

Spanish Grammar on the Web: Interactive Materials for the Language Classroom

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Introduction

"The WWW is, in this sense, an open signifying frame in which the information can be transferred and continually modified, different from the linearity and relative permanence of printed materials."

The impact of the Internet on our educational environment is enormous and continues to affect the ways in which we instruct and interrelate with students. The World-Wide Web (WWW) in particular allows multiple types of communication and information available to the user (instructor and student) at any given moment. The integration of the WWW into the foreign language curriculum has clear advantages for both educators and students. Dyrli and Kinnaman note that global networking offers the possibility of going beyond the space of the classroom and office hours to make educational resources and creative learning environments available to both the instructor and the student (85-86). The WWW is a medium supplementary to traditional classroom practices and text-book-based exercises. Offering an immense array of up-to-date information, the Web can make learning adventurous, dynamic and collaborative. The Web is also an excellent tool for diversifying the curriculum and facilitating a more comprehensive way for the student to interact with the target language (Armstrong, 478-79).

The WWW can be seen as a testing ground where ideas are constantly shared and processed. It is from the perspective of understanding the web as an aid to instruction, rather than as an end in itself that I review of some of my own experience with its use in the area of teaching Spanish. I am not concerned here with theoretical discussions or specific teaching methodologies as applied through the web; rather, I would like to show the potential the WWW offers to those interested in developing into more active participants and creators of teaching materials in this ever-changing medium.

As a Spanish lecturer in the Department of Romance Languages and Literatures of Washington University in Saint Louis, I was looking for ways to energize students and diver-

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sify my own teaching practices.

The web struck me as a fascinating environment worth exploring.¹ Almost immediately I realized that, as Sue Barnes points out, "students using hypertexts become active participants in the process of reading and writing" (15). This participation is not only active because of the inherent mechanics of the hypertext—mainly, the navigation of the WWW and the occasional submission of forms—but also, and perhaps more importantly, because this medium can foster new relationships between student and instructor. For instance, students can be asked to explore new Internet sites and resources with the goal of sharing their newly acquired knowledge with their peers and instructors via an email form. The WWW thus becomes an open signifying frame in which information can be transferred and continually modified. This type of activity is quite different from the linearity and relative permanence of printed materials.² Another practical reason for using the web is that language exercises and activities can be available on demand, making it possible for the student to complete the assignment at virtually any time and for the instructor to have a very convenient way of modifying the material according to his or her own schedule throughout the academic year.

Exercises

In December, 1995 I started to search the web for Spanish exercises that would help me to introduce the Internet into my language classes. At that time there were few language learning activities on the web. I was fortunate enough to come across the web page of Andrew Brown, a graduate student in the Department of Spanish, Italian, and Portuguese at the University of Virginia.³ Mr. Brown had designed several exercises on the web as part of his Spanish curriculum. An exercise dealing with direct and indirect object pronouns (http://www.people.Virginia.EDU/~jab5b/In_dir.html) inspired me to consider the web as an inviting teaching tool. I thought that the format used by Brown would be stimulating to my students, so I decided to adopt it for my own classes.

The first exercises that I authored were very straightforward; I included neither graphics nor links to other web sites. The students were only required to fill in the blanks and send the exercise to my email account by clicking the "Enviar" (send) button when they had finished.⁴ A typical exercise in my early web pages consisted of a dialogue with five blanks in which the student had to enter an object pronoun. Following this would be five questions that the students had to answer using the correct form of the direct and indirect objects. I very

soon realized, however, that if I wanted the students to be come more involved with the target language and the WWW, I would have to "spice up" the exercises, making them more interactive and surprising. I then wrote a "Ser/Estar" exercise which opens with a basic grammar explanation presented in a table format. Several cloze exercises based upon the grammar were provided for the students. I added a "trick" question at the end ("What does the word 'Guadalajara' mean?). In order to answer it, the students had to click on the link *México*, a word that is part of the last fill-in-the-blank question. A clue is provided in Spanish in parentheses above the question (Fig. 1):

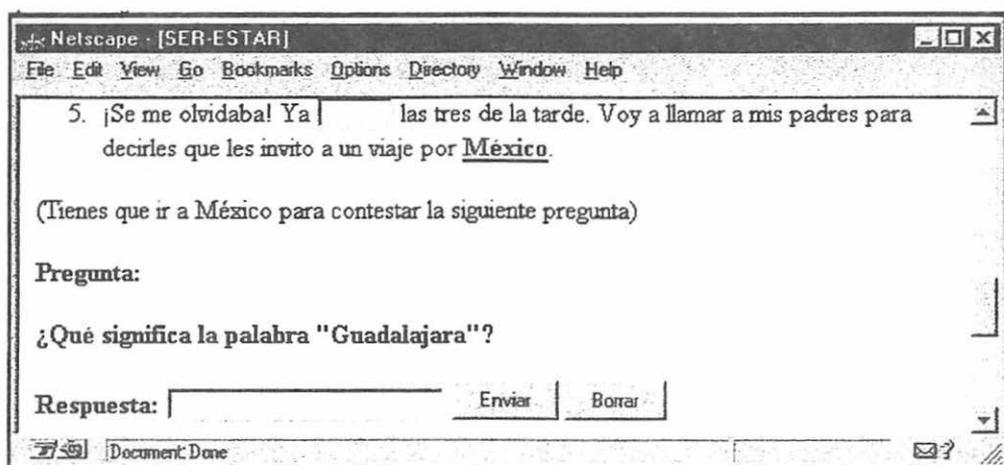


Fig. 1: Last part of "Ser/Estar"

This would require more effort on the part of the students since, in order to answer the question correctly, they would have to read carefully the information presented in the external link (a site from the Universidad de Guadalajara in Mexico). At the linked site, they can read that "Guadalajara" is an Arabic word that means "río de las piedras" (stone river).

I think this small example shows how the students can interact effectively with the target language and take advantage of the cultural information available on the WWW. I then expanded on this approach in my "Argentina en Presente de Indicativo" exercise. There are five short questions that need to be answered for the most part in the Present Indicative of the verbs provided. In addition to that, there are four external links to different sites about Argentinian culture. Again, the students practice their reading and comprehension skills in order to both understand the questions and to extract from the external URL's the information necessary to answer the

questions. But if there is one thing that the WWW is best known for, it is the versatility with which graphics and other materials can be incorporated into it. I wanted to include graphics in a meaningful and active way, not just to make the exercise more visually appealing. The first such exercise I created was "Imperativo 'icónico' (Usted)" which dealt with the affirmative and negative singular formal with object pronouns. I structured the exercise in tables, with two icons (hence the pun in the title of the exercise) and a verb in the infinitive form. As explained in the instructions for the exercise, the students identify the gender of the direct object of the left cell, replace it with a pronoun, conjugate the infinitive, and finish the sentence with the help of the clue given in the form of a second icon in the right cell. The students are required to provide the negative imperative in the first row and the affirmative imperative in the second one. A model is also provided. (Fig. 2):

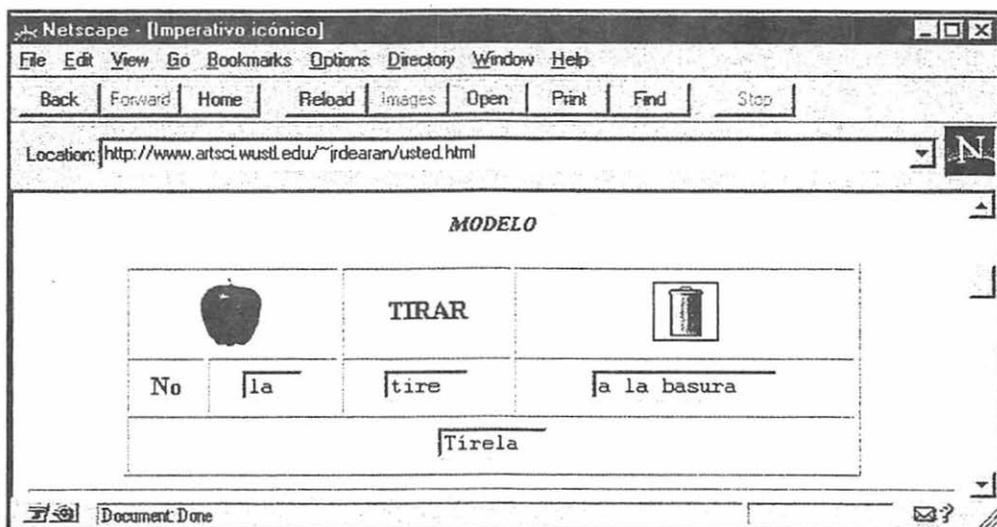


Fig. 2: Model of "Imperativo 'icónico' (Usted)"¹

This type of graphic layout using icons is also part of other exercises that I created. The series "Dudoso' Subjuntivo" uses clipart, "Persuasivo' Subjuntivo" incorporates graphics, and "Emocionante' Subjuntivo" incorporates a clipping from the Internet edition of the Catalanian daily *El Periódico*. The difficult part, though, lies in finding small graphics or icons that have cultural significance for a particular exercise.

Relevant use of graphical materials can be seen in two exercises dealing with the Imperfect Subjunctive. The first activity begins with the image (map) of Madrid. I authored a

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short story in which the students are asked to provide the Imperfect Subjunctive form of the verb in parentheses. The story deals with a foreign student walking around a popular tourist area of Madrid where one can find the Parliament, the Prado Museum, the Palace of Communications (which houses the national postal services and the Spanish telephone company Telefónica), and then a park of Madrid, *El Retiro*, along with one of the country's main train stations, Atocha. There are three external links that launch the story to sites that may be new to the students: two about Spanish painters whose works are central to the Prado Museum heritage, and third to Telefónica. These sites are intended to stimulate the students' curiosity, guiding them to expand their knowledge of Spanish culture. Once learners have finished visiting the selected sites and filling in the blanks, they click on a specific part of the map—the *estanque* or artificial lake—to move to the second.¹

The second exercise is meant to be a continuation of the first, but either can be completed independently. The theme is the same—the central area of Madrid and some of its famous sights and cultural landmarks—but the second exercise is a departure from the previous pedagogical approach. The students do not have to prove that they know the grammatical form. Instead, they must understand each of the choices presented in the exercise (all of them using the Imperfect Subjunctive) in order to choose one and then explain their personal answers by writing in a text box. This exercise obviously requires a more significant communicative effort on the part of the student (See fig. 3).

I would like to finish this description of the web form-based exercises with the one that my students and other users liked the most: the "*Carta del día de San Valentín*".¹ The objective is for the students to produce a letter, following a series of structured steps. First, they fill in a blank specifying to whom they write their letter and what kind of relationship they have with that person (i.e.: "I will write this letter to Melissa, my wife"). Then, the computer user chooses a salutation by selecting from choices in a pull-down menu: "dear", "my dear", "my love", "my dearest, love." Finally, they write the letter itself. Since I wanted to focus on certain grammatical points, the students have to use at least two of the following expressions: "I die without...", "The day we met I thought that...", "It's been a long time since...", "Today I'm thinking a lot about you because..." Finally, once the letter is finished, they have to choose a way of closing it from another pull-down menu: "Goodbye," "Take care," "A hug," "May God be with you," "I love you,"

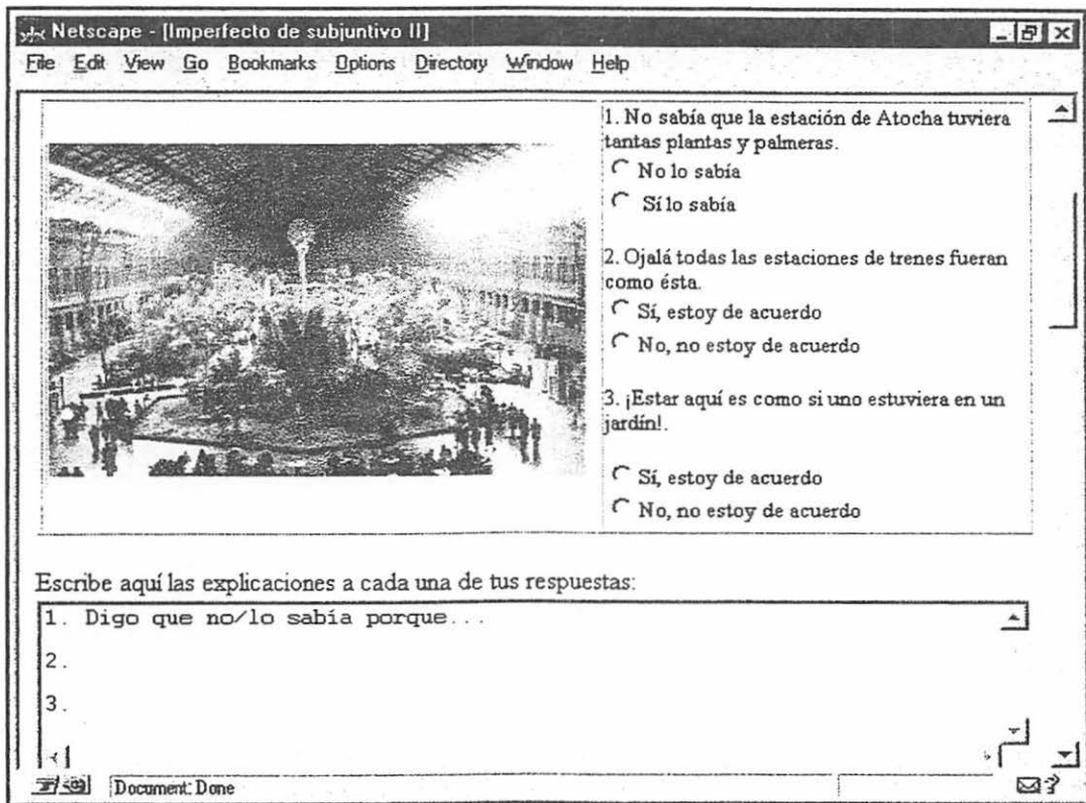


Fig. 3: First part of "Imperfecto de Subjuntivo II"

"Always," "Kisses, kisses, and more kisses" (this one being the most used by the students), etc. If any of these expressions are not satisfactory to them, students can write their own closing formula in a text box provided.

After I received all of the letters from the class, I highlighted grammatical mistakes (which they subsequently corrected) and I authored a web page (*cartas.html*) to "publish" their creative letters. Not surprisingly, most students preferred to remain anonymous!

In addition to these exercises which require the intervention of the instructor, I designed another series of self-check exercises which do not use any email forms and provide some type of immediate customized answers or feedback to the user responses. All of these exercises are written in JavaScript, an object-based scripting language created by Netscape that is written within the `<SCRIPT>...</SCRIPT>` tags incorporated into any HyperText Markup Language (HTML) document. JavaScript gives a great deal of flexibility to HTML documents and reduces the traffic to the server through cgis when

validating web forms.¹ So far, I have written five exercises in JavaScript: "Prueba de pronombres de objeto" (*projava1.html*), "Ejercicios de pronombres de OD y OI" (*prodrill1.html*), "Prueba de Pretérito/Imperfecto: 'Esquiando'" (*Prejava2.html*), "Prueba de Pretérito/Imperfecto: 'Un viaje inolvidable'" (*viaje.html*), and "Prueba de Ser/Estar" (*serjava1.html*).²

In the case of these exercises, the feedback can be in the form of a JavaScript pop-up alert window, inside a frame, or inside the text field of a form. In "Ejercicios de pronombres de OD y OI" the students have the option of reviewing the grammar of this particular exercise at any time by clicking on the *repaso* (review) button, which will open a new browser window with the information inside (Fig. 4):

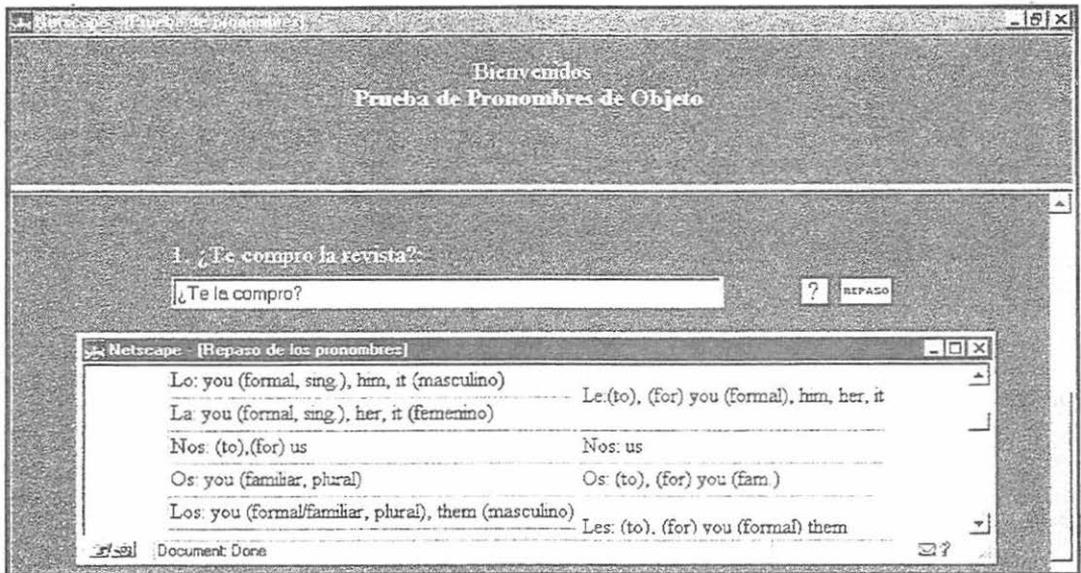


Fig 4: JavaScript exercise with new window

The top frame serves as a place to indicate to the students whether or not their answers were correct, and if after two tries the students do not provide the right answer, the latter is automatically written onto the text form field (the blank).

A second type of JavaScript exercise is "Prueba de Pretérito/Imperfecto: 'Un viaje inolvidable'" (*viaje.html*), which treats the traditional grammar problem of the Preterit versus Imperfect tenses in Spanish. Inspired by a true story, the exercise tells the adventures of an American undergraduate student traveling in Spain during the summer. It presents over forty blanks in which the students have to type the right tense. Responses are self-checked by clicking on a question (?) icon next to each of the blanks. Depending on their answers, the students will see

different JavaScript alert windows in Spanish: for instance, "Very well. Continue," "Check your spelling and/or the conjugation," "No, it is Preterit: completed action," etc. Furthermore, the students have a grammar review at the top of this Web page and the opportunity to checking the answers by clicking a button at the bottom of the page (provided that all the blanks have been filled). If any blank is not completed, a JavaScript alert window will instruct the students to fill it in, and the cursor will be placed in that particular blank (Fig. 5):

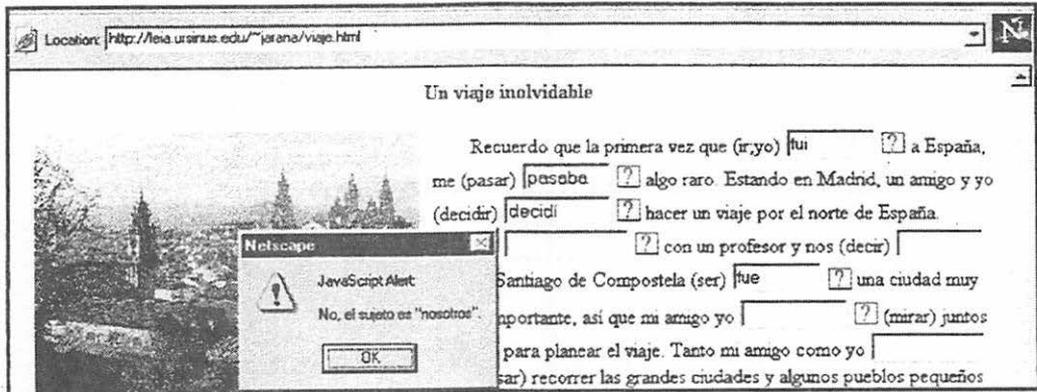


Fig. 5: JavaScript Alert for wrong answer *decidí*.

Finally, presented below is another format of JavaScript exercise that I used to review the direct and indirect-object pronouns ([prodrill1.html](#)). It consists of fifteen drills incorporated into a web page designed with three vertical frames: in the left one there are instructions for the exercise, the exercise itself, and a detailed grammar explanation that is loaded into this frame when requested by the students; the middle frame will show the students' answers, and the right frame will display the right answers when a button at the end of the first frame is clicked. The students have to assign object pronouns to the objects of the original sentences. Direct objects are shown in maroon and indirect objects are shown in green, the same colors that the pronouns will show in the answers; in this way, the students can better visualize the mechanics of the drill (Fig. 6).

Because it is case sensitive, JavaScript will consider accented letters differently than non-accented letters in the responses entered in any field. The designer/scripter of the exercise needs, therefore, to forestall possible wrong feedback to the students by making clear in the instructions of the exercise this peculiarity of the JavaScript language, so the students remain vigilant regarding spelling.¹

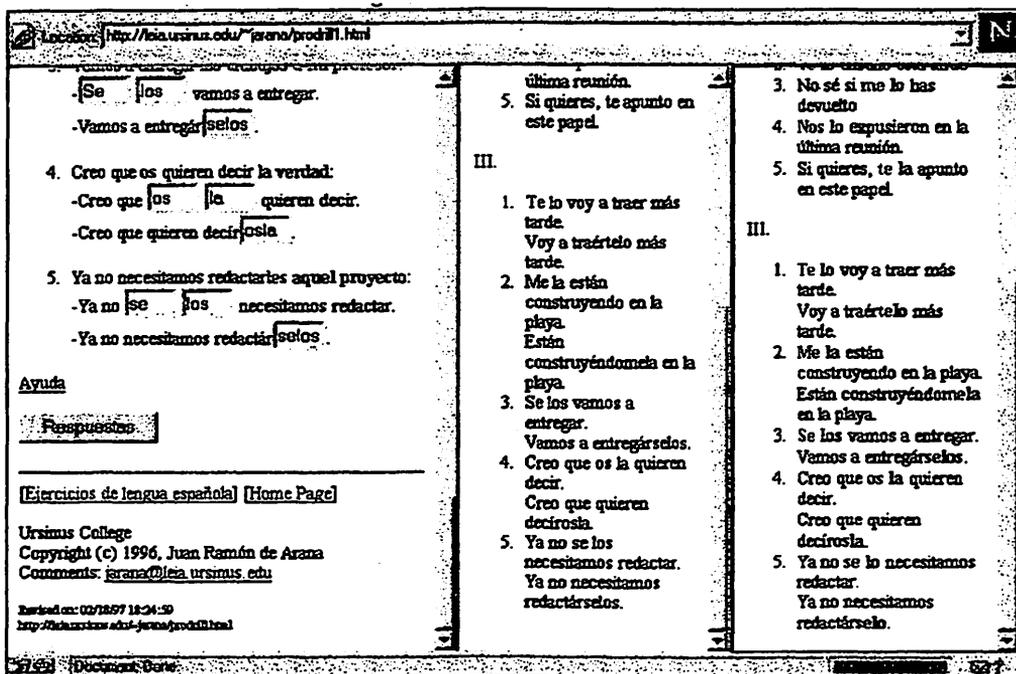


Fig. 6: Completed JavaScript Pronoun Exercise. Using frames.

Student Preparation and Feedback

In a rather somber article, a group called Interrogate the Internet makes an otherwise legitimate point about the medium: "Not only access, but technical knowledge determines the 'metaphysics of presence'. The consequence is that only certain, technical, voices are present to be noted" (127). If we want our students to be part of this presence so their voices can be heard in the realm of communication in other languages and cultures, we ought to provide them, to the best of our abilities, with the necessary tools to get there. It is very important that instructors make sure that students are familiar with the use of email and Internet before assigning the exercises. In some cases, it may be necessary to take the students to the computing facilities in order to instruct them on the mechanics of e-mail and the general functioning of the WWW. I can say from my own experience that the more prepared and confident the students are with the WWW, the more they enjoy this type of interaction with the target language. Instructors also should expect some degree of frustration on the part of the students if the server does not operate properly and students are unable to email the homework.

Based on students' responses to the survey I put on line (survey.html) and their course evaluations completed at the end of the semester, I can say that they clearly like this inter-

active way of working with language materials. They enjoy the fact that they can "turn in" their homework in a flexible way from different parts of the campus (dorms, computing labs) at almost any time. Here are some representative comments:

I think that our page is a great tool. It utilizes both the most current technology, while enabling us to work on our assignments at our own pace, and receive personal feedback from you consistently.

I am able to learn more about how to use the internet, while using it specifically for Spanish. I also like that I can do my homework whenever it is convenient. Also, the page shows many links that are relevant to the Spanish language and culture, and how to access this information easily.

Internet and academics go hand and hand [sic]. It was a wise decision to incorporate the Net into the class. I hope this method is continued, because computers provide us with a magnificent way to communicate globally. It is time that students realize that computers are the wave of the future. Grab a Surf Board and let's boogie!

Many of my students were, like me, newcomers to the WWW. After one semester most of us realized that this is a technology that is here to stay as a meaningful resource for both the student and the instructor of foreign languages. ♦

Notes

¹ I wish to thank two people in Washington University's School of Arts and Sciences for helping me to start to develop these exercises: Hussain Chinoy, former manager of the Internet Information Systems of Arts and Sciences Computing, and Eduardo Lage Otero, director of the Meyer Language Lab.

² For a review on the nature of hypertexts, see Sue Barnes (1994).

³ Mr. Brown's web page can be found at: <http://darwin.clas.Virginia.EDU/~jab5b/> (Editor's note: Andrew Brown is not sure this page is still up and available on the Web.)

⁴ For each exercise quoted in this paper, the last part of the URL will be provided in parentheses: i.e., in the URL <http://leia.ursinus.edu/~jarana/ejercicios.html>, substitute the parenthetical information for "ejercicios.html." There are several exercises that do not include graphics or external links and

that implement basic blanks: "*Pronombres de objeto I*" ([pron1.html](#)) "*Pronombres de objeto II*" ([pron2.html](#)), "*Pretérito Perfecto*" ([prfecto.html](#)), "*Pretérito/Imperfecto II*" ([pto2.html](#)), and "*Imperativos (tú)*" ([imper1.html](#)). As I write this paper, I am happy to announce that I am in the process of making all the exercises capable of being sent to any email address, not only mine. This will allow any instructor from anywhere to use the exercises for his or her students. I must thank Simon Rak, an undergraduate student of Ursinus, for modifying the Common Gateway Interface (cgi) program that implements this function. Three exercises already incorporate this option: "*Persuasivo' Subjuntivo*" ([subj1.html](#)), "*Dudoso' Subjuntivo*" ([subj2.html](#)), and "*Emocionante' Subjuntivo*" ([subj3.html](#)).

⁵ The first sentence says: "Don't throw it (for 'apple') in the trash." The second is the affirmative command form: "Throw it away."

⁶ The clickable graphic is also used in the exercise "*Algunas palabras positivas y negativas*" ([some.html](#)), where, in order to answer certain questions, the student has to click on the columns of the building displayed in the picture.

⁷ The statements read: "1. I did not know that the station had so many plants and palm trees: I didn't know that / I did know that; 2. I wish all train stations were like this one: Yes, I agree / No, I don't agree; 3. Being here is like being in a garden!: Yes, I agree / No, I don't agree." In the text box: "1. I say that I did / not know that because..." Another exercise, "*Se 'inocente'*" ([seinoc.html](#)) follows the same communicative approach.

⁸ There are also exercises using sound: "*Los sonidos del hogar*" ([casa.html](#)), and "*Una historia sonada*" ([sonada.html](#)). The first one consists of a series of sound files that the student has to associate with different parts of a house; the second is an acoustic story to be rewritten in Spanish by the student.

⁹ For more information on JavaScript, see the "JavaScript Authoring Guide," by Netscape (<http://home.netscape.com/eng/mozilla/3.0/handbook/javascript/index.html>). There are many sites on the Internet with information, tutorials, and examples of JavaScript. To mention only a few, try these: the Yahoo index (http://www.yahoo.com/Computers_and_Internet/Programming_Languages/JavaScript/), the Gamelan site (<http://www.earthweb.net/javascript/>), and Timothy's JavaScript Examples (<http://www.essex1.com/people/timothy/js-index.htm>).

¹⁰ "*Prueba de pronombres de objeto*" ([projava1.html](#)) was the first one I wrote, and it was inspired by the exercise "Baseball Quiz using limited tries and hints" (<http://www.flv.vcu>).

edu/cgi/baseballframe.html). You can find this link in "Language Interactive: SCRIPTING ARCHIVE. Web Scripts for Language Learning" (<http://www.fln.vcu.edu/cgi/archive.html#script>), a page maintained by Roger Godwin-Jones. "Prueba de Ser/Estar" ([serjava1.html](#)) and "Prueba de Pretérito/Imperfecto: 'Esquiando'" ([Prejava2.html](#)) are adaptations from my web form-based exercises "Ser/Estar" ([ser.html](#)) and "Pretérito/Imperfecto II" ([pto2.html](#)), respectively.

¹¹ An additional measure that can be taken is the inclusion in the script of likely typographical responses by the students. For example, in the case of a word that needs to be capitalized after a period, the script could interpret that answer as valid, or react by providing an alert box message informing of the mistake. The final decision lies with the designer/scripter, depending on different considerations; for instance, he or she will have to see how many possible combinations a particular exercise may generate and determine whether or not to invest a lot of time in perfecting the exercise in such a way as an alternative (or in addition) to informing the user about the case sensitivity of JavaScript.

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