</td>
<td>1794=11=05</td>
<td>Tartane</td>
<td>Vierge de</td>
<td>In</td>
</tr>
<tr>
<td>PC-RS</td>
<td>A 1</td>
<td>Port Maurice</td>
<td>1795=01=27</td>
<td>(Tartane)</td>
<td>Notre Dame de</td>
<td>Out</td>
</tr>
<tr>
<td>PC-RS</td>
<td>O 2</td>
<td>Marseille</td>
<td>1795=02=15</td>
<td>Tartane</td>
<td>Notre Dame de</td>
<td>In</td>
</tr>
<tr>
<td>PC-RS</td>
<td>A 1</td>
<td>Port maurice</td>
<td>1795=03=30</td>
<td>(Tartane)</td>
<td>Vierge de</td>
<td>Out</td>
</tr>
<tr>
<td>PC-RS</td>
<td>O 2</td>
<td>Marseille</td>
<td>1795=04=05</td>
<td>Tartane</td>
<td>Vierge de</td>
<td>In</td>
</tr>
<tr>
<td>PC-RS</td>
<td>A 1</td>
<td>Port maurice</td>
<td>1795=05=01</td>
<td>(Tartane)</td>
<td>Vierge de</td>
<td>Out</td>
</tr>
<tr>
<td>PC-RS</td>
<td>O 2</td>
<td>Marseille</td>
<td>1795=05=05</td>
<td>Tartane</td>
<td>Vierge de</td>
<td>In</td>
</tr>
</tbody>
</table>
How to process cargoes?

A list of cargo items:
- Defined as such by the source (same product, same unit, same price)
- Stored into a specific table (« Cargo »)
- Each cargo item as a record
- Each item linked to the point about which it has been mentioned by the source.
## A cargo in Navigocorpus

<table>
<thead>
<tr>
<th>Port name</th>
<th>Date</th>
<th>Item</th>
<th>Quantity</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Blé</td>
<td>310</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Bois à brûler</td>
<td>400</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Charbon de bois</td>
<td>90</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Huile</td>
<td>50</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Oranges</td>
<td>60</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Figues</td>
<td>36</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Riz</td>
<td>50</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Escargole</td>
<td>12</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Savon</td>
<td>12</td>
<td>In</td>
</tr>
<tr>
<td>Marseille</td>
<td>1795-01-02</td>
<td>Cuirs à tanner</td>
<td>2</td>
<td>In</td>
</tr>
</tbody>
</table>

Point identifier (linking field to the Points table)
What are commodities (1)?


"In international trade we define commodities as materials and articles movable and procurable..."
They are created by classification

"The term 'commodities' may be applied to the finest detail or to homogeneous groupings of the detailed classifications. There is therefore really no firm answer as to whether "fabrics" or "cotton fabrics" are "commodities".

The answer depends on the use made of the classification and thus depends on whether the products are sufficiently homogeneous in price, economic use, market, etc., to fit the needs of classification".
Criteria for historical classification

Conditioned by two terms:

- **Possibilities**: limits of the documentation
  => many classes imposed on the researcher by lack of information

- **Flexibility**: to meet the researcher's needs
  => no possible stable nor unique classification
Possibilities.
Cod, dry cod fish, green cod fish

Retrieve of Newburyport

Bordeaux the 13th December 1757

I hereby declare before you, Joseph Fenwick, Consul of the United States of America in this Port.

I arrived here 1st July 1757.
My vessel is called the Retrieve.
Is a Brigg
Navigated with
My owners are
That
They live at
I cleared from
I have touched at
I am loaded by
Consign to
My cargo consists in

90 quintals dry cod fish
1200 30' green 20
3 6 Bales Cotton
20 Barrels Porter
6 casks Rum
1 50' Indigo
20 Barrels Salt
300 pair Shoes

Joseph Wages

Sally of Salem

Bordeaux, the 13th December 1797

I hereby declare before you, Joseph Fenwick, Consul of the United States of America, in this Port.

I arrived here the 12th December.
My vessel is called the Sally of Salem.
Is a Schooner
Burthen 65 Tuns
Navigated with
My owners are
That
They live at Salem
J cleared from New-England
I have touched at
I am loaded by
Consign to
My cargo consists in

a Parcel of 1000 lbs.
4 Barrels Whiskey

John Peck
Flexibility. On-the-way classification

- Setting classification markers on blocks of cargo items considered as belonging to a same class
- Fast, non-exhaustive, temporary
- Highly unstable
### On-the-way classification

<table>
<thead>
<tr>
<th>Commodity (raw data)</th>
<th>On the way classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhum</td>
<td>Rum 00000150 ID-GBAxxxx-JF-ElAxxxx-FBxxxx Colonial xxx 36 boucaut</td>
</tr>
<tr>
<td>Sucre</td>
<td>Sugar 00000147 ID-GBAxxxx-JF-DCAxxxx-FBxxxx Colonial xxx 72 barril</td>
</tr>
<tr>
<td>Sucre</td>
<td>Sugar 00000147 ID-GBAxxxx-JF-DCAxxxx-FBxxxx Colonial xxx 2 tiergon</td>
</tr>
<tr>
<td>Sucre</td>
<td>Sugar 00000147 ID-GBAxxxx-JF-DCAxxxx-FBxxxx Colonial xxx 415 caisse</td>
</tr>
<tr>
<td>Café</td>
<td>Coffee 00000138 ID-GCCxxxx-xx-xooooo-FBxxxx Colonial xxx 67 boucaut</td>
</tr>
<tr>
<td>Café</td>
<td>Coffee 00000138 ID-GCCxxxx-xx-xooooo-FBxxxx Colonial xxx 14 barril</td>
</tr>
<tr>
<td>Café</td>
<td>Coffee 00000138 ID-GCCxxxx-xx-xooooo-FBxxxx Colonial xxx 310 balle</td>
</tr>
<tr>
<td>Café</td>
<td>Coffee 00000138 ID-GCCxxxx-xx-xooooo-FBxxxx Colonial xxx 103 sac</td>
</tr>
<tr>
<td>Tabac</td>
<td>Tobacco 00000032 ID-GVAxxxx-xx-xooooo-FBxxxx Colonial xxx 11 boucauts</td>
</tr>
</tbody>
</table>

- **Commodity (raw data)**
- **Commodity (English)**
- **Commodity (Identifier)**
- **Commodity (Permanent coding)**

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*Note: The table above shows the on-the-way classification of various commodities with their corresponding identifiers and permanent coding.*
Controlling instability
Distinguishing commodities

- Source-based definition of the commodity
  => change in wording = different commodity
  Eg. Anchovies / Salted anchovies

- English translation as standard name
- Identifier of commodity
Controlling instability
Grouping commodities

- Permanent coding
  Makes possible to find a same commodity starting from objective characters
  Provides classes

- Multi-criteria classification (cf. Kolesnikoff, op. cit.)
Three standard criteria

Three standard classification lines (*Kolesnikoff, op. cit.*):

- Material
- Elaboration
- Use
### Permanent coding string

**Sugar:**

**ID-GBAxxx-JF-DCAxxx-FBxx**

<table>
<thead>
<tr>
<th>Raw material</th>
<th>Elaboration process</th>
<th>Normal use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw products (I)</td>
<td>Industry (J)</td>
<td>Food (F)</td>
</tr>
<tr>
<td>Agricultural (D)</td>
<td>Food industries (F)</td>
<td>Human (B)</td>
</tr>
<tr>
<td>Vegetal for industry (G)</td>
<td>Sugar (C)</td>
<td></td>
</tr>
<tr>
<td>For sugar industry (B)</td>
<td>Refined generic (CA)</td>
<td></td>
</tr>
<tr>
<td>Cane (A)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A guide to classification

Our classification was based on:

Last port touched by ships importing fish to Marseille in 1787.
Fisheries from French ports, 1787

- Mackerel fisheries
- Newfoundland fisheries

Total burthen (French tonneaux)

- 11,879
- 2,970
Conclusion

- Based on the data, respectful of their limitations
- Providing guidelines
- Flexible, so as to let the researcher at liberty to create his own mixes
- And consequently complex