

## Full explanation of CrespoDynCoopNet DATA Collections

The collected data are stored into a Microsoft Access® database that has been designed to be physically integrated into a GIS system. The main structure of this initial database is built around the main table, named 'AGENTS', in which all biographic data related to the individual agents are entered taking into account the various 'worlds' each agent belongs to – social, economic...An individual study and classification has been carried out for each agent; then an attempt has been made to understand the collectivity as the sum total of all these individuals since all of these are related, as can be observed in the database. In relation to the agents, what is new about this initial database is that the investigation is not limited to agents who are merchants by profession. Instead, any relevant data has been collected related to any agent that takes part in cooperation: representatives, corsairs and pirates, capitalist partners, agents, consignees, etc. All of the latter are agents taking part in cooperation and are part of a global network of trade, smuggling, looting or any other type of cooperation or commercial operation.

**Format:** It is a Database in Access® with 30 tables (Access is a trade mark registered by Microsoft corp.). It contains several queries about actions, agents, cooperation, fleets and ships. All data have identifiers that relate tables. It has 21 full forms that give information on cooperation among agents while identifying partners. Lists with goods and ships are included.

A table named 'COOPERATIONS' is also defined, in which all forms of commercial relationships – business, Company, Society, etc. -are represented which take place between agents. This again is new as the study is not limited to a specific type of commercial operation but has been extended to all types of goods transactions in which two or more agents are involved, be it legal or illegal, be the goods slaves or metals. The objective is to identify all types of commercial networks. In fact, as agents we have people, Societies, Companies, Institutions, etc. There is also a table named 'ACTIONS' where all activities or actions are entered, such as money lending, job commissioning, etc., that occurred within cooperation and were quoted by the sourced used. This table is related to another, very important one – 'SHIPS'. Many of the remaining tables in the initial Access® database store typologies - places, professions, etc. Having chosen the previously described tables as primary (Agents, Cooperation, Actions and Ships) allows us to analyze the various commercial, professional and interpersonal relationships between the various agents, laying the emphasis on their geographic location, chronologic moment and degree of kinship; in short, the cooperation networks they built. (e.g. the importance of Nicholas Magens as a merchant, or that of the Roo or the Amsick families, whose range of action could spread from Alicante to Elche in Spain or from Cadiz to Manila via Mexico.

A very important aspect is the data's temporal component. In most cases two fields have been set up for the date value – a date-format one and a text one for when the source does not provide a precise date or the details are inconclusive. We face the same issue with regards to the spatial component – two fields have been set up, one stores the precise name of the spot and another for additional information (e.g. temporary residency) or when the current name of the place is unknown and only the old one is quoted. However, in this first database the places' geographic coordinates –latitude and longitude - were never input. In relation to this component, a new, differentiating, feature of this project is its geographical scope. Although based on a previous scope, the

Atlantic, when sources were investigated, specially those on trips and family networks, the scope widened to encompass the Mediterranean, the Pacific and even the Indian Ocean – the latter is specially relevant when studying the pirates' actions. That is to say, despite having started from a pre-determined spatial range, we have not relinquished the rest of the areas. Thus it is highlighted the importance of the cooperation networks that existed in the period studied and the already existing process of globalization.

On all tables the fields NOTES and SOURCES have been added so that every record has attached its own remarks and source quoted. Even on the tables for typologies fields have been added for remarks and definitions for those terms that are disused, obsolete or unknown, in an attempt to add clarity when doubts arise.

A **Spanish-English glossary** with usual terminology is attached to facilitate the understanding of the data set.

#### **Publications:**

Crespo Solana, Ana y Owens, Jack J. B. “Dynamic Complexity of Cooperation-Based Self-Organising Networks in the First Global Age (DynCoopNet)” *The Evolution of Cooperation and Trading*, By Ronald Noë, Rüdiger Klein, Julia Boman, Claire Rustat-Flinton, eds., Strasbourg, European Science Foundation, 2008, pp. 23-35.

<http://www.esf.org/activities/eurocores/programmes/tect.html>

Alonso García, David & Crespo Solana, Ana (coords.) *Self-Organising Networks and Trading Cooperation: GIS tools in the visualization of the Atlantic Economic Expansion (1400-1800)*, 2011 (forthcoming).

#### **Contents License:**

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