

# White Paper Report

Report ID: 104603

Application Number: HD5145911

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Institution: CUNY Research Foundation, City College

Reporting Period: 9/1/2011-2/28/2013

Report Due: 5/31/2013

Date Submitted: 5/31/2013

## **White Paper**

Grant Number: HD-51459-11

Title of Project: Spanish Paleography Digital Teaching and Learning Tool

Name of project director: Ramona Hernández, Ph.D.

Grantee institution: CUNY Dominican Studies Institute at The City College of New York

Date of submission: May 31, 2013

*The Spanish Paleography Digital and Learning Tool: White Paper Report to the NEH*  
Submitted by the CUNY Dominican Studies Institute at City College, May 31, 2013

## I. Project description

This project consists in the creation of an open access educational web-site that brings together a number of digital languages, programs and systems to offer its users the following central components: (1) digital images of Spanish manuscripts from the 16th-18th centuries linked to tool-tips containing word-by-word typed transcriptions of all the words in the manuscripts; (2) pdf double images formed by each manuscript accompanied by a side-by-side, full line-by-line typed transcription of its textual content; and (3) images of sample alphabets constructed with a selection of letters extracted from each manuscript.

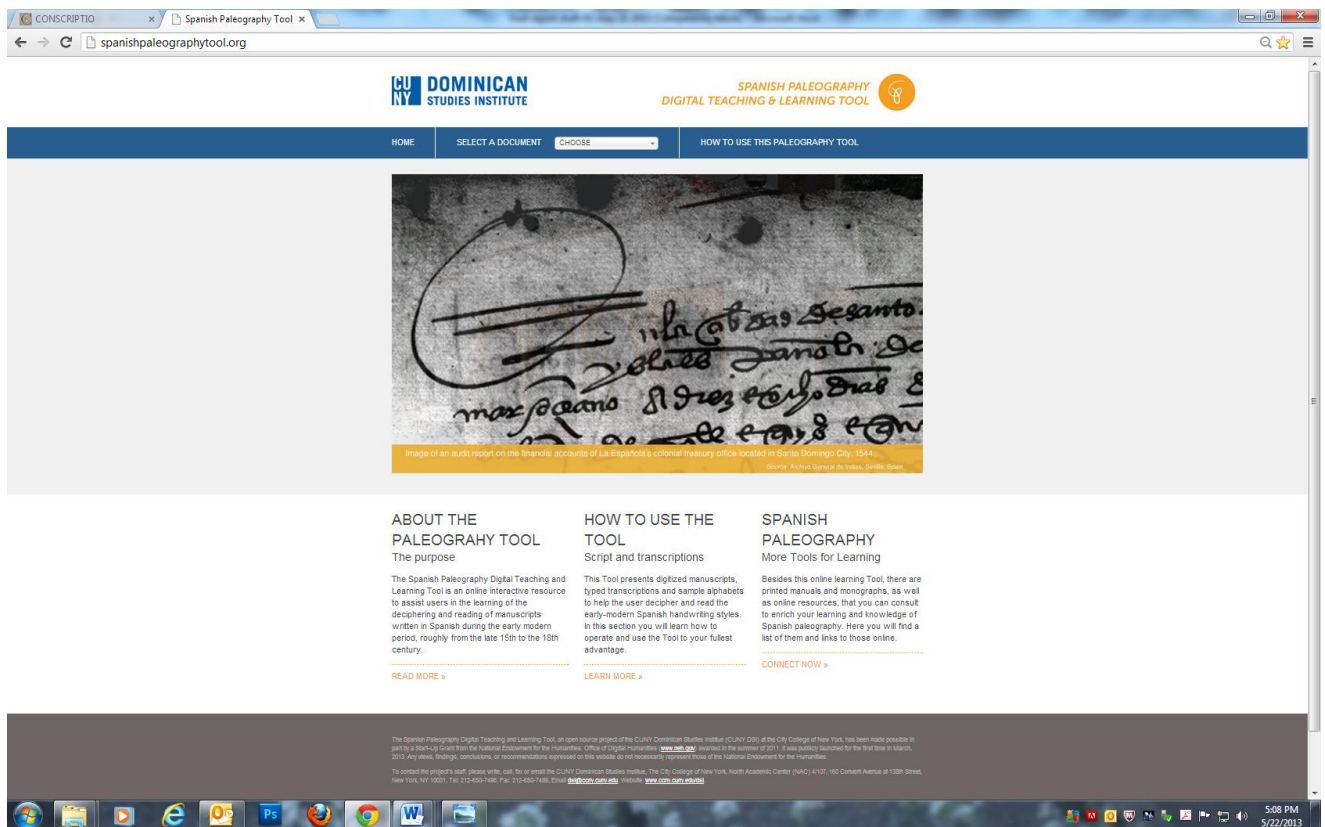


Fig. 1. Screenshot of the Spanish Paleography Digital Teaching and Learning Tool homepage showing links to the website's main sections. May 2013.

By repeatedly engaging themselves visually with the above mentioned three digital components, the users or visitors of the Spanish Paleography Digital Teaching and Learning Tool (from here onwards, Spanish Paleography Tool, or simply the Tool) are expected to develop an increasing visual familiarity with the peculiar way in which the letters of the Spanish alphabet are traced in each of the prevailing Spanish-language handwriting styles of the period. With practice, this visual familiarity with the alphabet letters as scripted in each of the old Spanish handwriting styles is expected to evolve into gradual recognition of all the letters of the alphabet, the different

styles of how they written, and, ultimately, into a capacity for full deciphering of each of the handwriting styles and an ability to read the writings of the period.

## **1.2 Goal of the Spanish Paleography Tool**

The primary goal of the CUNY DSI's Spanish Paleography Tool is to contribute an effective instrument to help increase the current numbers of scholars and students capable of fluently reading the early modern Spanish manuscripts. Hundreds of thousands of pages of these documents are still held in archives from throughout the world untouched and unstudied, and for decades the result of this scenario has been a rather limited scholarly knowledge of the early period of the formation of modernity in the societies belonging to the Spanish world. This limitation is especially acute in the case of the earliest Spanish colonies of the Americas, like today's Dominican Republic, Cuba and Puerto Rico. This Tool could help non-versed scholars, college students and interested high school graduates to learn how to read the arcane Spanish manuscripts of the 16th-18th centuries well before they reach doctoral-level academic programs, bringing the potential for new research in this sub-field of the humanities to a much larger pool of people.

## **II. Project Activities and Accomplishments**

### *The story behind the project*

The Spanish Paleography Tool project came to being as a result of the pressing need for the CUNY Dominican Studies Institute at The City College of New York to devise new strategies to foster the increase in the numbers of young scholars trained in the fluent reading of sixteenth, seventeenth, and eighteenth century manuscripts from the island-colony of La Española (today's Dominican Republic and Republic of Haiti). A great deal of this archival documentation (held in repositories of the Dominican Republic, the former colony, and Spain, the former metropolis) remains still today understudied or plainly untouched precisely because of the acute scarcity of individuals skilled in the reading and deciphering of the three or four prevailing Spanish handwriting styles of the period. At the institutional level in CUNY DSI, a similar situation is being faced vis a vis our collection of roughly 103,000 pages of microfilmed documents from sixteenth and seventeenth-century La Española, a documentation containing a wealth of information and data about the beginnings of Dominican society waiting for scholars capable of gleaning, processing, analyzing and disseminating them to the general public.

These early-modern Spanish scripts, long replaced by the highly standardized forms of contemporary Spanish handwriting, happen to be different enough from today's styles as to make them feel like a totally unknown written language even to those who are trained to teach Spanish. Arguably because of this, and together with increasing budget cuts to research and training in the humanities, on the one hand, and pressures for speedy completion of training upon students attending advanced degree programs, on the other, the arcane-looking early-modern Spanish writing styles seem to have dissuaded away potential new recruits from the ranks of researchers specializing in this long and formative, and sometimes foundational, period of contemporary societies of the Spanish world.

In response to this scenario, the Spanish Paleography Tool is an attempt to bring to a much larger pool of potential new scholars the opportunity to be trained in the reading and deciphering of the early modern Spanish manuscripts, with the hope that as a result, in a foreseeable future, we may see an increase in the production of sound new knowledge about the past of the peoples and societies that comprised the Spanish Empire. We hope to have such an impact both in the enticing of students and members of the public as well as university administrators responsible for the survival of robust programs in the humanities and social sciences.

*The construction process: teams and working meetings*

The overall designing and construction of the Spanish Paleography Tool was overseen by a Development Team composed by CUNY DSI senior staff as well as paleographers and college media professors and managers from throughout the City University of New York (See Appendix for a brief biography of each member). The Project Director and team leader was Dr. Ramona Hernández, Director of CUNY DSI.

Four planning meetings and a final round of individual members' assessments of the final Tool prototype were held by the project's Development Team during the eighteen-month life of the grant, going from the fall of 2011 to the late winter of 2013 (October 2011, April 2012, September 2012, February of 2013 and February 2013, respectively). At the working meetings, an atmosphere of amicable, constructive discussion and dialogue developed from the start, and communication between team members was prolonged in between meetings via email. As each member contributed his or her individual expertise, consensus was built on a few general ideas that proved to be central to the final outlook of the project.

The initial project concept proposed by CUNY DSI was examined by the Development Team and submitted to Monaco Lange, a private New York-based web-developing firm hired as consultants for the project. In subsequent months Monaco Lange presented a prototype scheme for the Tool that was further discussed and assessed by the Development Team, and subsequently additional requests and suggestions for modifications were submitted to Monaco Lange. During this process, Monaco Lange recommended that decisions about the visual design of the prototype's lay-out and aesthetics be postponed until the main engineering of the site's components and dynamics had been established. Monaco Lange's recommendation was accepted by the Development Team. A unified push for simplicity in the structure of the website and for portrait-orientation of its interface layout allowed the team to recommend a website format that is now being praised for its neatness and its ease of access and usability via many hand-held devices.

The Tool's prototype version selected by the Development Team implied a scaling down of a number of features envisioned by CUNY DSI in the early proposal sent to the Office of Digital Humanities of the National Endowment for the Humanities, since it was estimated that the costs of implementing all the envisioned features would exceed those allowed by the Step 2 Start-Up grant received from the NEH. (The original sketches proposed by CUNY DSI envisioned a home page with a rich menu bar with a number of buttons that would activate a number of functions when clicked after selecting or highlighting different segments of the manuscript images. (See Appendix.)

A compromise was reached between the Development Team and Monaco Lange, and Monaco Lange delivered a design that, despite a streamlined interface and a much smaller set of menus and buttons, allowed for the three basic components intended by the Development Team to be effectively incorporated into the prototype:

- (1) manuscript images with tool-tips containing word-by-word transcriptions;
- (2) double images of manuscripts plus full line-by-line transcriptions; and
- (3) sample alphabets based on letters contained by each manuscript.

Access to component (1) would be achieved through a “Select Document” drop down menu on the homepage listing the tool-tipped images of manuscripts. Component (2) would be accessed via a button on a retractable “Document Description” ribbon accessible from each manuscript. And component (3) would be available via a link contained in a “daughter page” accessible by clicking on the first tool-tipped word within each manuscript. (In the current version of the Tool the alphabets have been connected to the manuscripts exclusively through the “daughter page” of the first word of each manuscript.) To construct the prototype, the Monaco Lange developers used “a combination of Raphael, Aloha HTML5 editor, and persistent storage managed through JSON and PHP.” (<http://henryivry.com/spanish-paleography-tool/> )

Altogether, Development Team members attended the meetings consistently and at the end of the planning sequence the team was able to attract some guests from the academic setting that may prove useful allies of the project in the future. Among those we may cite Dr. Juan Carlos Mercado, Dean of the Center for Worker Education, a Multidisciplinary Studies Division of the City College of New York; Dr. Carlos Riobó, Department Chair of Foreign Languages and Literatures at City College; Dr. Devid Paolini, Professor of early modern Spanish literature at City College, all The City College of New York, and Dr. Feniosky Peña Mora, Professor of Engineering and former Dean of the School of Engineering at Columbia University. A final comment about team work is that for the CUNY DSI’s staff member who participated in this project, the experience has been truly formative and for the Development Team as such, it marks a precedent that we think will highlight the importance of intercampus, cross-university collaborative efforts in general and the importance of Spanish Paleography studies in particular in the City University of New York system.

### *The paleographers-transcribers*

One of the fundamental components of the Spanish Paleography Tool consists of typed transcriptions of the old Spanish manuscripts showcased in the Tool. Finding well trained paleographers with expertise in Spanish manuscripts to produce the needed transcriptions was one of the main tasks in the production of the Paleography Tool’s prototype. Simultaneous to the Tool’s digital structure planning, an outreach effort was launched by CUNY DSI on behalf of the Development Team to recruit a paleographer that would take charge of producing typed transcriptions of the manuscripts to be uploaded onto the Tool. After some unsuccessful attempts in finding paleographers in the United States that could produce the transcriptions for the project within the life of the grant, a team of four paleographers-archivists based in Santo

Domingo, Dominican Republic, and Lima, Peru, were recruited by CUNY DSI. Archivists Jacqueline Abad, Rocío Devers and Rosa Elena Figueroa, from the Archivo General de la Nación of Santo Domingo, and Laura Gutiérrez from the [Archivo Arzobispal de Lima] were hired as consultants to generate typed transcriptions of the digital copies of manuscripts approved- for the Tool by the Development Team. The digitized manuscripts were sent via email to these transcribers and they returned the typed transcriptions to CUNY DSI through the same venue. All communication with the transcribers was done online and, occasionally, over the telephone.

*The Paleography Tool's content processing and digital coding team: non-traditional project members*

After Monaco Lange's submission of a new version of the Tool incorporating the suggested changes, a pre-final concept was agreed upon and a team of digital-code inputters was recruited to be trained by Monaco Lange in the coding of the images of the manuscripts once uploaded onto the Tool. For this purpose, Monaco Lange used a construction based on Word Press that allowed for the uploading of pdf images of the manuscripts, the typed transcriptions and the alphabets, as well as jpg images of photographs to illustrate the site and pieces of text in the informational and explanatory sections of the site.

The Content-Coding Team was formed by 10 people: four undergraduate students (Melbin Peralta and Eduardo Dueñas--Psychology; Carlos Taveras--Fine Arts; Laura Rivas—International Relations) and one graduate student (Antonio Pérez—Education) from The City College of New York; two graduate students from Queens College (Jhensen Ortiz and Jessy Pérez—Library Science); a Hunter College graduate (Mariel Acosta—Anthropology and Linguistics); and two professionals from the New York Dominican community (Dr. Marilú Galván and Dr. Manuel Acevedo). An online training session led by Monaco Lange staff was held to train the Content-Coding Team. Based on Monaco Lange's training session, Anthony Stevens Acevedo, Assistant Director of CUNY DSI produced specific instruction sheets about the different phases of the work to be inputted. These were used throughout the remainder of the website's coding and populating work. (See samples of instruction sheets in the Appendix.) Under the direction of Anthony Stevens the Content-Coding Team took on the critical job of coding and processing the digital images of sixteenth-century documents that constitute the heart of the Tool's contents.

Never before, in so far as we are aware, has a similar project been launched in CUNY with such an involvement of undergraduate and graduate students in a field that has traditionally been almost the exclusive purview of professors and students in a doctoral program. The exercise constituted a unique learning experience for these students, who immediately realized they were participating in an effort with the potential to impact an entire academic field as well as the careers of young and senior scholars. A learning of issues and items pertaining to Spanish paleography took place during this process and students gained a perspective on the history of the written Spanish language that they will probably never forget.

The participating students' increased awareness about the complexities and intricacies of the evolution of the written language became evident in the questions they asked, the suggestions

they made for future developments of the tool, and the ability they began to develop to identify on their own occasional mistakes done in the “mapping” of the digital copies of the manuscripts. The evidence of this in situ learning by the students has further strengthened the CUNY DSI staff’s sense of the potential of this project to democratize the learning of the early-modern Spanish handwriting styles and the field of the humanities in general.

The “daughter page” mechanism constructed by Monaco Lange allowed for the transcription tool-tips to be added to the manuscripts virtually rather than through the writing of hypertext codes. This step made this very demanding part of the project much more operator-friendly. A manuscript was opened, a box or polygon would be drawn around each text word by successive clicks of the mouse, and once the polygon was completed, a double clicking on the interior polygon would lead to a “daughter page” where the word-transcription would be typed. And once saved and updated, the document would record the new tool-tip. After this recording, the tool-tip became active and any time from then on the mouse is hovered over the word in the manuscript, the tool-tip would pop up automatically showing the typed transcription for the word.

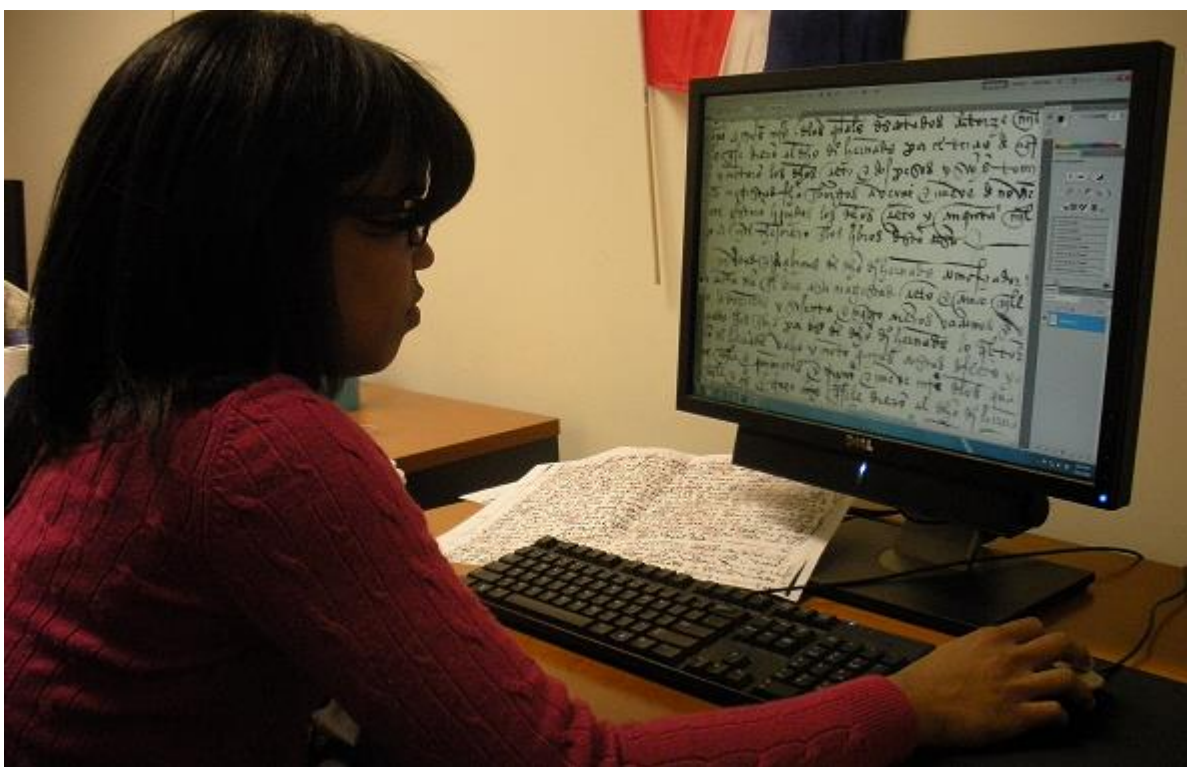


Fig. 2. Hunter College-CUNY graduate Mariel Acosta selecting and copying letters from a digital version of a manuscript to construct a sample alphabet to be attached later as a deciphering aid onto a separate copy of that manuscript in the Spanish Paleography Tool. To her left is the printout of an alphabet-selection guide manuscript copy indicating, with hand-drawn perimeters marked in red ink, the letters and combinations of letters to be cut out from the manuscript and pasted onto the sample alphabet being constructed.

The Content Coding Team was in charge of doing all the linking necessary to adhere the hypertext tool-tips onto the digital manuscripts on a word-by-word basis. This job was done via the mechanism of an editing version of the “daughter page” created by Monaco Lange by which an electronic box was drawn around each manuscript word contained in the manuscript, and then, by clicking inside the drawn box, accessing a text box in the “daughter page” where the



exact text of the transcription would be typed as it would be shown on the tool-tip. Once these steps were saved or recorded in a macro-like fashion, the tool-tip was created and activated for each word of each manuscript. An individual member of the Content Coding Team was in charge of creating, using Adobe's Photoshop, the double pdf images formed by the joining of each manuscript image and the image of its full typed transcription, as well as of the uploading and linking of each of them to their tool-tipped version. The same Content Coding Team also generated the sample alphabets by using Adobe's Photoshop, cutting out and pasting together sets of letters previously identified by the CUNY DSI staff in the raw TIFF version of each digital manuscript. A separate instruction sheet was generated as well for this alphabet construction process. (See Appendix.)

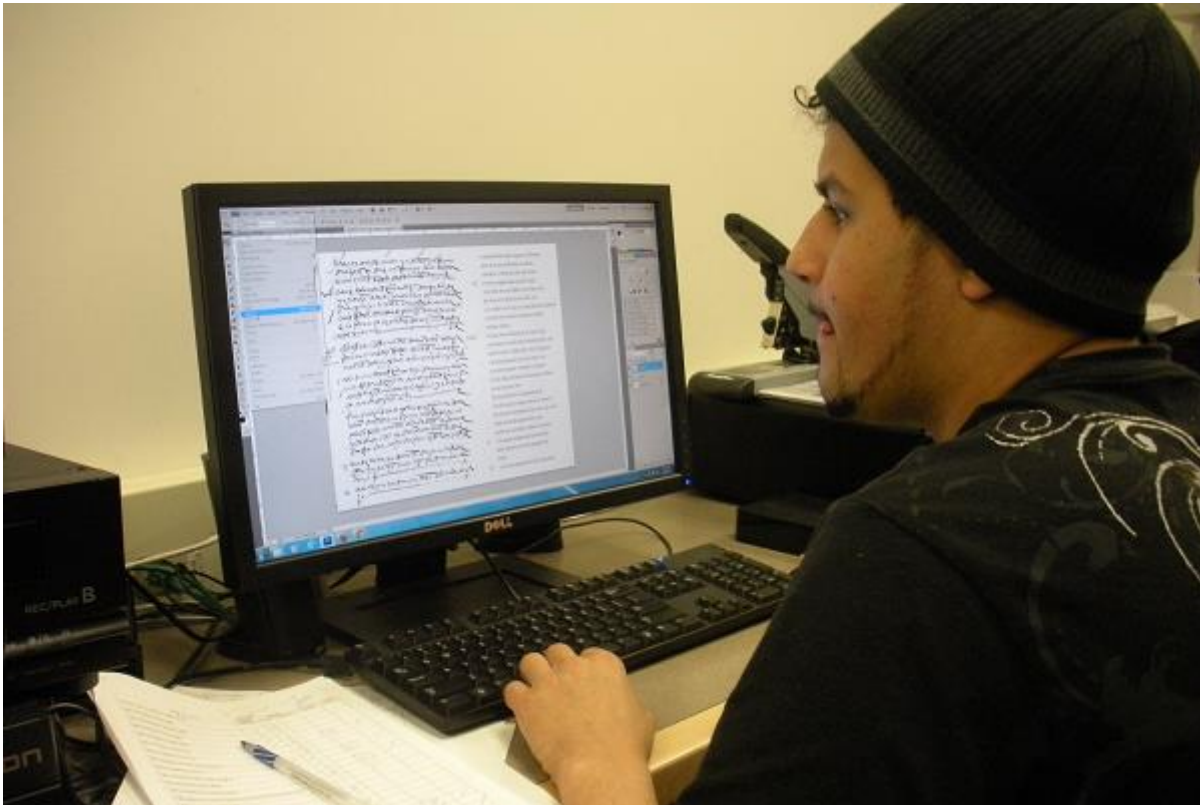


Fig. 3. City College Fine Arts senior student Carlos Taveras working in the side-by-side merging of manuscripts' images and typed transcriptions. Once generated and converted into pdf documents, these double-documents were uploaded onto the Tool via Word Press.

A set of guide-sheets were produced by the CUNY DSI staff for the tool-tip construction work as well as for the alphabet construction work done by the Content Coding Team. CUNY DSI Assistant Director Anthony Stevens-Acevedo, the Institute's leading Dominican colonial history researcher knowledgeable in early-modern Spanish paleography, was in charge of generating the guide-sheets, two sets of which were generated. One set consisted of copies of enlarged printouts of all the manuscripts to be showcased on the Tool on which boxes were drawn manually with a thin felt point marker in red ink around each word of the manuscript (in the case of the tool-tip construction phase). A second set consisted of enlarged copies of the manuscripts on which a selection of letters and variances of letters within each given manuscript had been equally marked manually in red ink (this was the case of the alphabet construction phase). The members of the Content Coding Team used these guides-printouts to identify exactly the words

around which the tool-tip boxes should be drawn and the exact letters that should be selected to compose the sample alphabets. (See images of both types of guide-sheets in the Appendix .)

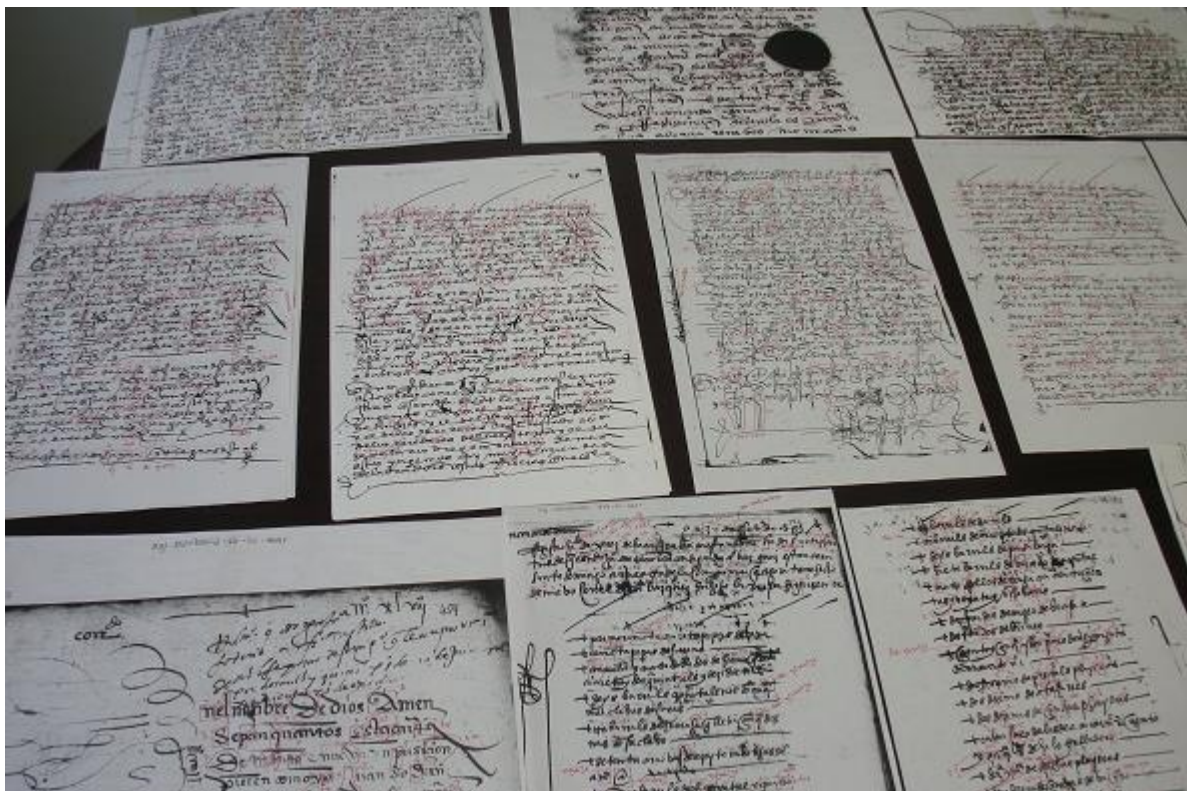


Fig. 4. Set of alphabet-selection guide-sheets, 11 in. x 17in., showing images of manuscripts with specific letters and variances of letters encapsulated in red-ink boxes and marked with hand-written contemporary versions of the letters also in red ink. These sheets guided members of the coding-team in carving out the letters from the manuscripts and organizing them alphabetically within the alphabet samples linked to the individual manuscripts.

Finally, as to the Tool's populating process, the informational sections of the Tool were composed and typed in Microsoft Word by CUNY DSI staff, edited by Development Team members, and uploaded onto the Tool's Word Press site's by CUNY DSI staff. Given that by this time the contract with the Monaco Lange consultants had expired, CUNY DSI staff trained in graphic design and computer science are currently familiarizing themselves with "Word Press" to complete some additional pending work as to the formatting of these textual pieces during the upcoming weeks.

On the other hand, another important component of the informational pieces now uploaded is a pdf-format, text-based tutorial illustrated by screen-shots that describe in visualized terms the main functions and features of the Tool and how to operate them. CUNY DSI contemplates replacing and/or accompanying in the near future this fixed-image tutorial with a digital moving-image one of the type now doable with relatively cheap programs like Camtasia.

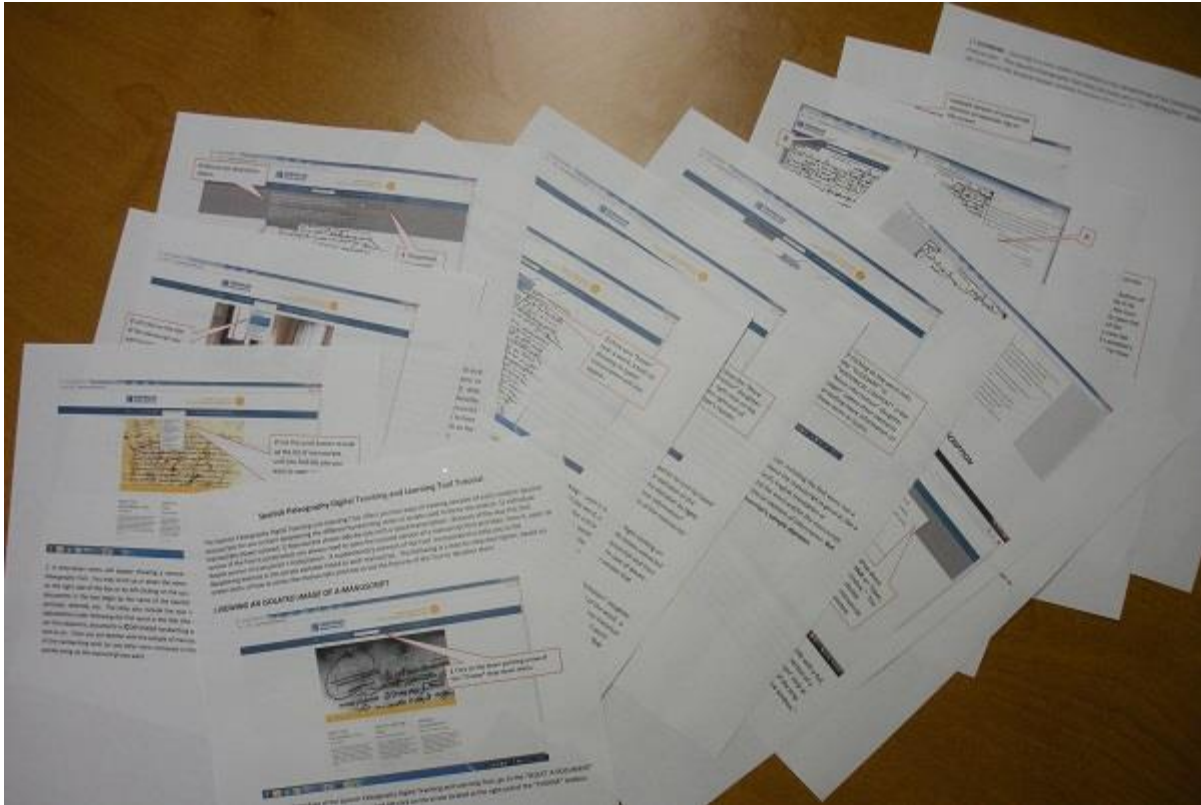


Fig. 5. Printout of text and screen shots-based tutorial describing the use of the Spanish Paleography Digital Teaching and Learning Tool and incorporated in the prototype. CUNY DSI intends to incorporate a video version of the tutorial onto the Tool.

### III. Audiences

#### *Audience of the Spanish Paleography Tool: Democratizing Access to a Very Specialized Subfield*

The intended audience of the Spanish Paleography Digital Teaching and Learning Tool is composed by three segments of the population:

- 1) Any member of the public anywhere in the world who reads Spanish or who may want to learn how to read and decipher Spanish manuscripts from the 16<sup>th</sup> to the 18<sup>th</sup> centuries;
- 2) college students in the field of the humanities, in the U.S. or anywhere else in the world, who are specializing in studies related to the Spanish language in general or the cultures and histories of societies of Spanish language, and have an interest in studying the early modern period of these societies through primary sources.
- 3) The scholarly community of researchers and university professors specialized in any given aspect of the Spanish-language societies and their cultures from the 16<sup>th</sup> to the 18<sup>th</sup> century.

The Spanish Paleography Tool project creates or opens the possibility, for the first time, of basically expanding in a sizable way the number of people with real access to an effective

training in the learning of the early modern Spanish handwriting styles, and thus with real potential access to a vast repository of historical information that until now has been restricted to individuals pursuing doctoral studies in highly specialized programs in universities throughout the world. In that sense, the Spanish Paleography Tool effectively democratizes knowledge and creates the possibilities of impacting what we currently know about the early Spanish world in the Americas.

#### **IV. Evaluation**

Once the Spanish Paleography Tool was completed we sent it to key experts and potential users for a frank evaluation. Below, we reproduce their comments some of which have been translated from Spanish. Emphasis has been added to some comments.

##### *Remarks from experts*

When announced as a project, the Spanish Paleography Tool was already welcomed as a worthy project by some prominent scholars in the fields of Spanish Paleography and Early Modern Spanish Studies. That was the case of Dr. Carla Rahn Phillips of the University of Minnesota and Dr. Pedro Sánchez Prieto-Borja, of the University of Alcalá (Spain). Now that the initial phase of the project has been concluded in the form of a website prototype featuring at least the main components initially envisioned, the Tool is receiving praise by a number of specialists with both theoretical as well as hands-on research-based knowledge about the early modern Spanish manuscripts.

We think the following testimonies indicate that the first Spanish Paleography Tool prototype or proof of concept, as configured at this point and time, has succeeded in demonstrating that its particular way of combining some of the existing digital technologies to promote the learning of the deciphering and reading of the early modern Spanish handwriting styles is a valid proposal that actually delivers the basic intended results and contains the potential to achieve a higher level of efficacy as a pedagogical tool for the field of Spanish paleography and Spanish manuscript studies. The comments are listed in the same sequence as they were received in recent weeks at CUNY DSI. Those submitted in Spanish have been translated into English.

1. Dr. Carla Rahn Phillips, Union Pacific Professor in Comparative Early Modern History, Department of History, University of Minnesota:

“I will be directing a summer institute in Spanish paleography at the Newberry Library in Chicago next month (3-21 June), sponsored by the Mellon Foundation. It is good news indeed to hear of the good use you made of the start-up grant.

**With your permission, I would like to make the website available to the participants in the Newberry's Mellon Seminar. We have selected fifteen individuals, all advanced graduate students or faculty members whose research program requires their use of early modern documents in Spanish. I have no doubt that they will be an ideal Beta testing group for**

**your teaching tool**, and I will be pleased to pass their ideas along to you, if there is no way for them to do so directly on the website.

“I am discussing with the Newberry staff various ways that we might continue such instruction in the future. A web-based approach may be the best option.”

2. Dr. Edward Paulino, Assistant Professor, Department of History, John Jay College of Criminal Justice-CUNY:

“Magnificent!”

3. Dr. Richard Turits, Associate Professor, Department of History, University of Michigan:

“This is absolutely FANTASTIC. I am trying it out, and it is working very well (so far). I love the feature of clicking on the word and seeing what it is. That is what works best for me.

**This project will expand momentarily paleographic knowledge – beyond what is now a very, very small number -- by facilitating learning that otherwise seemed too daunting** (or too prohibitively expensive if one had to travel to take paleography courses). **And by expanding paleographic skills, a mass of virtually unused documents will become available to and will be able to be discussed among many more scholars. Thank you for making this happen!**

I look forward to finding information in some of the other sections, like Handwriting Style, Alphabet, Ligatures, Abbreviations, Numerals, Translation / Glossary, and historical context. Will you be filling these in gradually over time? But the most important work is already complete.”

“Thank you again for this extraordinary project.”

4. Dr. Gabriel Haslip-Viera, Professor and Chair, Department of Latin American and Caribbean Studies, The City College of New York

“This is beautiful -- great work!”

5. Dr. Néstor Vigil Montes, Professor, Universidad de Oviedo, Spain, and Manager of “Conscriptio,” a blog about archives and manuscripts.

“I think it is a very interesting Project for the learning of modern paleography in Spanish **which is of great usefulness both in the American continent as well as in Spain** (there are not large differences in the documentation since it stems from a colonial administration that follows the styles of the Peninsula.) You may indicate in your report that **it is something innovative for paleography in Spanish since there is no similar web page, thus I believe it is fundamental to translate its functioning to Spanish.**”

“The page is very good, in these cases the good ideas are more important than the resources, though I hope you may continue with the project and may receive more funding. I think the system of dividing the words within the document itself is very intuitive since it allows to navigate it (this is something that had not yet appeared in other webpages, your true comparative strength), maybe the system of the pdfs with the transcription is somewhat more cumbersome

since it is not done on the same webpage (besides I do not consider myself a fan of the philological transcription rules, especially for the learning, but I am aware that in certain settings they prefer them rather than the rules of the International Commission of Diplomatics).”

“You are seeing quite clearly the path to be followed, the work with ligatures and abbreviations, and the diplomatic and historical descriptions; this will no doubt make the tool more consistent and that is what other paleography learning webpages abroad offer generally, some of them could give you some ideas for modifications (<http://conscriptio.blogspot.com/2011/09/recursos-online-para-el-aprendizaje-de.html#entrenamiento>).”

“I think it is a very interesting Project for the readers of the Conscriptio blog, therefore I will devote the next post to it.”

6. Lic. Rosa Elena Figuerero, Archivist, Archivo General de la Nación, Santo Domingo, Dominican Republic:

“I am enormously pleased that the tool is functioning. I had the opportunity to enter the links and it seemed to me it is a **very interesting tool and innovative**, which I am sure will be of help to anybody interested in the handwriting of that period, it will also be a reference tool to paleographers themselves.”

“I hope the project moves forwards and that new modules are incorporated into it, I have positive hopes for the tool and it will have the intended results, you have done a great job and I congratulate you and your team.”

7. Kianny Antigua, City College Adjunct Instructor and Ph.D. Student, Graduate Center, City University of New York

“I could not believe it! This Spanish Paleography & Learning Tool is phenomenal! After studying paleography for over a year, both as a scholar at the DSI and as a Ph.D. student at the Graduate Center, CUNY, and finding myself lost and many times frustrated when in front of an illegible word or phrase, and now experimenting with this magnificent tool, **I feel that a whole new world of possibilities has open its doors**. The Dominican Studies Institute has done a unique and extraordinary job making this tool a reality. I cannot put in words my excitement since I know that it is just a matter of time for us, both people with background in paleography, and anybody else, to discover, to READ, to unveil many of the secrets that have been hidden in the words of our past. ¡Enhorabuena team!”

8. Leonor Alvarez Francés, Ph.D. Student, University of Amsterdam:

“The aim of the website is clearly explained in its home page, it attempts to offer help to those interested in learning to decipher texts from the Spanish modern period. Because its command is indispensable for historical studies, paleography is a science with a long tradition. As a beginner student or researcher in these techniques, the initial difficulty in understanding the texts, plus the great diversity of handwriting types, often times have a considerably disappointing impact.

This is why the use of digital technologies and Internet with didactic purposes has been considered a useful resource in the field of paleography. During my studies at the University of Amsterdam I had access to an online tool for the learning of the reading of texts in Dutch from the modern period. It consisted of an alphabet that included the variances used for each letter, as well as a series of texts with their corresponding transcription. Though it was a helpful support during my learning process, it was not very different from a specialized printed monograph containing the said information.

That is where the Spanish Paleography Tool excels and distinguishes itself. It has been capable of combining the traditional methods of teaching this science, as the said alphabets, with the possibilities offered by the digital support. The possibility of accessing the transcription of a word with a single click and without interrupting the analytical reading of the text in its entirety is an advancement of great magnitude in the field. The wealth of information not only paleographical but historical that accompanies each text makes it also a tool not only educational but one that may also be labeled as academic.

As someone knowledgeable of paleographic techniques I find this tool to be an outstanding achievement that will without a doubt contribute to a better learning of paleography. It happens **to be accessible to a very broad public not only because of its digital support but also because of its ease of use.** This feature will additionally work against the initial discouragement experienced by many.”

9. Dr. Pedro Sánchez Prieto-Borja, Professor, Universidad de Alcalá, Alcalá de Henares, Spain

“I have been able to view with attention your electronic page. **Besides being clear and well constructed, it offers already in this early phase materials of the greatest interest.** Without a doubt it is a tool of great usefulness for the learning of the reading of old documents. It has called my attention in particular the “interactive” word-by-word reading, since it allows to read the document and resort to the help of the transcription in the case of difficulty or doubt. It goes without saying that I will recommend the use of this tool to my students. I hope that you will soon offer new materials (I will keep informed through the page).

Receive my sincere congratulations for the project together with my most cordial greetings.”

10. Dr. Manuel Ramírez Sánchez, Professor, Universidad de las Palmas de Gran Canaria:

“I congratulate you for the great work you have accomplished. The Spanish Paleography Digital Teaching and Learning Tool is an excellent tool, with a very friendly user interface that facilitates the study of the various types of Spanish handwriting styles of the 16th and 17th centuries through digitized facsimiles. **It could be very useful to initiate university students in paleographic research not only in Latin America but also in Spain, where we keep magnificent archives with documents of great interest for dissemination and pedagogical use.** Regretfully, in Spain we have not contemplated yet projects as interesting as this one accomplished by the CUNY Dominican Studies Institute (CUNY DSI) at the City College of New York. To be truthful, until now I only knew of the [contra] TAEDIUM project produced by several specialists in paleography and medieval history of the University of Barcelona:

<http://www.ub.edu/contrataedium/taediumcast/taedium.htm>. The images of handwritten sources are available at the following link: <http://www.ub.edu/contrataedium/scriptorium.htm>”

11. Lissette Acosta Corniel, Ph. D., Department of Latin American and Latino Studies, State University of New York-Albany:

“The “Spanish Paleography Digital Teaching and Learning Tool” is both groundbreaking and innovative. Given the importance of colonial documents, this tool is a much needed assistive technology that will bring researchers closer to the understanding of ancient writing. I’m grateful that the CUNY DSI developed such a magnificent project. **As someone who studies colonial Hispaniola, I will be able to improve my paleographical skills and the understanding of primary sources.**”

12. Dra. Stella González, Directora General de ADABI de México.

“My congratulations for this effort to facilitate this teaching that brings closer those who want to study paleography in a simple and attractive manner. I hope you will be able in the future to add all the text in Spanish since it could reach a larger number of students of history and linguistics. Thank you and congratulations again for this enormous effort.”

## **V. Continuation of the Project**

### *Remaining work and the future of the Spanish Paleography Digital Teaching and Learning Tool*

Two initiatives remain pending for CUNY DSI to arrive at the completion of the Spanish Paleography Tool project at the scope we initially envisioned it when the first proposal was submitted to the NEH; one is short term and another long-term. The first one involves the populating of some of the still-empty links contained in the “daughter page” and consisting in the showcasing of Spanish paleographic “abbreviations” and “ligatures” as well as “numerals” pertaining to each of the handwriting styles showcased in the Tool so far. It also involves the need to populate the links conceived and allocated for supplemental textual information like the “historical context” of each of the manuscripts showcased in the Tool.

The second pending initiative, more long-term, and for which we hope to submit an implementation grant proposal to the NEH during the next available round, would entail a major reshuffling of the Tool as currently constructed, with an eye on a re-engineering of it that would include a more encompassing and sophisticated set of menu bars on the home page that could allow for a more powerful selection mechanism when it comes to tool-tips as well as other pieces of supplemental information pertaining to the selected text or to the manuscript at large, so that, for instance, on the same digital manuscript, segments of different lengths of text (from a single word to a maximum of the entire manuscript page) may be selected to call up the corresponding typed transcription or other informational pieces like glossary-definitions, translations, descriptions of historical context, diplomatic information, images, etc.



The same goes for the need to incorporate to the Tool focalized magnifying-glass type of applications already in use in many websites that would allow for a zooming in and out on specific, selected, segments of the manuscripts, allowing the magnification of the desired items only, and saving time now otherwise spent in re-adjusting the window or frame every time a zooming takes place. In summary, CUNY DSI understands that the next goal within the line of functionality proposed for this teaching and learning tool should be *the unification of as many of the digital applications and features now dispersed in a number of existing websites* so that the learning experience vis a vis the visual memorization and deciphering of the early modern Spanish handwriting styles is fully maximized.

An additional, important route of further development that CUNY DSI wants to propose for the future of the Spanish Paleography Tool is the expansion of the website through the incorporation of a much larger number of manuscripts representing the documentation of as many societies of the Spanish language world as possible, making the Tool a comprehensive sampling of the entire universe of the Spanish written culture of the early-modern period. This could be achieved by identifying, contacting and persuading potential partners among institutions in Spain and Hispanic America that focus on historical and linguistic studies. CUNY DSI already has a history of collaboration with Spanish institutions like the Instituto Franklin from the University of Alcalá in Spain, as well as multiple national institutions in the Dominican Republic.

In fact CUNY DSI has already been contacted by institutions like the CHARTA network of manuscript scholars from Spain and Universidad ICESI, from Cali, Colombia, with an explicit invitation for CUNY DSI to join forces in initiatives centered around the Spanish Paleography Tool. CUNY DSI intends to seriously consider each and every of those invitations. The integration of contributions from other institutions throughout the Americas in the form of manuscripts from different Spanish-culture nations into a common site like this will probably offer some other beneficial by-products beyond giving users access to the full panoply of variances of the early modern Spanish manuscripts. One can immediately think of comparative and collaborative research projects based on this diversity of manuscripts that could in turn generate new historical and cultural knowledge about the Spanish-culture societies of the period altogether.

Equally important as another future component for the project, we would like to convert the Spanish Paleography Tool as soon as possible into a fully bilingual English-Spanish site, especially when we consider that no website exists in Spanish that offers a similar content of digitally-treated manuscripts as this Tool does. In the short term much of this could be achieved by inserting into the current lay-out of the Tool new pages in Spanish equivalent to the ones in English already in the Tool and adding to the current introductions to sections the new links leading to those new Spanish pages. Even when not making it into a full Spanish version of the site, these additions would give access to practically 95% of the contents of the site's instructions to a potential additional public of more than 400 million people who speak and read Spanish today. The ideal scenario, however would be to produce a twin, mirror-website fully in Spanish that could be tracked with Spanish tag-words on the existing Internet search engines. Such endeavor will benefit from the fact that the bulk of the contents –the manuscripts-- will be exactly the same as in the English version.

## **VI. Long Term Impact**

### *Replicability of the Spanish Paleography Tool*

As delivered by its Development Team, the first prototype of the CUNY DSI Spanish Paleography Digital Teaching and Learning Tool has a technical applicability potential that goes beyond the studies focused on the Spanish-language world and reaches into a much broader scenario of the humanities in general.

The linking of manuscripts with word-by-word transcriptions, the merging of manuscripts with side-by-side transcriptions, and the construction of sample alphabets based on the manuscripts that are at the core of this CUNY DSI prototype can actually be applied to the study of practically any set of old texts of any alphabet-based language of the world. Not to mention Latin alphabet-based languages, we could envision therefore a future Greek Paleography Tool, Cyrillic Paleography Tool, and maybe even Arabic Paleography Tool, all just by replicating the mechanism that the CUNY DSI prototype has constructed based on Wordpress and other digital and web-design programs, and repopulating it with manuscripts from the respective language.

This replicability of the Spanish Paleography Tool is another feature of the prototype project that we think falls squarely within the overall aims of the National Endowment for the Humanities.

## **V. Grant Products**

The main product of the Spanish Paleography Tool project in this first stage of its development has been the prototype of a website now active online with the title “Spanish Paleography Digital Teaching and Learning Tool” under the URL [www.spanishpaleographytool.org](http://www.spanishpaleographytool.org) or simply “spanishpaleographytool.org” if searched or called with Google’s Chrome browser. Also a 12 page text and screen-shots based tutorial has been generated to guide users of the website. The tutorial is accessible through the “How to use the Paleography Tool” section of the homepage. A total of 40 manuscripts are showcased on the website. The 40 typed transcriptions of the manuscripts and 40 sample alphabets based on a selection of letters from the manuscripts themselves, all shown on the site as well, are another by-product of the project. Also two sets of instruction sheets on how to add the transcription tool-tips to each digitized manuscript and on how to select and cut-out specific letters from the manuscripts to construct the sample alphabets, respectively, were generated. (See Appendices.)

**Appendix**

Spanish Paleography Tool Development Team Members' Bios

Media Coverage: Echo of the Paleography Tool in the Media

Instruction sheet—Document tool-tip insertion

Instruction sheet---Double document construction

Instruction sheet---Sample alphabet construction

Tutorial

Original sketches for the Paleography Tool

## Appendix

### Spanish Paleography Tool Development Team Members' Bios

**Sarah Aponte**, M.L.S., M.S. Ed., is Chief Librarian of the CUNY Dominican Studies Institute Library at The City College of New York. She is the only librarian in the United States specialized in bibliographical resources about Dominicans. As such, and as Assistant Professor at The City College Libraries, she regularly assists scholars and students conducting research on Dominican issues. She is the author of *Dominican Migration to the United States 1970-1997: An Annotated Bibliography* (1999), the first annotated bibliography ever of sources on Dominicans in the United States, as well as (in collaboration with Dr. Franklin Gutiérrez) the upcoming *Autores dominicanos de la diáspora: apuntes bio-bibliográficos (1902-2012)* (Santo Domingo, República Dominicana: Biblioteca Nacional Pedro Henríquez Ureña, forthcoming, 2013).

**Dr. Pennee Bender** is the Associate Director of the American Social History Project/Center for Media and Learning and on the faculty of the Interactive Technology and Pedagogy Program at The Graduate Center, City University of New York (CUNY). She has worked in educational media for thirty years as a multimedia and video producer, director and editor. She has a Ph.D. in U.S. History from New York University, and teaches U.S. foreign policy, labor, and women's history.

**Dr. Marithelma Costa** is Professor of Medieval Spanish & Modern Latin American Literature at the Department of Romance Languages, Hunter College, and City University of New York. She is the author of monographs on Spanish Medieval texts and editor and annotator of the works of several medieval and modern authors. Her latest publication is *Medievalia Humanistica. Estudios sobre literatura española. Homenaje ofrecido por sus amigos y colegas* de Ottavio Di Camillo, co-edited with Dr. Isaías Lerner (Salamanca: Seminario de Estudios Medievales y Renacentistas, 2009).

**Idilio Gracia Peña** is the founding Archivist and Current Chief Archivist of the CUNY Dominican Studies Institute Archives at The City College of New York, City University of New York, home of CUNYDSI's Dominican Colonial Documents Collection. Mr. Gracia Peña is a career archivist with a lifetime of experience in archival management. Before joining the CUNYDSI he was the Archivist of the Centro de Estudios Puertorriqueños Archives at Hunter College, and before that he was New York City's Commissioner of Records and Director of the Archives of the City of New York.

**Dr. Ramona Hernández** is the Director of the CUNY Dominican Studies Institute at The City College of New York—City University of New York. She is also a Professor at the Sociology Department of The City College. She is the author of *The Mobility of Workers Under Advanced Capitalism: Dominican Migration to the United States* (2002), named Outstanding Academic Title by *Choice* in 2002, and co-author of *The Dominican Americans* (1998), and of numerous journal articles on Dominican immigration in the United States. Under her leadership the CUNY DSI acquired its Dominican Colonial Documents Collection, consisting of more than 103,000 sheets of sixteenth-century documents in microfilm.

**Colin Lange** is a professional web-developer and Partner at Monaco Lange, a full-service digital programming and design company in New York City. He is the constructor of the new website of the

CUNY Dominican Studies Institute and CUNYDSI's *First Blacks in the Americas* website, an educational project devoted to a multimedia divulgation of the history of the first permanent Black population of the Americas, formed by the free and mostly enslaved Africans that settled in Hispaniola-*Santo Domingo* during the 16<sup>th</sup> century.

**Dr. John O'Neill** is the Head of Library and Curator of the Department of Manuscripts and Rare Books of The Hispanic Society of America in New York City, one of the oldest institutions in the United States devoted to the preservation and study of Hispanic cultures. He is also the Director of the *Dictionary of Old Spanish Language* Project. He has contributed approximately fifteen transcriptions to the DOSL and ADMYTE projects, two pioneering electronic transcription projects in the field of Hispanomedievalism. He is a Doctoral Professor at the Department of Hispanic and Luso-Brazilian Literatures of The Graduate Center, City University of New York, where he teaches a course on Editing the Spanish Text.

**Anthony Stevens-Acevedo**, M.A., is Assistant Director at the CUNY Dominican Studies Institute at The City College of New York. A doctoral student at the History Department of The Graduate Center of the City University of New York, he earned a B.A. in History of the Americas at the University of Seville and an M.A. in History at The City College of New York. He has a long research experience working on 16<sup>th</sup> and 17<sup>th</sup>-century manuscripts from Hispaniola and has produced more than 2,000 pages of transcriptions of archival documents from that period.

**Cynthia Tobar** is a cross-disciplinary metadata specialist/archivist experienced in digital project planning and implementation, including the development of metadata best practices, controlled vocabularies and taxonomies aimed at improving and maximizing information retrieval for digital content. Previously, she was a Metadata Librarian and Assistant Professor at The Mina Rees Library of The Graduate Center of The City University of New York, where in addition to cataloging special collections, she participated in digital project planning and implementation, including the development of metadata standards and best practices. Prior to her time at the Graduate Center, she was Senior Metadata Creator for the Museum of the City of New York and a cataloger, archivist, and metadata creator at the New York Public Library.

**Andrea Ades Vásquez** is Associate Director of the American Social History Project/Center for media and Learning and Managing Director of the Graduate Center's New Media Lab. She joined ASHP/CML in 1989 as an artist, designer, and producer of multimedia materials and has continued to develop online materials for high school and college level classes. Since the inception of the New Media Lab in 2000, she has run a collaborative, interdisciplinary Lab as a space for doctoral students and faculty to develop digital research and projects related to their academic research.

Media Coverage: Echo of the Paleography Tool in the Media

The Huffington Post- October 16, 2011

The initial announcement about the Spanish Paleography Tool project generated some wide-spread online visibility when the Huffington Post published a story on the project titled “Spanish Language Scholar Leads Development of Digital Tools to Teach Hispanic History” by reporter David Ramírez ([http://www.huffingtonpost.com/2011/10/16/spanish-language-paleography-digital-tool\\_n\\_1008131.html](http://www.huffingtonpost.com/2011/10/16/spanish-language-paleography-digital-tool_n_1008131.html)).

Ethnic Majority-October 17, 2011

“Spanish Language Scholar Leads Development of Digital Tools To Teach Hispanic History”  
<http://www.ethnicmajority.com/wordpress/mediaentertainment/2011/10/spanish-language-scholar-leads-development-of-digital-tools-to-teach-hispanic-history>

Hispanic Outlook-September 8, 2011

“CUNY Dominican Studies Institute Win NEH Grant”  
<https://www.wdhstore.com/hispanic/data/pdf/sept8-cuny.pdf>

CUNY Digital Humanities Initiative Blog-May 3, 2012

“May 8: Ramona Hernández and Anthony Stevens-Acevedo on the Spanish Paleography Digital Teaching and Learning Tool,” by Charlie Edwards  
<http://cunydhicommons.gc.cuny.edu/2012/05/03/may-8-ramona-hernandez-and-anthony-stevens-acevedo-on-the-spanish-paleography-digital-teaching-and-learning-tool/>

Vox XXI-June 11, 2012

Carbonell Basset, Delfin: “American universities at the forefront of Hispanic studies,” *Vox XXI*,  
<http://www.voxxi.com/hispanic-studies-american-universities/#ixzz2U3KGVaH2>  
<http://www.voxxi.com/hispanic-studies-american-universities/>

UDUAL-September 24, 2012

“Herramienta para descifrar la historia”  
Reporter Cristina Salmerón, a Madrid-based journalist with the world-famous Agencia EFE in Spain, also wrote a story that made it to some Latin American online media.  
<http://udual.wordpress.com/2012/09/24/herramienta-para-descifrar-la-historia/>

La Voz Diaria-October 30, 2012

“Herramienta para descifrar la historia”  
<http://www.vozdiaria.com.do/contenedor/portadas/pdf/2529etc.pdf>

Dissemination of the news on the completion of the first stage of the Spanish Paleography Tool prototype from May 21, 2013 onwards:

Conscriptio: El Blog de las Ciencias y Técnicas Historiográficas--May 21, 2013

“Aprender paleografía moderna hispana con Spanish Paleography Tool”  
<http://conscriptio.blogspot.com/>

Licencia Histórica Blog-May 24, 2013

“Paleografía: un saber necesario”

<http://licenciahistorica.blogspot.com/2012/04/paleografia-un-saber-necesario.html>

Propylaeum. Paleografía, Diplomática y Ciencias Afines Blog-- May 24, 2013

“Curso de Paleografía española (siglos XIV-XVII).

<http://mabillon.blogspot.com/2013/04/curso-de-paleografia-espanola-siglos.html>

Bibliotypes Blog--May 24, 2013

<http://bibliotypes.blogspot.com/2012/03/la-paleografia-en-el-primer-tercio-del.html>

Grafosfera: Bitácora sobre cultura escrita Blog-- May 24, 2013

<http://grafosfera.blogspot.com/2012/07/cursos-virtuales-de-paleografia-de-la.html>

Language Policy and Planning, and Language Revitalization around the world, an academic Facebook page. Based in Bloomington, Indiana [Facebook Page]--May 24, 2013.

<https://www.facebook.com/pages/Language-Policy-and-Planning-and-Language-Revitalization-around-the-World/162961040413548>

Manual de Paleografía en del Prof. Juan José Marcos, en pdf:

[http://revistagrafos.files.wordpress.com/2013/03/manual\\_paleograf.pdf](http://revistagrafos.files.wordpress.com/2013/03/manual_paleograf.pdf)

Email: [juanjmarcos@yahoo.es](mailto:juanjmarcos@yahoo.es)

Asignatura Practicum Paleografía Hispana—Universidad del País Vasco

<http://www.mastereuropaymundoatlantico.ehu.es/p105->

[1001/es/contenidos/informacion/europa\\_atlantico/es\\_eumun101/adjuntos/practicum\\_paleografia\\_hispana.pdf](http://www.mastereuropaymundoatlantico.ehu.es/p105-1001/es/contenidos/informacion/europa_atlantico/es_eumun101/adjuntos/practicum_paleografia_hispana.pdf)

Language Policy and Planning, and Language Revitalization around the world, an academic Facebook page. Based in Bloomington, Indiana

<https://www.facebook.com/pages/Language-Policy-and-Planning-and-Language-Revitalization-around-the-World/162961040413548>

Archiveros de Extremadura, Spain, in their blog--May 22, 2013

<https://www.facebook.com/archiveros.extremadura>

ANABAD, the largest network of Spanish archivists, reproduced the news on the Tool in their Facebook Blog--May 22, 2013, taken from Archinfo 2.0:

<https://www.facebook.com/pages/ANABAD/212949342069288>

Archinfo 2.0

<http://archinfo20.wordpress.com/2013/05/22/aprender-paleografia-moderna-hispana-con-spanish-paleography-tool/>

Ars Libera

<http://arslibera.wordpress.com/2013/05/22/aprender-paleografia-moderna-hispana-con-spanish-paleography-tool/>

ADABI, Mexico

<http://www.adabi.org.mx/content/lateral/directorio.jsfx>

Also check HISPANA

<http://roai.mcu.es/es/inicio/inicio.cmd>

Blog "De Rebus diplomaticis"

<http://drd.hypotheses.org/1012>

Archivo municipal de Santa Fe

<https://www.facebook.com/archivomunicipaldesantafe>

<http://www.scoop.it/t/recursos-bibydoc>

Orientacion Para Documentalistas--Facebook Page

[https://www.facebook.com/permalink.php?id=345313995511541&story\\_fbid=544658442243761](https://www.facebook.com/permalink.php?id=345313995511541&story_fbid=544658442243761)

Recursos Bibliotecarios—[A Facebook Page]

<https://www.facebook.com/RecBib/posts/597443883614129>

Archivos y Archiveros-Noticias de Archivos y Documentos

Curated by Marta García

<http://www.scoop.it/t/archivos-y-archiveros>

DADUN: Depósito Académico Digital de la Universidad de Navarra:

<http://unavdadun.wordpress.com/2011/06/24/solicita-permiso-a-las-editoriales-con-un-mail/>

Miravalles Restarua—[Facebook Page]

[www.facebook.com/MiravallesRestaura/posts/575206139185957](http://www.facebook.com/MiravallesRestaura/posts/575206139185957)

Tweets:

<http://laleydelautobus.wordpress.com/2012/07/29/hoy-lady->

godiva-viste-de-prada/

<https://twitter.com/EeyJude>



*2. Instruction sheet—Document tool-tip insertion*

**SPANISH PALEOGRAPHY TOOL, MANUSCRIPT CODING INSTRUCTION SHEET 2**

*Words broken-up at end of manuscript's lines*

We will be editing the tool-tips of every word cut-off at the end of a manuscript line so that it indicates the interruption by spelling the rest of the word [-in between brackets and with a hyphen preceding it].

Steps:

1. Go online, enter the Chrome Internet browser and then log-in into Word Press' editing page for the Spanish Paleography Tool by typing in:

<http://spanispaleographytool.org/wp-login.php>

2. Enter your username and password. Word Press' 'Dashboard' page of the Paleography Tool will open.
3. Click on 'Documents' on the left side vertical menu, go to the 'Documents' page and find the names/titles of the documents you have been assigned to work on.
4. Double click on the document's name to enter Document Edit page. Once there, click on 'Preview' on the top-right corner of page. The edited version of the document will open, showing all the 'boxes' or encapsulations in blue color added to the document.

(If no blue boxes show on the manuscript's words, do not do anything else, and get out of the document. Double check the document name/title and confirm that you actually selected the specific document you had been assigned. If the name is correct, report to Anthony the fact that it shows no blue boxes on the text. If Anthony is not around, write down the name of the document that you found missing the blue boxes.)

5. Look at the right end of every line of manuscript on the right margin of the document. Read the last word on each line and try to identify those words whose

text is cut-off, and continued the line in the next line. If you cannot decipher the word, just hover the mouse pointer over the word and it will show the 'tool-tip' with the typed spelling of the word.

6. If the word on the right end of the manuscript's line happens to be cut off and its tool-tip only transcribes the exact letters on that line, do the following:

- a. Double click with the mouse's left button on the blue box surrounding the manuscript word. This will take you to the 'More information' daughter page. Click on the text-box located under 'Transcription' at the top of the daughter page.
- b. Carefully click on THE SPOT RIGHT AFTER THE LAST LETTER OF THE SPELLING OF THE WORD that is within the text-box. Immediately after the last letter, type an opening bracket '[' , then a hyphen '- ' , then the transcription of the remaining letters of the word as they appear at the beginning of next line of the manuscript on its left margin, and then a closing bracket ']'. (For instance, if at the end of the line the word 'comision' appears as 'comi', you will edit the tool-tip to say 'comi[-sion]').
- c. Click on the 'x' on the top-right corner of the 'More information' daughter box to save the change.
- d. Go with the mouse pointer to the same word-section you just edited and hover the pointer over the word to confirm that the tool tip now reflects the editing you did. (If you don't see the change incorporated in the tool-tip, repeat steps 'a' to 'c' and see if you can get it the second time. Otherwise, report to Anthony.)

7. Go to the beginning of the next line of the manuscript immediately below on the left margin, and edit the remaining of the word you just edited on the right end of the line of text immediately above by doing the following:

- a. Double-click with the mouse's left button on the continuation of the word that occupies the first place on the line. This will take you to the 'More information' daughter page for that word.

b. On the textbox right below 'Transcription' at top of the page, click on THE SPOT IMMEDIATELY BEFORE THE FIRST LETTER OF THE SPELLING OF THE WORD that is within the textbox. Immediately before this letter, type-in an opening bracket '[' followed by the exact transcription of the letters of the word that show at the end of the prior line, followed by a hyphen '-' and then by a closing bracket ']'.

(For instance, if at the beginning of the line the ending of the word 'comision' appears as 'sion', you will edit the tool-tip to say '[comi-]-sion').

- c. Click on the 'x' box of the 'More information' daughter box to save the change.
- d. Go with the mouse pointer to the same word-section you just edited and hover the pointer over the word to confirm that the tool tip now reflects the editing you did. (If you don't see the change incorporated in the tool-tip, repeat steps 'a' to 'c' and see if you can get it the second time. Otherwise, report to Anthony.)

### *3. Instruction sheet---Double document construction*

#### **Spanish Paleography Tool-Document Editing Instruction Sheet 3**

##### **How to merge two documents side-by-side with Photoshop and save them as one single PDF document containing a double image.**

This is a guide to help us produce a series of PDF double documents containing an image of a manuscript on the left and an image of its typed transcription on the right. Each double document will be uploaded onto the Paleography Tool and will be linked/connected to each of the manuscripts appearing in the Tool's homepage 'Select Document' menu, the menu from which users will select manuscripts to view. Once users open a manuscript, besides looking at the tool-tips that show a typed transcription of each word of the manuscript, users will have the option of opening this separate version of the same manuscript accompanied by a line-by-line transcription.

Here's how to generate the manuscript + transcription documents:

1. Open Photoshop by clicking on the Photoshop icon on your computer's desktop or selecting it through the 'Start' menu.
2. Once Photoshop page is open, click on 'File' / 'New' on the top menu bar to open a new Photoshop document, that is, the one document into which you are going to merge copies of two existing documents (the manuscript document and the typed transcription document). In the box that opens, type in a name ending in "-double" for the document being constructed, set up the document size to '11x 17' or else, and then click O.K. A new Photoshop document of the selected dimensions will open.
3. On the top horizontal menu bar, go to Image Mode and select "Grayscale."
4. To bring into the newly created Photoshop document the image of the first of the two documents you want to merge (a copy of one of the manuscripts uploaded onto the Paleography Tool), click 'File' and 'Open' on the top horizontal menu bar of the Photoshop window. A document-open window will appear.
5. In the document-open box, from a drive in the computer, select the desired document. You must select either a TIFF document or a PDF document. An "Import PDF" or "Open" box will open showing the name of the document selected.
6. Press O.K. The selected document will appear on the Photoshop window.
7. While in the selected document, on the top menu bar, go to "Select" and click on "All."
8. To move the selected document from screen to the destination document (that is, to the blank Photoshop document created at the beginning of this sequence), select the previously called document

either by clicking 'Edit' / 'Copy' on the horizontal top menu bar or by dragging the called document with the mouse pointer onto the destination document.

9. Go to the destination document (the blank document created in the beginning) and once there, right-click with your mouse and select 'Paste' in the pop-up menu or select to 'Edit' / 'Paste' on the horizontal menu bar of the Photoshop window. A copy of the called-in document (in this case a manuscript) will appear added to the Photoshop page.

10. Using the Move Tool [V] on the left vertical menu, drag the imported document (manuscript) to the location wanted within the destination document (the blank Photoshop document). Once you have your 'manuscript' document placed on the left side of the Photoshop document, it is time to bring in or import the second document to be merged, that is, the typed-transcription document.

11. To bring in the second document, basically repeat the steps used to bring in the first of the two documents to be merged. While in the Photoshop page where you already inserted the first imported document, click 'File' / 'Open.' A document-open box will open.

12. From the document-open box, select the drive and name of the desired second document, the transcription document. (Remember, it must be either a TIFF or PDF document). An 'Import PDF' box will open showing the document selected. Confirm the name is the one you want.

13. Press O.K. The second selected document will appear on screen.

14. Again, prior to copying the image go to "Select" on the top menu bar and click "All."

15. To move the second document onto the Photoshop destination document (where the manuscript image has already been placed), either click on 'Edit' / 'Copy' on the top horizontal menu bar of the page the imported document has opened, or drag document with mouse pointer.

16. Go to (or click on the name tag of) the Photoshop destination document and click on 'Edit' / 'Paste' on the top horizontal menu bar or right click with the mouse and then click on the 'Paste' option on the mouse-generated menu. The second document now will appear added to the destination document. Drag it to the position you want it to remain at, in this case, the position immediately to the right of the manuscript image.

17. Finish aligning the two images/documents (manuscript and typed-transcription) in the way you want them to be saved and to show in the Paleography Tool when the users call to screen the transcription documents.

18. On the same Photoshop page where the two images have been merged, click 'File' / 'Save' to save the merged documents as one new document. Give the name you want the document to have and make sure it is saved in the drive you want. Once you click on 'Save,' the document will be saved under that name.

19. Upload the document onto the Paleography Tool and link it to the manuscript document already uploaded onto the Tool. Once activated, try the functioning of the link by going to the public version of the Tool, opening the respective manuscript, and from its upper right corner, click on the link 'Open transcription.'

The double manuscript + typed transcription document should open as a separate page to offer the user another component to learn deciphering the handwriting on the manuscript. If the double document does not open properly, notify Anthony.

5. *Instruction sheet---Sample alphabet construction*

**Sample alphabet for document [name of document here]**

Samples of letters are shown organized alphabetically in vertical fashion, lower case followed by upper case. Variances of each letter as found in the manuscript are organized horizontally, from left to right. Thus, to consult the sample more efficiently, you should first decide what letter you are looking for, then search for it vertically in the sample, and once you find it by scrolling up or down, consult the variances horizontally on the letter's line from left to right searching for the sample that most closely matches the letter you are trying to decipher and/or confirm in the manuscript connected to this sample.

**a: a a a a**

**A: A A A A**

**b: b b b b**

**B: B B B B**

**c: c c c c**

**C: C C C C**

d:

D:

e

E

f

F

g

G

h

H

i

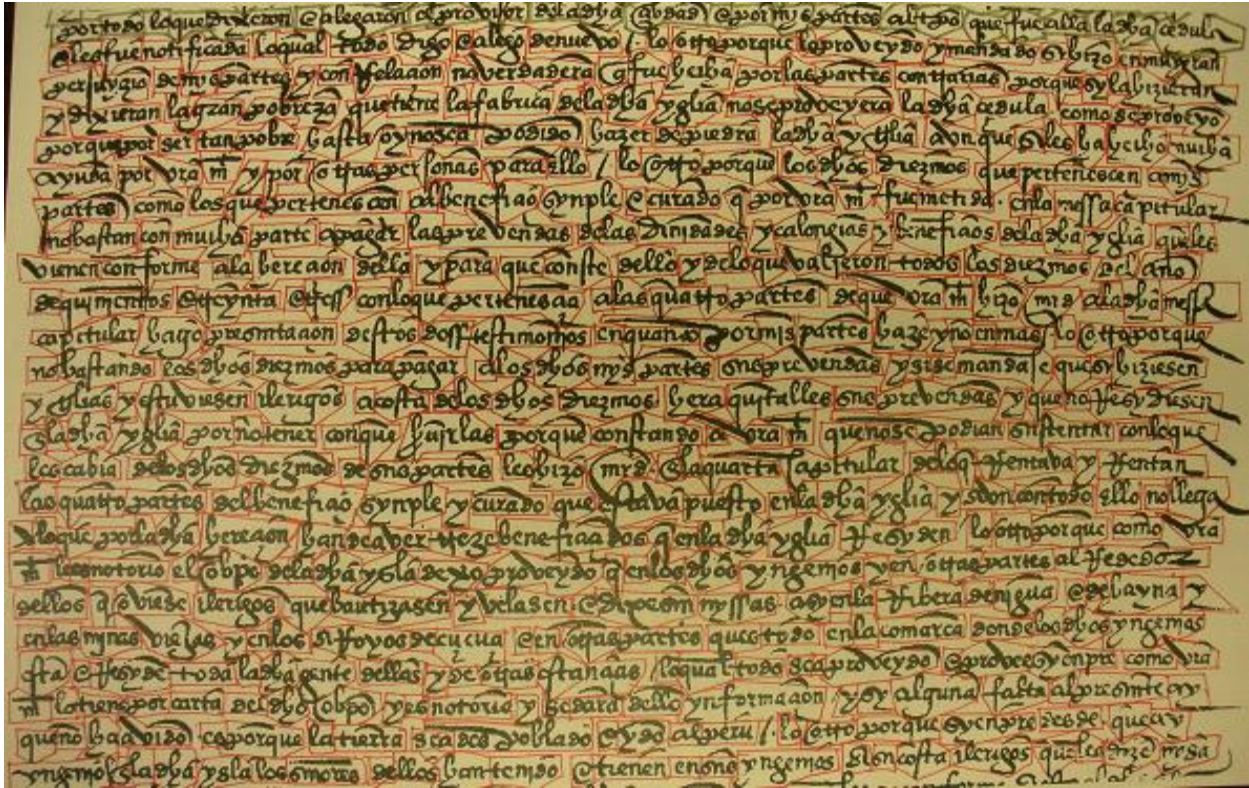
I

k

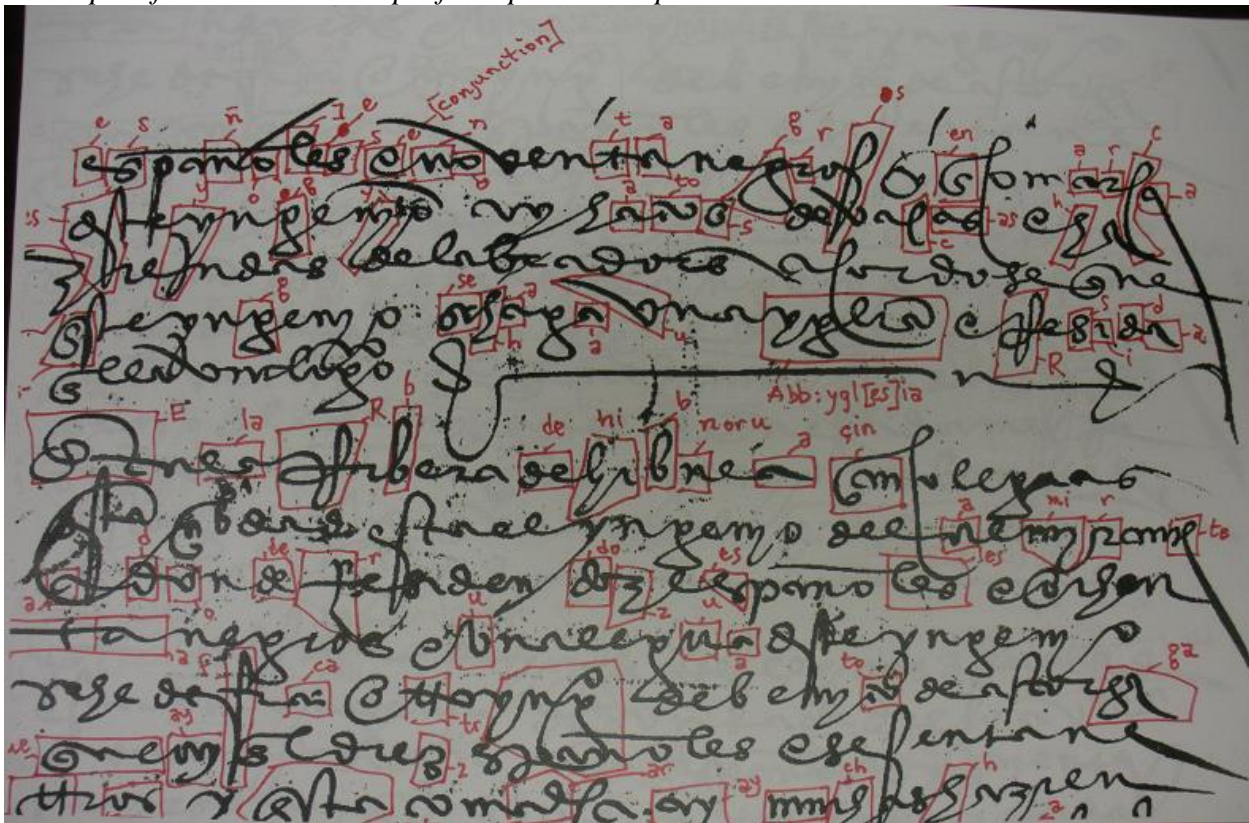
K

[...]

5. *Sample of marked manuscripts for word-by-word transcriptions*



6. Sample of marked manuscripts for alphabet sample construction



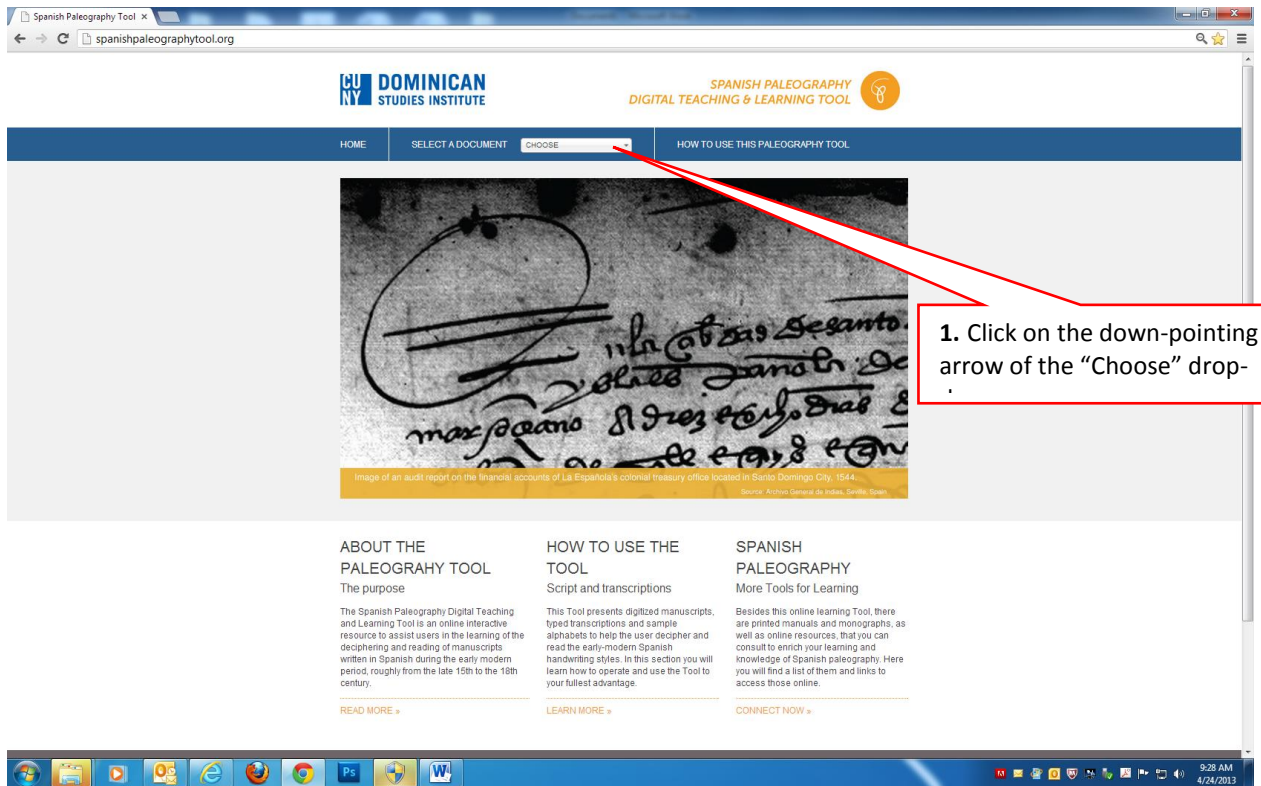


## 7. Tutorial

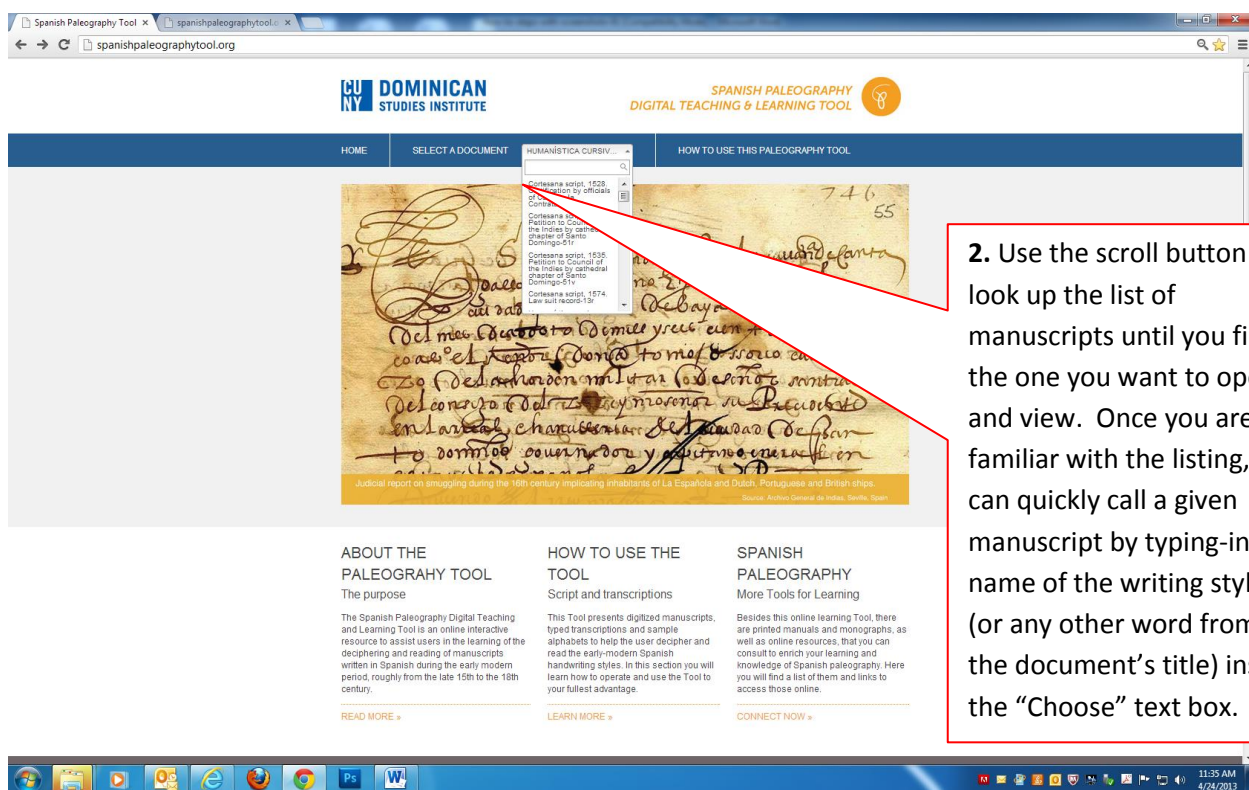
### Spanish Paleography Digital Teaching and Learning Tool Tutorial

The Spanish Paleography Digital Teaching and Learning Tool offers you two ways of viewing samples of early-modern Spanish manuscripts for you to learn deciphering the different handwriting styles or scripts used in those documents: 1) Individual manuscripts shown isolated; 2) Manuscripts shown side-by-side with a typed transcription. Because of the way this first version of the Tool is constructed, you always need to open the isolated version of a manuscript first and then, from it, open its double version of manuscript + transcription. A supplementary element of the Tool incorporated to help you in the deciphering exercise is the sample alphabet linked to each manuscript. The following is a step-by-step description, based on screen-shots, of how to access the manuscripts and how to use the features of the Tool to decipher them.

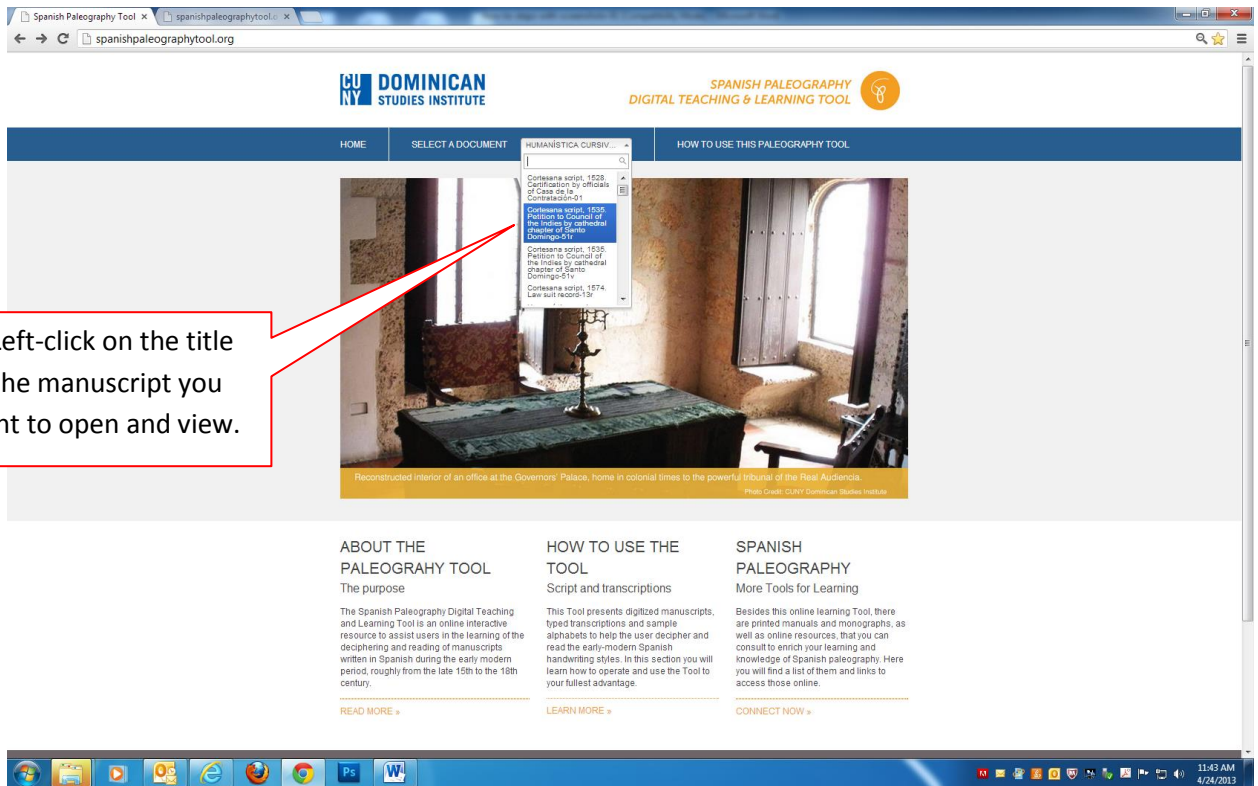
#### I. VIEWING AN ISOLATED IMAGE OF A MANUSCRIPT



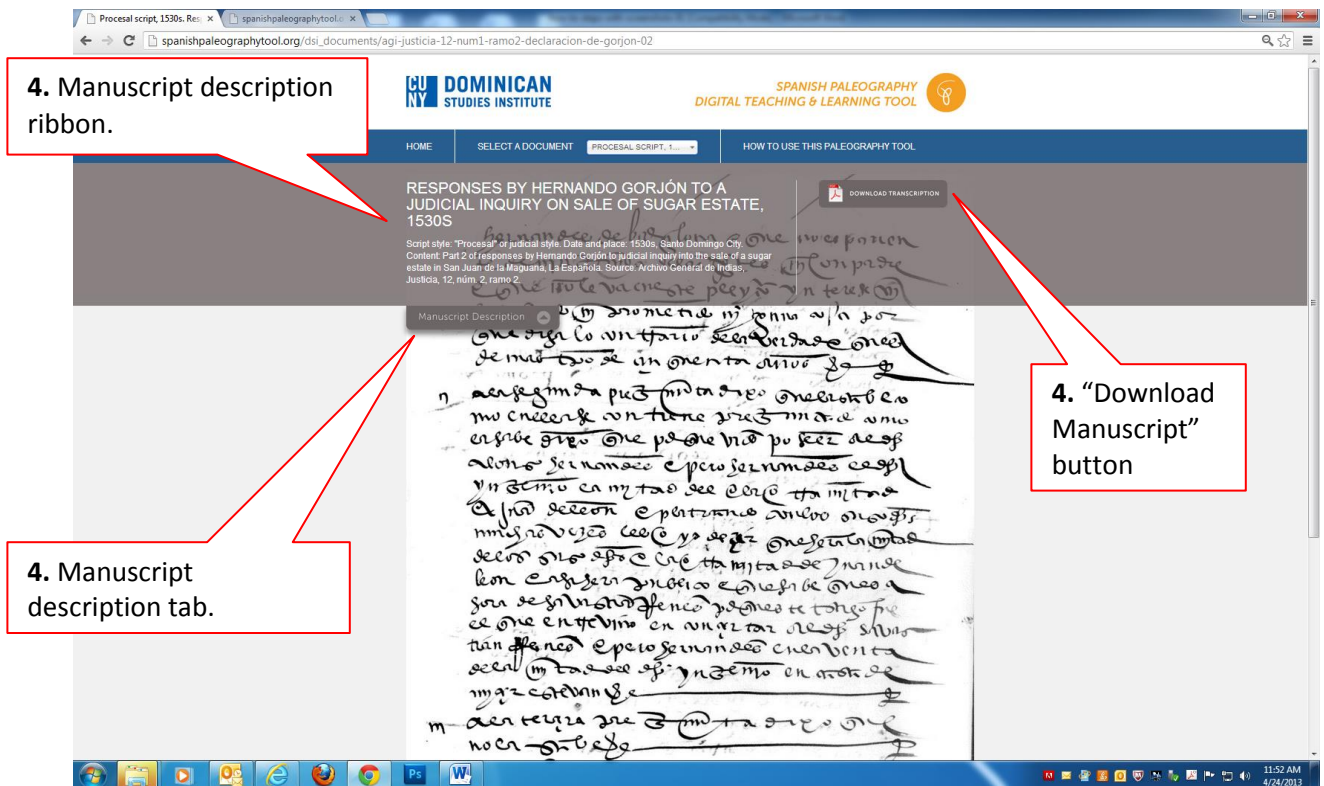
1. On the Home Page of the Spanish Paleography Digital Teaching and Learning Tool, go to the “SELECT A DOCUMENT” menu on the navy blue upper menu bar and left-click on the arrow located at the right end of the “CHOOSE” textbox.



2. A drop-down menu will appear showing a vertical listing of the titles of manuscripts contained in the Spanish Paleography Tool. You may scroll up or down the menu to find a document by dragging up or down the scroll button on the right side of the box or by left-clicking on the up or down arrows at the right-side of the box. All the titles of documents in the box begin by the name of the Spanish handwriting style they belong to: Cortesana, encadenada, procesal, redonda, etc. The titles also include the year or approximate year of the document. They are listed in alphabetical order following the first word in the title (the word that designates the writing style they belong to). As per this sequence, documents in **C**ORTESANA handwriting come first, followed by those in **E**NCADENADA handwriting, and so on. Once you are familiar with the sample of manuscripts contained in the Tool, you can also type-in the name of the handwriting style (or any other term contained in the manuscript's title) inside the "Choose" textbox to more quickly bring up the manuscript you want.



3. Inside the “SELECT DOCUMENT” drop-down box, place the cursor on top of the title of the manuscript you want to open or view. A blue highlighting will cover the manuscript’s title. Left-click on the title of the manuscript you want to open or view.

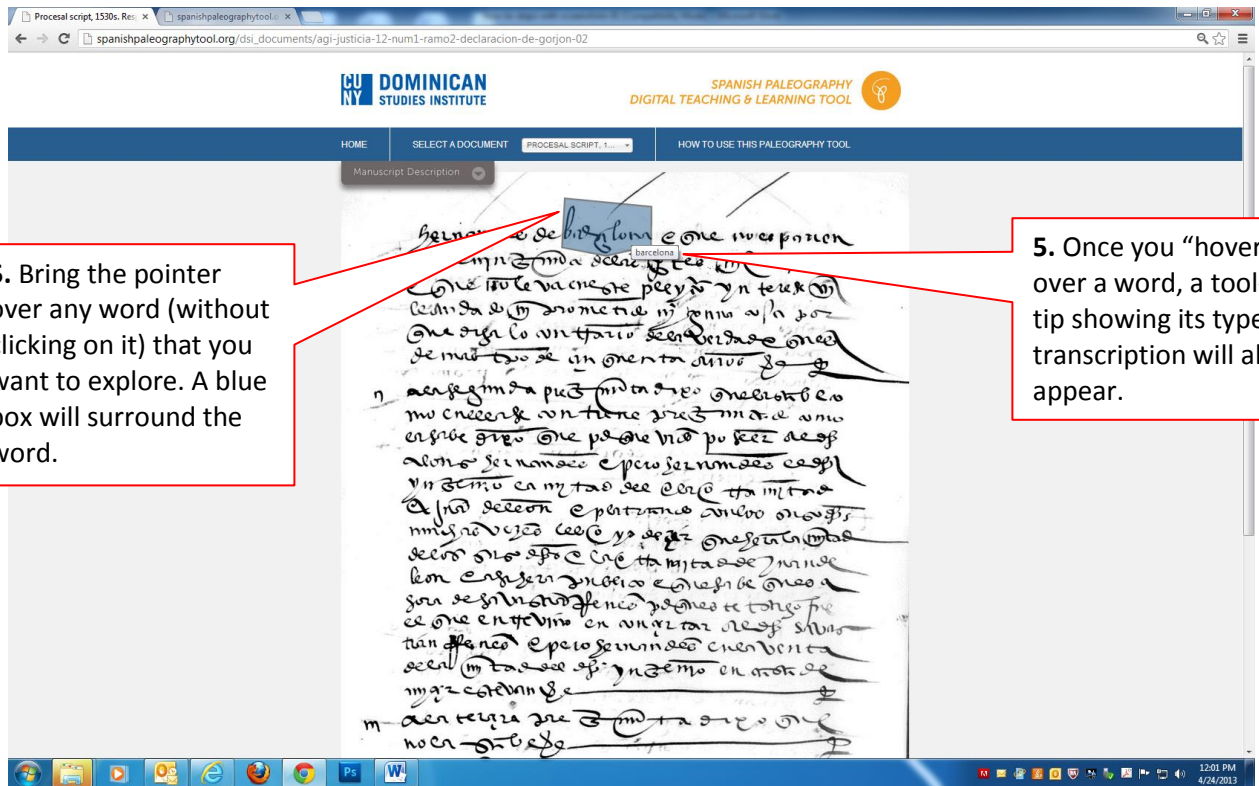


4. Manuscript description ribbon.

4. "Download Manuscript" button

4. Manuscript description tab.

4. A new page will open on the screen showing the selected manuscript with its "Manuscript Description" grey silk-strip at the top. This "Manuscript Description" gives a summarized description of the manuscript as to, its theme or content, the type of archival document it is part of, the author(s), individuals involved in the events mentioned, date and place, etc. To the right of the strip you will see the "DOWNLOAD TRANSCRIPTION" button-link. (We will describe the function of this button later in these "How to" instructions.) On the left bottom edge of the "Manuscript Description" strip is the "Manuscript Description" tab showing an upward arrow. Right-click on this toggle tab to have the strip retract upwards and allow full view of the upper part of the manuscript. (The tab will remain visible at the upper left edge of the page.) To view the "Description" strip again, just right-click on the tab again at any time.



5. Bring the pointer over any word (without clicking on it) that you want to explore. A blue box will surround the word.

5. Once you “hover” over a word, a tooltip showing its typed transcription will also appear.

5. With the manuscript in full-view onscreen, use the mouse to move the screen’s cursor –without any clicking--until it is on what you may identify as a word of the manuscript that you want to explore. Once the cursor is on top of the word, a box or parallelogram will appear drawn around the word with its interior tinted in light blue color covering the entire word (or most of it). A tool-tip or small rectangular tag will also appear next to the selected word showing the typed transcription of the hand-written word. You can now visually compare the handwritten word in the manuscript and the tool-tip transcription to begin identifying and memorizing the tracing or script of each letter in the word. After doing this process with a number of words in the manuscript, you will begin recognizing letters in other words further ahead in the manuscript or among the words you already left behind. You can almost immediately begin testing your learning by traveling visually to an unchecked word, trying to recognize-guess its letters and spelling, and then testing your guess by bringing the cursor over the word and contrasting your guess against the word’s transcription tool-tip.

6. To access a sample alphabet, click on the first word of a manuscript.

6. A "More information" daughter page will open showing word-links to several informational items. Click on the "ALPHABET" link. A new window showing the alphabet will open.

6. To close the "More information" daughter page, right-click on the X at the right end of the page's header.

6. Besides familiarizing yourself with the script of a selected word of a manuscript by contrasting it against its tool-tip typed transcription, you can also look into more detail at individual letters of the word by opening a sample-alphabet of the particular Spanish handwriting style in which the document onscreen was written. You may access the alphabet by **right-clicking on the first word of the first line of text of each manuscript in the Tool**. This will open a "More information" daughter page. (A daughter page is a box with horizontal sections that contain descriptions of aspects of the manuscript or word-links to other digital elements that provide such information.)

The "More information" daughter page offers several word-links, including an "ALPHABET" word-link. Right-clicking on "ALPHABET" will open a separate page showing a sample alphabet. This sample alphabet, made up with letters extracted from the manuscript itself, shows a vertical display of the letters of the alphabet that appear in the manuscript and their script variances, if any, organized alphabetically from A to Z in two vertical parallel columns, so that --in case of doubt-- you may more easily identify the handwritten letters by comparing them to their typed, contemporary version that appears on the left at the beginning of each horizontal line of letters.

The screenshot shows the Spanish Paleography Tool interface. At the top, there is a navigation bar with 'HOME', 'SELECT A DOCUMENT', 'PROCESAL SCRIPT, 1...', and 'HOW TO USE THIS PALEOGRAPHY TOOL'. Below this is a 'Manuscript Description' dropdown menu. The main area displays a manuscript page with handwritten text. A red box highlights a word in the manuscript, and a red arrow points to a 'More Information On Selected Manuscript Segment' pop-up menu. This menu contains several options: TRANSCRIPTION, barcelona, HANDWRITING STYLE, ALPHABET, LIGATURES, ABBREVIATIONS, NUMERALS, TRANSLATION / GLOSSARY, and HISTORICAL CONTEXT. A second red box highlights the 'TRANSLATION / GLOSSARY' and 'HISTORICAL CONTEXT' options, with a red arrow pointing to a text box on the right.

**7a.** Right-clicking on any word in the isolated version of a manuscript opens a “More information” daughter page with descriptions or word-links to items like “GLOSSARY,” “HISTORICAL CONTEXT” etc.

**7b.** Clicking on the word-links like “GLOSSARY” or “HISTORICAL CONTEXT” in the “More information” daughter page opens other elements providing more information on these items or topics.

7. Each **word** in the isolated version of every manuscript of the Spanish Paleography Tool, including the first word, has a “More information” daughter page that provides other information about a word or about the manuscript in general, like a transcription of the word, a glossary-entry describing the meaning of the word, the word’s English translation or equivalent, if any, and some historical context information that helps better understand the word and/or the manuscript. In the case of the items that consist of word-links, left-clicking on them will take you to an additional element of information. **But only the daughter page of the first word of each manuscript offers access to the manuscript’s sample alphabet.**

## II. VIEWING A MANUSCRIPT SIDE-BY-SIDE WITH ITS FULL TRANSCRIPTION

The screenshot shows a web browser window displaying the Spanish Paleography Digital Teaching and Learning Tool. The page title is "CARGO MANIFEST OF SHIP TRAVELING FROM SPAIN TO LA ESPAÑOLA, 1548." The interface includes a navigation bar with "HOME", "SELECT A DOCUMENT", "PROCESAL SCRIPT", and "HOW TO USE THIS PALEOGRAPHY TOOL". The main content area shows a manuscript image on the left and a transcription on the right. A red box highlights the "DOWNLOAD TRANSCRIPTION" button in the "DOCUMENT DESCRIPTION" strip. A context menu is open over the button, showing options: "Open link in new tab", "Open link in new window", "Open link in incognito window", "Save link as...", "Copy link address", and "Inspect element". A red box highlights the "Open link in new window" option.

**8a. Right-click the "DOWNLOAD MANUSCRIPT" button/link in the "DOCUMENT DESCRIPTION" strip. A drop-down menu will open showing options of action vis a vis the link.**

**8b. On the drop-down menu, left-click on "Open link in new window." This will open the double version of the manuscript on a separate window.**

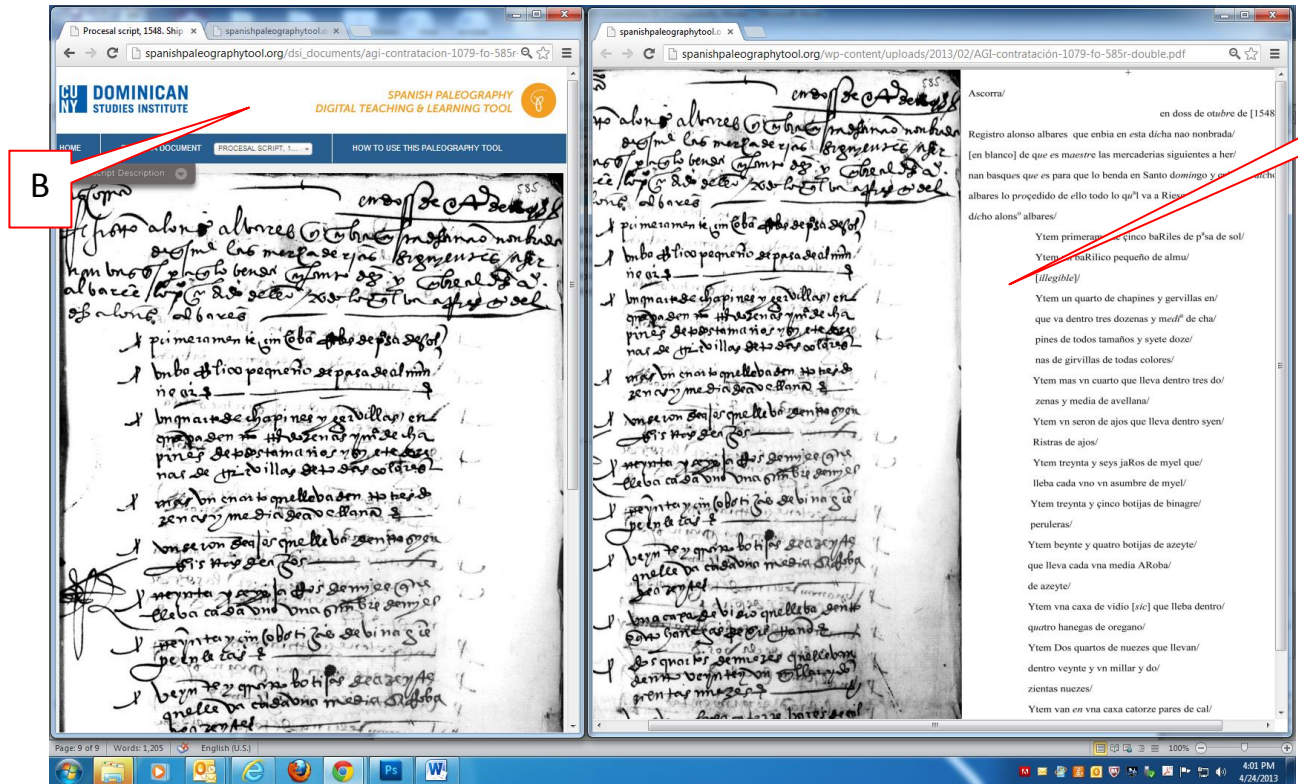
8. The Spanish Paleography Teaching and Learning Tool also allows you to look at each manuscript side-by-side with a full, line-by-line typed transcription of the entire manuscript as one single PDF document. To access this double version of a manuscript, open a manuscript as in Step 4 of these instructions, go to (or display) the "Document Description" strip at the top of the manuscript, and **right-click** on the "DOWNLOAD TRANSCRIPTION" button/link at the right end of the strip. A menu box will open with options as to how to open the new window. If you choose/click on "Open link in new window," this will open a manuscript + transcription image as a separate window.



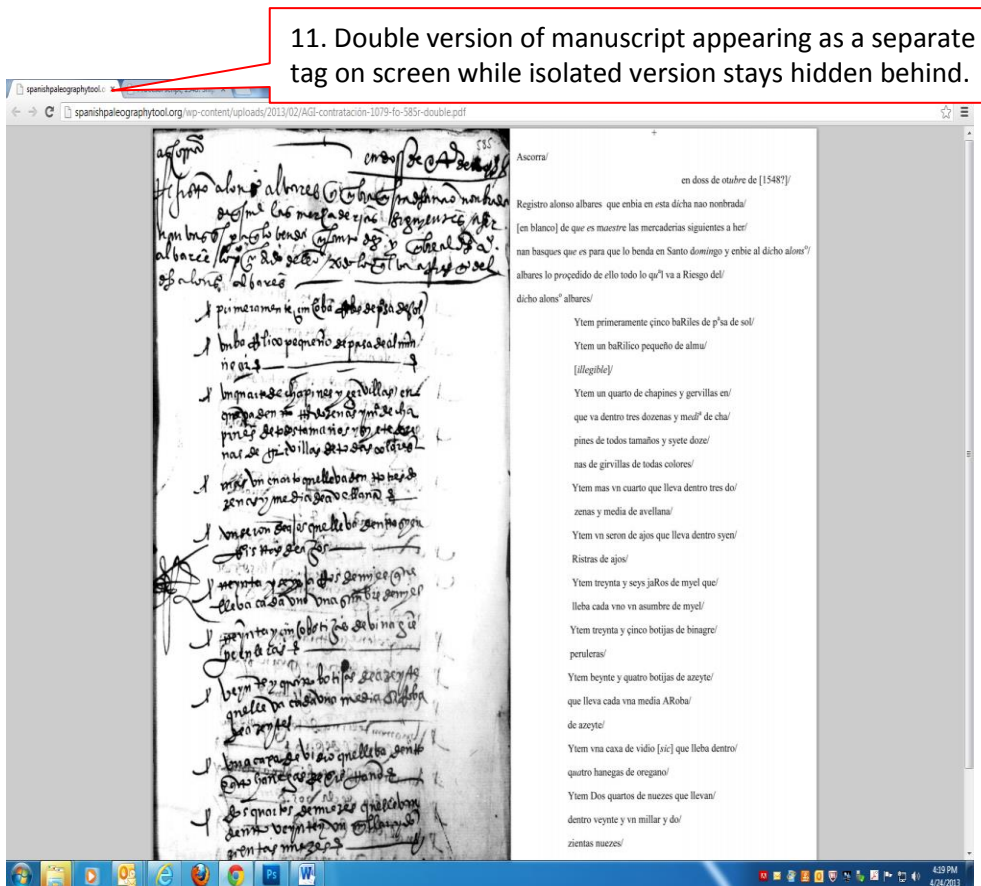
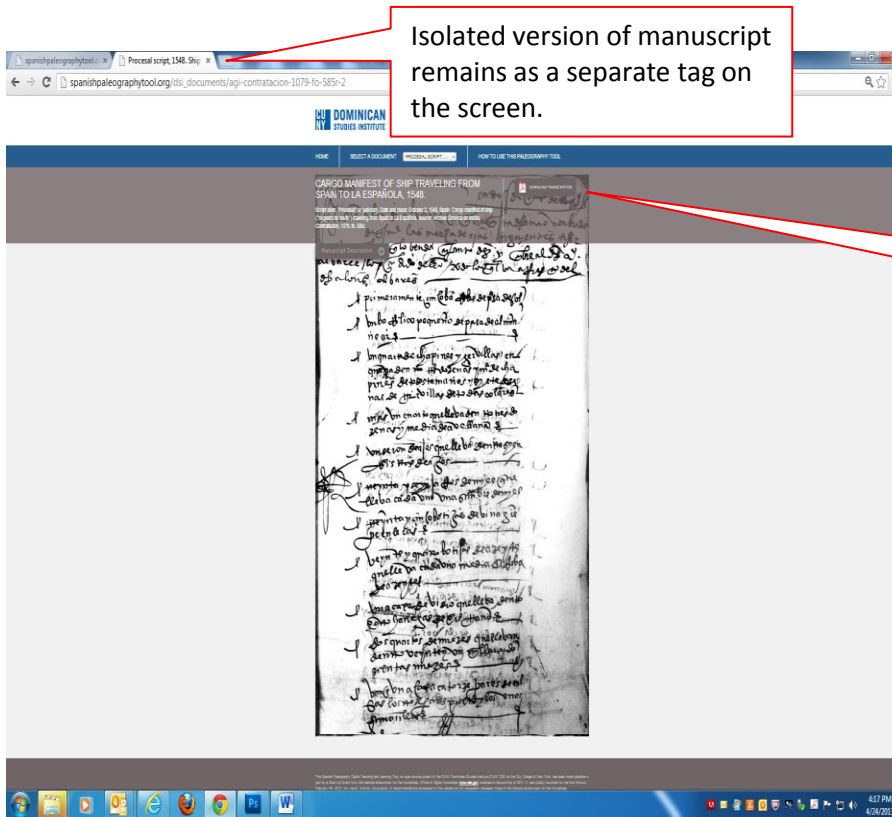
The screenshot displays the Spanish Paleography Tool interface. On the left, a handwritten document is shown with a list of items and their quantities. On the right, the transcription of the document is displayed in a separate window. The transcription is as follows:

Ascorta/  
en doss de octubre de [1548?]/  
Registro alonso albares que enbia en esta dicha nao nonbrada/  
[en blanco] de que es maestre las mercaderias siguientes a her/  
nan basques que es para que lo benda en Santo Domingo y enbie al dicho alons\*/  
albares lo propeçido de ello todo lo qu\* va a Riesgo del/  
dicho alons\* albares/  
Ytem primeramente cinco baRiles de p'sa de sol/  
Ytem un baRilico pequeño de alma/  
[illegible]/  
Ytem un quarto de chapines y gervillas en/  
que va dentro tres dozenas y medi\* de cha/  
pines de todos tamaños y syete doze/  
nas de girvillas de todas colores/  
Ytem mas vn cuarto que lleva dentro tres do/  
zenas y media de avellana/  
Ytem vn seron de ajos que lleva dentro syen/  
Ristras de ajos/  
Ytem treynta y seys jaRos de myel que/  
lleba cada vno vn asumbre de myel/  
Ytem treynta y cinco botijas de binagre/  
peruleras/  
Ytem beynte y quatro botijas de azeyte/  
que lleva cada vna media ARoba/  
de azeyte/  
Ytem vna casa de vidio [sic] que lleba dentro/  
quatro hanegas de oregano/  
Ytem Dos quartos de nuezes que llevan/  
dentro veynte y vn millar y do/  
zientas nuezes/

9. The separate-window format will allow you to drag, relocate and resize the double image momentarily on the screen in whichever position or way is more useful to your viewing.



10. You could, for instance, resize the manuscript + transcription window (A) and then the other window containing the isolated version of the manuscript (B) and drag them together side-by-side so that they could be both visible next to each other on screen. This will allow you to travel between both versions of the manuscript, checking the transcriptions of each word of the manuscript both with the tool-tips of the isolated version as well as the full and visually steady transcriptions of the double-document.



11. If you **left-click** on the “DOWNLOAD TRANSCRIPTION” button of a manuscript while in its isolated version, the Tool will automatically open the double version of the manuscript as a new tab within the Tool’s window structure, and rather than watching both versions simultaneously onscreen you will just be able to switch or toggle from one to another, each appearing full blown by itself on the screen. The advantage of this option is that it provides you a default view of each image of the document at a larger size.

12. **ZOOMING.** Zooming is a very useful mechanism in the deciphering of the handwriting in digital versions of manuscripts. This Spanish Paleography Tool does not have yet a “magnifying glass” application, yet in the meantime we can hold on to the browser-based zooming functions (Ctrl and plus sign (+) to zoom in; Ctrl and minus sign (–) to zoom out) to enlarge and reduce, respectively, the image of a digitized manuscript to better decipher any part of the script.

MAIN HEADING

[CUNYDSI LOGO] SPANISH PALEOGRAPHY TEACHING / LEARNING TOOL

Image of simple line of text as visual background

*SAMPLE LINE OF SIXTEENTH CENTURY TEXT AS BACKGROUND ADORNMENT*

Document's archival description and identification [Archival Reference and Call Number, type of document and date and place of issuance]

Main options bar

<b>DOCUMENT MODE</b> Archival mode Transcription mode Archival & Transcribed	<b>DOCUMENT MENU</b> Doc. 1 & Title Doc. 2 & Title Doc. 3 & Title Doc. 4 & Title, etc.	<b>ALPHABETS</b> Style 1, Style 2, Style 3 Variants of letters Other words with	<b>GLOSSARY</b> Definitions Pronunciation Translations	<b>IMAGES</b> Maps Monuments Objects, etc.	<b>DIPLOMATICS</b> Type of document Structure of document	<b>TOOLS</b> Zoom in Zoom out Modify contrast, etc.	<b>OTHER</b> Transcription tests Historical context Timeline, etc
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VERTICAL SCROLL BAR

GENERAL INFORMATION

HORIZONTAL SCROLL BAR

ABOUT THIS SITE	SPONSORS	STAFF	OTHER SITES	CONTACT US	OTHER
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