The Revealing Cooperation and Conflict Project

Project depiction of the Plaza de San Nicolas (Plasencia, Spain). Artistry by David Seidman.

www.revealingcooperationandconflict.org
The Revealing Cooperation and Conflict project seeks to invigorate the humanities and public’s imagination by creating a visually-compelling, data-robust, and historically-lush digital world known as Virtual Plasencia. Our endeavor generates a 3D walk-through model of a key portion of the walled city of Plasencia (Spain) that reveals Jewish, Catholic, and Muslim interrelations. We aim to recreate the cooperative and challenging processes that emerged during this era of intercultural integration and violence in Spain and Europe. Our team will populate the 3D model by transcribing and indexing census-like events from Book One (1399-1453) of the Capitulary Acts of the Cathedral of Plasencia. The project assembles geovisualization experts, historians, geographers, linguists, and computer scientists in the U.S.A., Switzerland, and Spain as well as global “citizen scholars”. Our digital world delivers a portal for the public to immerse themselves within and an open-access data repository for scholars. This start-up project launches our broader team effort to model issues of identity and social disruption from the 14th-17th centuries.
Statement of Innovation

Our project rallies new approaches to the study of cooperation and conflict by combining GIS, cartographic visualizations, and 3D models for a more accurate depiction of social, religious and political networks in Spain and Europe. It harnesses the power of the citizen scholar by crowdsourcing the transcription and indexing of historical documents. It implements a more flexible database scheme to capture non-linear relationships between agents and phenomena. It disseminates novel historical data using an intelligent, open-source virtual world and eBooks.

Digital imagery and GIS data for key locations in Plasencia, Spain.

Images by Dr. Roger L. Martinez-Davila (UCCS)
From the saved memories of Catholic churchmen, Jewish noble and merchant families, as well as medieval lords and knight clans, our endeavor revives long lost interactive and cooperative networks of people and places in Plasencia and Spain. The project focuses on interreligious affairs because archival evidence suggests that Jewish, Catholic, and Muslim relationships were far more integrated—both positively and negatively—than contemporary scholars and the public realize. For example, the pogroms of 1391 that led to large scale Jewish conversion to Christianity (forced and voluntary) and their eventual expulsion in 1492 led to enormous changes in social identity and communal boundaries creating new alignments in political, religious, and economic networks. By documenting such incidents and the interaction of noteworthy families, religious organizations, political networks, and economic partnerships, we will reconstruct the quintessential cultural dynamics that underlay the foundation of the Castilian world and its impact on Europe.
One of our primary deliverables is **Virtual Plasencia**
One of our primary deliverables is Virtual Plasencia, an interactive 3D digital world, as well as all of its open-source databases, codes, and APIs. Virtual Plasencia and these materials will be hosted on a dedicated website—the centerpiece of our dissemination strategy. Our team will populate the interactive 3D model by transcribing and indexing census-like events from Book One (1399-1453) of the Capitulary Acts of the Cathedral of Plasencia. Within Virtual Plasencia users will be able to navigate the city and experience dynamic links that zoom into various visualizations, such as the intricate alliances that occurred in 1442 between Catholic clans, Jewish families, the church, and the seigniorial nobility.
Why Rebuild Plasencia?

Plasencia matters — it was at the core of important developments in the late medieval and early modern world. For example, the leaders from this city secured King Ferdinand and Queen Isabel their most important title, “The Catholic Monarchs”, from the papacy. These same leaders were also responsible for securing the papal bulls that gave the Americas to Spain, for negotiating the marriage of England’s Henry VIII and Catherine of Aragon and for challenging Pope Julius II for the papacy in 1512 (with the assistance of the French and Machiavelli). In addition, leaders from Plasencia served as the first royal administrators of the Consejo de las Americas (the official Spanish American government) and prepared the first revised collection of official state histories for the new united kingdoms that made up Spain. In short, the community of Plasencia and their influential citizens, had a broad impact on the events that helped shape Spain and Europe. However, these momentous events did not self-generate or form in a vacuum, rather, they were the byproduct of the unusual conditions and relationships that began in the frontier city of Plasencia.
Virtual Plasencia - Four Innovations

The project’s implementation will involve four key innovations. They include: (1) modeling Plasencia on the micro-level, (2) bridging Plasencia and its socio-economic influence to Spain and Europe, (3) transcribing of unpublished manuscripts to collect data to populate our virtual world, and (4) integrating historical and geovisual databases.
Virtual Plasencia - A macro and micro world

To understand how this local history is connected to the broader European environment, the project will model two interconnected geographic scales—one micro and the other macro. The micro scale, which makes up the bulk of our work, will center on the city of Plasencia while the macro scale will expand beyond the city to the Iberian Peninsula and the European continent. For the micro, a detailed 3D model of Plasencia will provide a spatial context for the networks of power, faith, and kin. For this discrete project, we will model 30 percent of the city that includes portions of the Jewish quarter, the ecclesiastical zone nearest the cathedral, and a central neighborhood composed of noble families.
*Virtual Plasencia - Intensive GIS mapping*

For this discrete project we will model the following geographic features. The base streets and foot pathways map for the walled section of the city that is bounded by the Plaza Mayor (east), the Puerta de Trujillo (south), the Puerta de Coria (west), and the Puerta de Berrozas (north).

- This includes 25 base street and footpath streets.
- Detailed 3D modeling of two principal streets — Calle/Rua de Zapateria and Calle Trujillo.
- Detailed 3D modeling of the exterior of the Iglesia de San Nicolas, the synagogue, and the Palacio de los Mirabeles.
- Detailed 3D modeling of two public spaces — Plaza de la Catedral and Plaza de San Nicolas
By actively navigating the virtual world, users will experience local networks (e.g., religious, family, etc.) and perceive how these relationships developed and changed over time. Switching back to the macroscale, users will be able to view changes within Spain and Europe as well as examine the ramifications of larger kingdom events (e.g., pogroms or expulsions). The strength of the project lies in the seamless interaction between the local 3D model of Plasencia and a set of highly interactive visualizations that bridge the micro affairs to key historical events. At the core of the project lies an innovative geodatabase that links social, economic, and demographic data with 3D models and geographic information.
Engaging Citizen Scholars

A key component of the Revealing Cooperation and Conflict Project is the integration of citizen scholars into our research team. Through the use of a Massive Open Online Course, or a MOOC, during summer 2014 and fall 2014 Dr. Martinez-Davila is offering the Deciphering Secrets: Unlocking the Manuscripts of Medieval Spain course. In this free, online course students will explore the history of Jews, Christians, and Muslims in late medieval, fifteenth century Spain. Serving as citizen-scholars, students will learn about the positive and negative elements of inter-religious co-existence in Plasencia, Spain, and more importantly, contribute to an international scholarly effort by helping transcribe manuscripts.

https://www.coursera.org/course/medievalspain

MOOC Introduction

https://www.youtube.com/watch?v=vG-byHYngow

Introduction to the Project

https://www.youtube.com/watch?v=saKUc=ncaxM
Virtual Plasencia - Data Integration

All of our work will be made possible by our plan to integrate Geovisual and Humanities databases. Unlike other efforts that focus on manuscript transcription or GIS-interpretation, our work will integrate a humanities-oriented database (historical details, events, and relationships) with a geovisual database (GIS and 3D modeling). Filemaker Pro is ideal for our humanities-oriented database because (1) it utilizes open ODBC and XML standards to exchange data and (2) its relational databases can exchange static and live data with SQL data sources. Further, Filemaker Pro’s relatively user-friendly tools will encourage our non-technical humanities scholars to learn to use more robust data analysis tools in their scholarship.

Data integration model.
Prepared by Dr. Roger L. Martinez-Davila (UCCS)
Insight #1 - The role of the Cathedral of Plasencia

Virtual Plasencia will situate the Cathedral of Plasencia, the defining institution of local life, within a network of cathedrals that negotiated with the Spanish Crown for the payment of ecclesiastical subsidies. It reveals how financial negotiations at the national level increased the cathedral’s power at the diocesan level. Visualizing these subsidies will expose the financial reach of Catholic religious foundations within the region and across the Iberian Peninsula. In this regard, the Cathedral of Plasencia regularly transferred monies to northern European bankers in the early sixteenth century, suggesting that the region was heavily integrated into European markets and political affairs. Our research will further delineate how local human action can shift institutional and mercantile systems behavior and how these systems in turn shaped human behavior.
Insight #2 - Presenting Relationships

For example, *Virtual Plasencia* users can view the home of Zanfines Capa, the Jewish chainmail maker, who was a close associate of the Carvajal family of knights. In this specific case, the Catholic Carvajal clan and their compatriots in the cathedral, the Santa Maria clan (formerly the Jewish Ha-Levis), leased church-owned properties to Jewish families (like the Capa) at the expense of their political competitors, the Catholic Estuñiga family (the Counts of Plasencia and Bejar). In this event, competing and overlapping political and religious jurisdictions are revealed as well as vibrant Catholic-Jewish alliances that sought to expel interloping secular lords.
Insight #3 - Highly integrated residential patterns

Jews, Catholics, and Muslims. Nobles, commoners, churchmen, and rabbis. They all lived amongst each other in contradiction to the defined “religious” zones of the city.

Map of Jewish, Catholic, and Muslim families in the Jewish quarter (aljama or juderia) of mid-15th century Plasencia.

Image by Dr. Roger L. Martinez-Davila (UCCS)
Our project is an international collaboration involving eight universities in Spain, Switzerland, and the United States of America.

The project is an independent scholarly endeavor organized within MappaMundi, a digital humanities initiative of the University of Texas at Austin. MappaMundi graciously provided seed-funding for the creation of Virtual Plasencia, as well as ongoing intellectual and technical counsel.
Additionally, we have secured collaborative agreements and endorsements from key Spanish institutions, including the Ayuntamiento de Plasencia; Ministerio de Educación, Cultura, y Deportes; and Centro Sefarad Israel.

Dr. Roger L. Martinez-Davila serves as the Project Director (PD) and Dr. Victor Roger Schinazi (Co-Principal Investigator) is the technical leader. For more information on the project, please contact Dr. Martinez at (719) 255-4070 or rogerlmartinez@gmail.com. His mailing address is: University of Colorado, Department of History – Columbine Hall 2046, 1420 Austin Bluffs Parkway, Colorado Springs, Colorado 80918 USA.

Dr. Martinez is an assistant professor of history at the University of Colorado – Colorado Springs. Dr. Martinez is a specialist in medieval Spanish paleography, the history of medieval inter-religious relations, and the community history of Plasencia. He has investigated in over 40 Spanish and international archives. In addition to his Ph.D. from the University of Texas at Austin, Dr. Martinez worked for eight years in the public sector, including strategic planning and technical consulting positions at the Institute for the Future, Election.com, and MGT of America. Dr. Martinez has managed numerous project teams and budgets in excess of $500,000 USD. More information at: www.rogerlouismartinez.com.

Dr. Schinazi is an Oberassistent (Assistant Professor) in the Department of Humanities, Social & Political Science at the Swiss Federal Institute of Technology (ETH-Zurich). He holds a Ph.D. in Geography from the Centre for Advanced Spatial Analysis at the University College London. Prior to joining ETH, he was a Senior Research Associate in the Department of Geography at the University of Oregon and a Postdoctoral Fellow in the Department of Psychology at the University of Pennsylvania. During 2011-2012, he served as the Chief Science Officer for Strategic Spatial Solutions, Inc. (Berkeley, CA) – a company developing software solutions to architects and planners. Dr. Schinazi has also been at the forefront of desktop and immersive 3D modeling and has published in geography, sociology and more recently in the cognitive neuroscience. Dr. Schinazi, who is of Sephardic Portuguese descent, is a native of Montreal, Canada. He is fluent in five languages, including English, French, Spanish, Portuguese, and Hebrew. More information at: www.cog.ethz.ch/people/scvictor.