DIGITAL HUMANITIES AND THE COMMON GOOD. THE CASE OF *ENTIÉNDELO*

LAS HUMANIDADES DIGITALES Y EL BIEN COMÚN. EL CASO DE *ENTIÉNDELO*

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Abstract

Entiéndelo. An App Helping Latin@s and their Advocates Navigate Stressful Linguistic and Cultural Situations is based on the idea that language should not be the last frontier to a good quality of life. The app contains three essential parts, all of them connected: 1) a glossary that aims to collect all Hispanic-American and US Latino variants of keywords associated with violence and healing, along with an urban dictionary that contains literary excerpts and authentic street sentences; 2) an interactive bilingual collection of inspirational quotes; 3) an interactive bilingual game, based on the model of *Spent*, where players are faced with the dilemmas of being a monolingual speaker in situations where their lack of diglossic dominance becomes a hindrance.

Keywords: App. Domestic Violence. Language. Bilingualism. Literary Quotations.

Resumen

Entiéndelo. Una App para ayudar a las Latin@s y a sus defensores a navegar situaciones lingüísticas y culturales estresantes se basa en la idea de que el lenguaje no debe ser la última frontera para una buena calidad de vida. La aplicación contiene tres partes esenciales, todos ellas interrelacionadas: 1) un glosario de palabras clave que pretende recoger todas las variantes tanto hispanoamericanas como del español de los EEUU asociadas con la violencia y la rehabilitación, junto con un diccionario urbano que contiene fragmentos literarios y frases utilizadas en la calle; 2) una colección bilingüe e interactiva de citas de inspiración; 3) un juego bilingüe e interactivo basado en el modelo de *Spent*, donde los jugadores se enfrentan al dilema de ser un hablante monolingüe en situaciones en las que la falta de dominio diglósico se convierte en un obstáculo.

Palabras clave: Aplicación. Violencia doméstica. Lenguaje. Bilingüismo. Citas literarias.

1. INTRODUCTION

Entiéndelo is a mobile app (Android) that aids Spanish and English speakers navigate situations of bilingual and bicultural distress. At present, *Entiéndelo* focuses on Spanish-speaking individuals with a stake in Inter Personal Violence (IPV) prevention and English-speaking individuals who work with the US Latin@ community because IPV continues to become prevalent at epidemic proportions. The *Entiéndelo* app alleviates the additional difficulty that arises from having to deal with a situation of IPV in a multilingual context while it also raises awareness to the fact that prevention of IPV is less effective when there are linguistic and cultural barriers between survivor and provider. The driving force behind the development of *Entiéndelo* is the prevention of Inter-Personal Violence (IPV) among the Spanish-speaking Hispanic population in the US. The Hispanic/Latin@ community is sensible to this problem as any other community in the US, but Latin@s are in serious need of cultural and linguistic-centered resources to adequately address IPV. Latin@s represent 17% of the total US population. However, in spite of the importance of Hispanic/Latin@ communities across the United States, we lack bilingual and bicultural personnel in shelters, in police departments, in the courts, and in most other services that can provide an adequate treatment to victims of IPV. According to the recent studies conducted by the National Network to End Domestic Violence[1], the most effective manner to prevent the (re)occurrence of IPV is by increasing the amount of available resources that inform and raise awareness through the

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[1] See http://nnedv.org/.

engagement in activities and games that are fun and not preachy. In August 2015, for instance, the Avon Foundation[2] announced $1.5 million in new grants to fund the most *creative*, *resourceful* and *original* proposals that clearly and measurably demonstrate the strategy and tactics to address specific barriers for Latin@ victims of domestic violence.

Entiéndelo is culturally sensitive to the multiple Spanish modalities spoken in Latin America and by US Latinos. The app user has access to:

- A multi-dialect glossary of words relating to sexuality, violence, and healing.

- Inspirational and counseling materials that enhance understanding, self-awareness, and responsiveness.

- An urban dictionary and an interactive game that serve as cultural resources.

- In a situation of poor communication, *Entiéndelo* facilitates interaction between users and speeds up assessment of the client's needs. When used as a learning tool, the app contextualizes the terms in the glossary and suggests different meanings of the vernacular use of a word. Its corpus of inspirational literature serves as a resource to heal and empower.

Entiéndelo is a novel collaboration among experts in different Humanities and non-Humanities fields. The project's original scope and design expands on the theoretical research that Lucia Binotti (2015) carried on during the spring and fall of 2014 for the DIL-IAH Digital Humanities Project *How Do You Say It?* At that time Binotti built a searchable database of the materials on IPV available in Spanish that supports a variety of linguistic and cultural analyses of the data and allows researchers to propose linguistic adjustments of the extant IPV prevention literature. These materials are continually updated as crowdsourcing of the repository continues.

2. INTERDISCIPLINARY RESEARCH

The obvious multidisciplinary dimensions that a Digital Humanities project entails encouraged Binotti to foster unconventional partnerships that would strengthen the project's use-based paradigm and would equip its second phase with the components needed to transcend the walls of the university and to help changing the epistemological habitat of the Humanities from reading to making. Thus, *Entiéndelo* was born as an interdisciplinary project that stems from the partnership of four fundamentally different disciplinary practices: Social Work, Sociolinguistics, Computer Sciences, and Literary Studies.

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[2] See https://www.avonfoundation.org/.

Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Sociolinguistics is the study of language in relation to social factors, including differences of regional, class, and occupational dialect, gender differences, and bilingualism. Serious games are simulations of real-world events or processes designed for the purpose of solving a problem. Literary studies, today, pursue either historical or philosophical projects that may have a greater epistemological complexity and a higher political legitimacy, while, at the same time, literary discourse is no longer exclusively or even predominantly occupied with studying the canonized meaning of the concept literature. Our project profits from the synthesis of these four disciplines' distinct methodologies to reinforce the public impact of use-based collaborative research. It shows that the hybridization of approaches and communal use of resources coming from disparate fields of inquiry, even when each one separately engages mainly in the analysis of symbolic or abstract systems, promotes consideration of important cultural and historical concepts of self and community and becomes a powerful yet practical tool to engage people in social action.

The crucial role that now, and increasingly in the future, mobile apps play in the efforts of businesses, governments, and nonprofits to come up with solutions to meet some of the world's most pressing problems —such as poverty, disease, and limited access to education and health care— is becoming everyday clearer, showcased by initiatives like App-E-Feat[3], part of IEEE's commitment to the Clinton Global Initiative, and by the products developed in response to the theme *Digital Global Action* (to tackle some of the world's greatest challenges through mobile technology) at the Social Good Summit[4] last year. According to a presentation called *Mobile is the Needle, Social is the Thread* (Purcell, 2012), Kristen Purcell, Pew Internet Project's Associate Director, says that mobile:

- Makes information accessible at any time and in any place.
- Increases the demand for instant information.
- Puts information within our reach at all times.

Going mobile is more than just having a website —it means a whole slew of new things. It's about reaching and engaging with one's community in a new way, and offering one's population a different way to receive information.

Unfortunately, only a handful of the most recent apps developed *to do good* propose to contribute to social causes via the integration and deployment of the research methods,

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[3] See http://www.appefeat.org/how-to-participate.html.
[4] See http://mashable.com/sgs/.

themes and content most familiar to the Humanities. See for instance the review of "10 Mobile Apps for Social Good" (Tsao, 2012), where the only one that expands the reach of the Humanities is Foursquare Books, an app based on Literary Manhattan that integrates ebooks with geolocation and social media, and that seems to be already dead (Castillo, 2015). The lack of creative innovations that transform Humanities content into a catalyst for social transformation is even direr when the intended audience is an underrepresented minority, as it is the case with the population at risk for IPV. In fact, a review of current mobile applications dealing with domestic violence conducted by the National Network to End Domestic Violence concluded that the apps present in the marketplace tended to be more narrowly directed towards preventing dating violence in teenagers and college students. These applications include the Aspire News[5], bSafe you[6], and Circle of 6[7] apps.

Thus, *Entiéndelo* is an illuminating example of the powerfully transformative possibilities that the experimental application of innovative technologies to elaborate humanistic content opens up for the dissemination of the Humanities to the Public. Such an approach has the catalytic potential to reimagine and reconfigure traditional fields of inquiry into publicly engaged and socially active practices that blend the conventional boundaries between theoretical thought, classroom teaching, field practice, and the opportunity to turning academic research into useful tools for the community. The *Entiéndelo* project shows how the same body of work can have practical and functional applications that serve a large constituency of people in need, while scholarly and pedagogically it contributes to advance the study of many of the political, legal and cultural issues raised by the murky status of Spanish in the USA.

We have identified the followings humanities themes in *Entiéndelo*: a linguistic component of the glossary; a cultural component of the glossary identifying words by country and geographical area as well as socio-economic level; a cultural component of inspirational quotes translated in culturally competent discourse; and a linguistic/cultural component consisting of quotes taken from colloquial Spanish as well as a variety of Latin American writers.

The collaborative research that makes *Entiéndelo* possible is endlessly scalable. Within the academia it has already generated scholarly papers and presentations in Hispanic Sociolinguistics, Psycholinguistics, Corpus Linguistics, Feminist Studies. Out in the real world, albeit this phase of *Entiéndelo* is designed for a specific population, its general utility goes far and beyond the control group, as it should help prevention through distribution in schools, universities, cultural centers, libraries, churches, hospitals, police departments, and justice

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[5] See https://www.whengeorgiasmiled.org/the-aspire-news-app/.
[6] See http://getbsafe.com/.
[7] See http://www.circleof6app.com/.

organizations. As a cultural artifact, it serves to understand society and to promote dialogue. Finally, the prototyping work on this application could be beneficial for the development of parallel applications in different languages and literatures.

Although it is becoming clearer and clearer that mobile apps and serious games can revolutionize the world of the common good —and more and more professionals are committed to creating or using games in the classroom, healthcare institutions, government and military— more projects like *Entiéndelo* are needed.

3. DESIGN DOCUMENT. *ENTIÉNDELO* APP
3.1. Narrative Treatment

Bilingual dictionaries, translation machines, and online glossaries are very important for the use of standardized language. Generally, bilingual dictionaries inform us of the most standard translation of a given word, giving the utmost importance to greatest comprehension over accuracy. However, when one encounters words that are not registered within the standardized dictionaries of everyday life, accurate translation and comprehension becomes impossible. We address this situation through designing a mobile application that not only supports an innovative form of a bilingual dictionary, but also a monolingual dictionary that may help bridge the gap between dialectal variation within the Spanish language. Given that automatic translation and online bilingual dictionaries are becoming progressively powerful and useful, it is our aspiration to make available linguistic data collected by expert researchers to counteract the inherent assumption of *standardization as progress* present in far too many linguistic tools of modern technology. Instead, we are proposing to create a resource that can be used in tandem with modern language technologies to preserve the dialectal and semantic richness of Spanish while at the same time to facilitate bilingual interaction.

3.2. User Experience

The three sections, or *tabs* are the following:

- Glossary
- Learn
- Discover

3.2.1. Glossary

The Glossary works as a sort of dictionary, where users may query a specific word from a given dialectal variation or from its standardized Spanish concept. For example, the English verb *to bite* is generally translated into standard Spanish as *morder*. When looking up *to bite* in a standard thesaurus, it returns words such as *chomp, gnaw,* or *nibble*. Although these concepts pertain to the idea of biting, they are distinct words with similar but distinct meanings. A dog *gnawing* on a bone gives us a very distinct picture of *nibbling* on a bone. The same goes for Spanish. When looking up *morder*, we receive words like *dentellear*, *masticar,* and *roer*. These *official* words work great when language has undergone a strict standardization within a group of people, but we know that in the real-word, language is far from standardized. Therefore, we have collected words from Spanish dialects from various Spanish-speaking countries around the world. When searching *morder* in our Glossary, instead of returning a definition, translation, or synonym, we return a list of word equivalences. For example, when searching *morder*, in the list returned appears *tarasquiar*, a word specific from certain dialects of Colombia. While this word may never be found in any *official* dictionary, it is quite possible that it would be the only word used by a speaker who is trying to explain what is happening to her. The glossary optimizes communication at a very personal level between a Spanish and an English speaker as well as between speakers of different varieties of Spanish. This tab also displays an *Urban dictionary* of American Spanish literary quotations displayed as concordances of words that also appear in the glossary. Textual examples are:

- "Cuando reía y accionaba, sus tetas se mecían como dos globos belicosos." (As she laughed and actioned, her tits wobbled as two belicose baloons) Mario Vargas Llosa, *Travesuras de la niña mala*.
- "No quiero sentirme culpable de que te pase algo peor que morirte." (I don't want to feel guilty if something worse than death happens to you). Jorge Díaz, *Canción de cuna para un anarquista*.
- "Didn't mean I ever ate with her family again or that her girlfriends were celebrating. Those cabronas, they were like, No, jamás, never." Junot Diaz, *This Is How You Lose Her*.

3.2.2. Learn

This tab is inspired by the proliferation and user's high ratings of *happiness* apps, apps designed to improve the user's quality of life. In a scan of these available apps, one of the most

noticeable was *Happify*[8], an app using the Science of Happiness derived from one of its lead experts, Barbara Fredricksen, a professor at UNC Chapel Hill. A review of the application and other applications of the like, shows a reoccurrence of central themes of "not dwelling on negative thoughts" and "achieving goals." Thus, this tab contains an interactive set of bilingual inspirational cards, categorized under different IPV themes by the OCRCC[9] and translated into Spanish following cultural appropriateness guidelines. The Learn tab appears a *list display* of these categories. The user selects a theme. Within a theme, she will be able to navigate to more specific subcategories that include cards related to particular situations and feelings. She is then presented with a random card that may contain anything from an image to a motivation related to that theme, in the model of apps like *Oflow*[10].

3.2.3. Discover

The third tab of the application will be labeled Discover, and will contain an interactive mobile game intended to inform -in a playful, personalized way- both Latin@s and others about the current reality of domestic violence among Latin@ communities of the United States. According to the National Network to End Domestic Violence, it seems that the most effective manner to prevent the (re)occurrence of IPV is by increasing the amount of available resources that inform and raise awareness through the engagement in activities and games that are fun and not preachy. The *Entiéndelo* game follows the model of the *Spent* game created by the Urban Ministries of Durham, where the player will be put in situations that could be at risk for, or red flags of, IPV, and will ultimately have to make her way out of the situation based upon a series of predetermined choices. On clicking the button to start the game, this will be loaded and inform the user of her game identity (characters and situations are created by projecting demographic statistics of at risk populations (you are an elementary age child, you are a middle-aged woman who does not speak English, you are a *GenderBender* teenager) provided by the *no more/no más* study[11]. We will have multiple scenarios presenting the player with the types of warning signs commonly found in situations potentially at risk of IPV, such as fights, sadness, poverty, alcohol, etc. Once the user reads the background information concerning his or her current situation, he or she will be presented with a series of decisions that must be made to break the current cycle of potential violence. Each decision made will either help break the cycle of violence or continue the cycle. For example, a user may be in a situation of interpersonal violence and is forced to make a decision whether to tell a friend of the situation

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[8] See http://www.happify.com/.
[9] See *Orange County Rape Crisis*: https://www.pinterest.com/ocrcc/.
[10] See http://oflowapp.com/.
[11] See http://nomore.org/nomas/.

or to not tell the friend. This friend, however, is a mutual friend of the user and the user's partner. Therefore, by telling the friend, the friend may either step in to help and thus help break the cycle, or tell the partner, who negates the accusations and responds negatively to the user, continuing the cycle. Using statistics collected by *no more/no más* we can reconstruct real-world circumstances that vulnerable populations experience every day and by immersing and engaging the user we increase awareness of these risks and how to prevent them.

3.3. Technical specifications

When approaching the idea of creating a mobile application that contains all our desired information, the main concern is conciseness. Mobile applications are intended to be easy and natural to use, have a clear and defined intention, and make the user want to return. Anybody with a Smartphone in this age has had the experience of downloading a new app, trying it out the first time, and uninstalling it due to its complexity or ugliness. Therefore, in creating a prototype for this app, we must approach its development with the intention of creating an app that is friendly, easy to use, and makes the user return while telling others in his or her community about it. For this reason, we have divided the content of the app into three sections that can be accessed by either swiping the screen from left to right or clicking on the tabs on the top of the screen.

4. *ENTIÉNDELO APP* MOCK-UPS

Figure 1 is the entrance screen into the pre-prototype of the application. There is an action bar at the top of the screen where the user will be able to access the *Settings* menu at any time in the app. In the settings menu, users will be able to toggle all visible information between Spanish and English. Below the action bar there is another bar with three tabs labeled Learn, Discover, and Glossary. The default screen will always open up to the Learn section, which will be the main focus while attempting to draw users into the application. As of right now, the Understand section is quite dull compared to our future intentions, but graphics and design will come along in the prototype stage. However, the main concept of this page is represented by clickable short-phrases that will pop-up into a window. Users may then either swipe left or right or touch one of the tabs at the top of the screen to get to any of the two other sections.
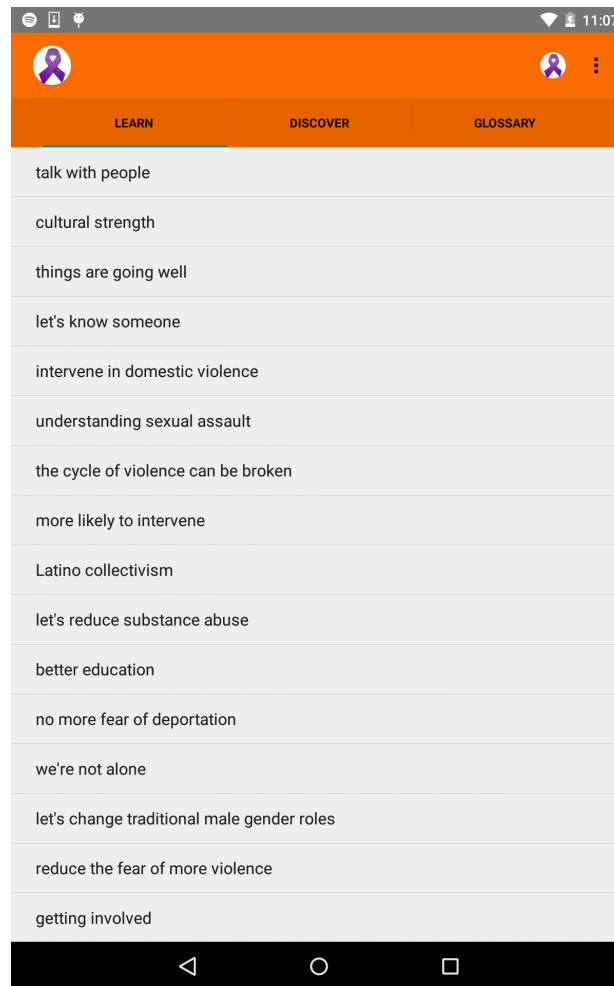
Figure 1

Figure 2 is the image of what happens when a user swipes from right to left. Figure 3 is a representation of another swipe in the same direction. As of the current conceptualization of the app, the *Discover section* does not contain any real information concerning the game idea and is, instead, a sort of placeholder.
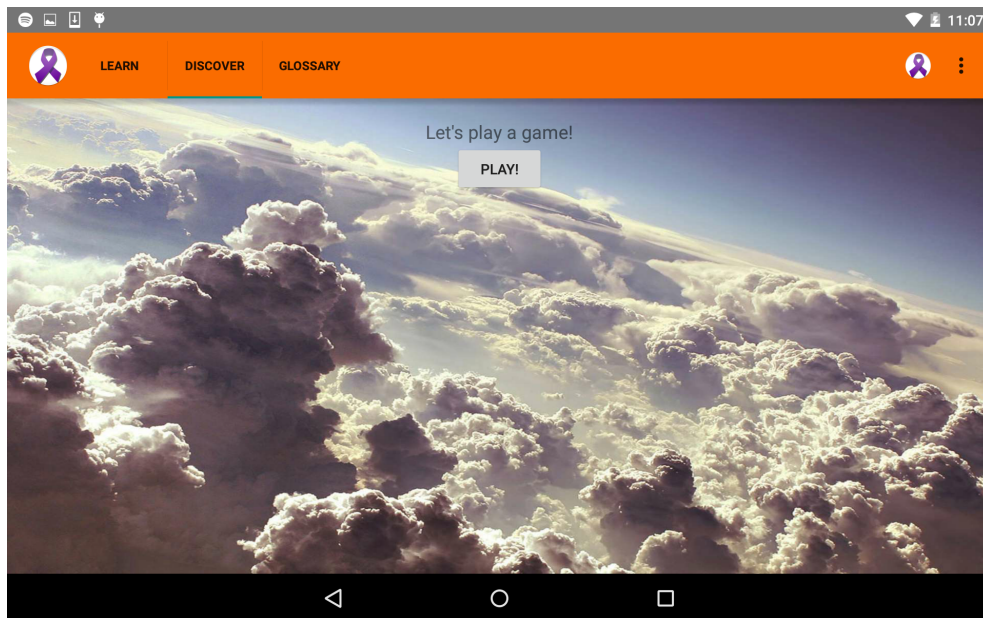
Figure 2

So, looking at Figure 3, the user may read the passage at the bottom of the page and touch the circle to continue to the glossary.

Figure 3

Figure 4 represents the view of the glossary after touching the circle. As it can be seen, when the page loads, the cursor will automatically be placed in the search bar and the keyboard will fill the bottom half of the screen. The user may then query a word.
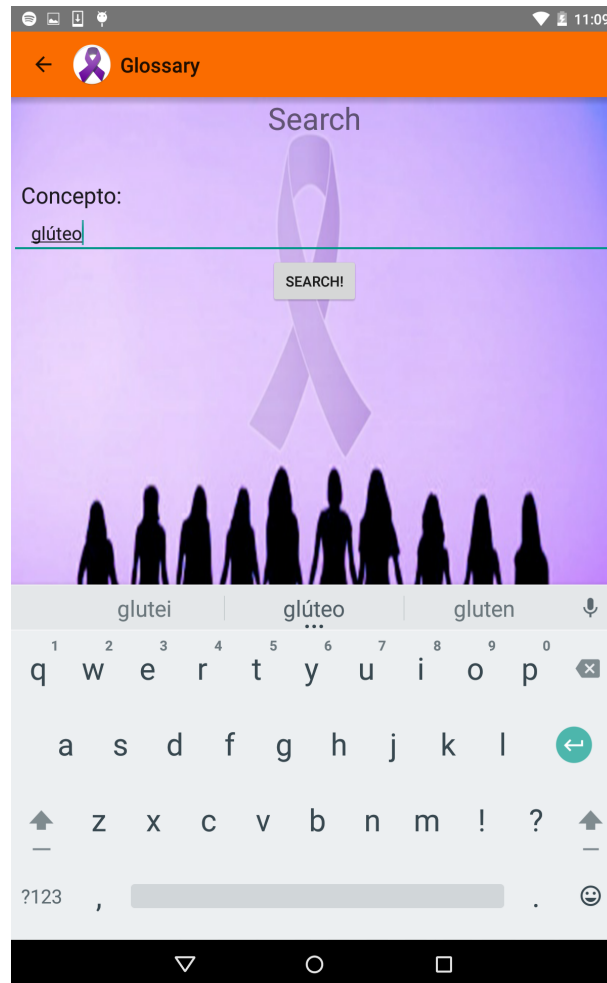

Figure 4

Upon searching for the word, a list of responses will be returned, which can be seen in Figure 5.
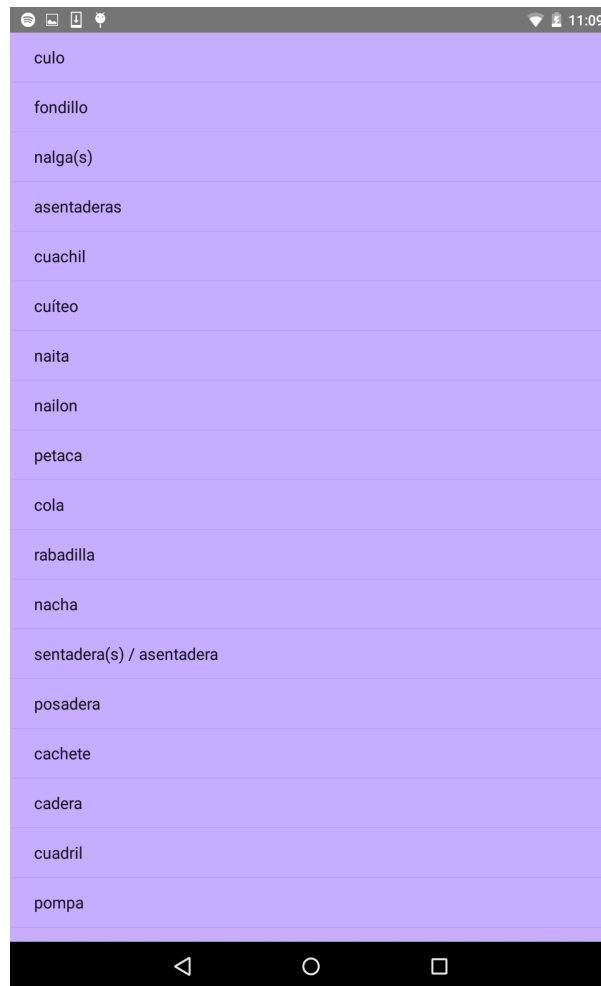
Figure 5

Figure 6 then shows that upon touching a word in the list view, a small text box will pop up in the bottom of the screen that gives the user the term, the standardized Spanish concept that the term refers to, and the country of origin.

Figure 6

4. 5. Trend of Personalization

We see this increasing trend in personalization across all forms of social media, advertisements, games, etc. For example, there are emerging tech/linguistic companies who produce articles directed towards the user. Take for example, the mobile application *Pipes*[12], which summarizes news articles based upon relevant information to the user. A maybe more recognizable approach to personalization is *Facebook* and how they create a timeline that is personalized to your frequent friends. *Fantasy Football* leagues even create mock articles that are meant to look like handwritten news articles to make you feel as if you are part of a league. The list is growing at an unprecedented speed. However, when we look towards dictionaries and machine translation, we feel a distancing in place of personalization. How many times have people discussed the *correct* term and consulted a dictionary that feels almost alien to the understanding of their own language? This is because the general trend of standardization of these sorts of tools brings us further from personalization and more towards a feeling of

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[12] See http://www.pipesapp.com/.

disconnection or artificiality. With our project, we are attempting to reverse this process and follow the trend of personalization.

4. 6. App development roadmap

4.6.1. Prototype construction elements

We will build a native Android application prototype and publish it to the Google Play Store. Work included in the prototype construction will be:

- Icon and color scheme design.
- Support for Android devices running Android 4.0 and up (~92% of all Android users).
- Modern design: full compliances with Google's new Android 5.0 Material Design languages, with backwards compatibility for Android 4.X users.
- Tabbed layout.
- Industry quality code: clear, organized, commented, and documented. Easy for anyone to pick up and continue in the future.

Features that will be included in the 1.0 Prototype version:

- Glossary Tab and searchable corpus hereby mentioned.
- Learn Tab hereby mentioned.
- Settings activity that allows user to toggle all text between Spanish and English.
- Safety button and option to hide the application icon from the Android system's app drawer.

Features for continued research and development that will not be included in Prototype 1.0:

- Discover Tab and game hereby mentioned (this will come in future versions or prototypes following Prototype 1.0).

4.7. Safety

Modeling on the safety mechanism of the *Aspire News* app we plan to include in the *Entiéndelo app* a GO Button, which the user can activate the moment she is in danger. Once activated, the GO Button will send a pre-typed or pre-recorded message to multiple trusted,

pre-selected contacts, or even 911, saying that you the user is in trouble. These messages, of course can be sent in English or in Spanish.

4.8. Sustainability

Entiéndelo, as a native mobile application, is a first (more affordable) step towards full development of a native mobile-ready web application. If the beta testing of *Entiéndelo* produces successful result, we will build a Social Entrepreneurship venture around it. We hope to attract the interest and investment of local and national business to develop, market and distribute nationwide a web mobile version of *Entiéndelo.*

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