THE HUMAN FACTORS IN VIDEO-BASED LANGUAGE INSTRUCTION

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Over the course of the last five years, a regular supply of foreign video recordings has become available to language teachers in Europe and North America. This new accessibility of foreign television has focused attention on the possible ways of "tailoring" video materials to meet the specific requirements of established courses in composition, conversation, and—more recently—comprehension. Several methodological approaches based on detailed, step-by-step classroom procedures, as well as on broader student-centered perspectives (Altman, 1989) have been developed to meet the emerging insight that the video medium's continuous "stream of underselected images" (Sontag, 1977) would not in itself bring about miracles of language acquisition. Little by little, teachers have begun to concentrate on the novel and inescapable characteristics of video where images are not an incidental accompaniment or an "oralized" script, but basic ingredients in complex, realistic human messages where several layers of meaning and culture underlie each sentence. With the advent of such interactive media as computer-controlled video, videodiscs, and CD-ROM, the technocratic urge to emphasize hardware, speed of access, response time, computer memory size, and the like has somehow masked the immediate issue of defining how the new media would address the complex issues of language acquisition.

This article will attempt to survey some of the often-neglected human factors, including training and attitudes, which have to be developed if we are to transform the combination of hardware and methodology into suc-

cessful, rewarding language acquisition tools. The following observations are based on the experience of numerous in-service teacher training seminars held in Europe, North America, and Australasia for the benefit of instructors of French, English, and Spanish. Our field work with students consisted of a ten-year experiment at the University of Poitiers with students of English and French as foreign languages. In our third-year classes video is treated as the source of instruction, the basis for learning activities, rather than as a side dish in a textbook-oriented menu. Students are required to organize themselves into small groups which sign up for their own bi-monthly viewing hours in a carrel which contains interactive video learning modules. Each module consists of specially edited segments recorded off-air or produced by the university's audiovisual center. Each video sequence lasts five to seven minutes and is shown twice in succession-once at the normal pace of TV viewing and once with pauses inserted by the computer. Each pause consists of a predetermined freeze frame, at which point the computer stops the video action, provides comments on the scene the student is watching, asks questions about the vocabulary and structures used, the register of speech, non-verbal indicators, and so on.

Each such "activation package" is based on the CLIP-VAO authoring system (Courjaud, 1987) developed at Poitiers; this

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system enables all instructors to create their own video-based modules in order to address the specific linguistic needs of a given class. The CLIP-VAO authoring software works in "plain language," i.e., French or English. Instructors can design their own video-related exercises without any advance knowledge of computer programming. Once students have inserted the cassette into the VCR and the disk into the microcomputer, the computer takes over and operates the system. Students can stop and make selections from a menu if they need help or need additional information. Each interactive video station can accommodate a maximum of four students who can simultaneously be helped and quizzed by the computer (Phillips et al., 1988).

The interactive video modules constitute the comprehension and vocabulary acquisition side of the course. Work in oral expression is based on the students' production of four original video programs in the target language. In many cases the production teams are made up of the same groups of three or four students who attend the interactive video sessions.

Allaying the Fears

The enhanced learning prospects offered by a combination of media will always arouse a great deal of interest among students and teachers. At first sight, in fact, both groups tend to overemphasize the hardware side of video and interactive video, the spectacular video effects, and the awe-inspiring mysteries of the computer program that operates the system. This original enthusiasm soon fades when students actually find themselves alone in front of an interactive video workstation. We may wonder whether their fear and feeling of impotence are due to the unfamiliar technology, or whether they are intimidated by the obligation to teach themselves through video without assistance from a teacher. Any language-based video module will emphasize comprehension of large doses of "authentic" unsegmented oral material spoken by native speakers for a native audience. This procedure is described in depth by Rick Altman in *The Video Connection* (1989). The student's initial trepidation can be avoided if the instructor follows a careful *presentation process* aimed at defusing two potential sources of frustration: 1) unnecessary emphasis on the characteristics of the equipment involved using esoteric terminology which baffles the uninitiated, humanities-oriented language student; and 2) an insistence on full, detailed comprehension of the video segments from the start.

To avoid these pitfalls, the instructor should devote a session to familiarizing students with the equipment. Emphasis on the interactive video station's user-friendliness, on the instant access to the few keys that enable the learner to freeze the ongoing sequence when she feels that things are getting out of hand, is an essential step in the course introduction. This warm-up session must be a hands-on demonstration in order to show the students that they can handle the whole interactive video process from beginning to end by using a few simple functions. At this stage a thorough description in esoteric language describing the whole range of possibilities offered by the hardware would revive many hidden fears and block the familiarization process.

In order to establish reassuring expectations for aural comprehension, the instructor should play one of the video documents in class. The goal here is to demonstrate to the students that once they have overcome the initial feeling of panic caused by hearing the target language spoken at what appears to be an excessive, unmodulated speed, they do in fact understand the main points of the program. At Poitiers, introductory courses specifically devoted to the media are not included in the language curriculum; such courses would provide another means of giving students a valuable grasp of the dialectic interplay of sound and image in television and would show them that by paying more attention to the visual component they would be less likely to stumble over the first block of seemingly

indistinguishable spoken words. In lieu of such courses, aspects of media awareness are integrated into video-based language courses, as described below.

Teachers should also stress the "peer-learning" factor. The language laboratory has traditionally been based on a one-student/onemachine pattern and there has been a tendency to apply the same standards to videoviewing stations. This attitude does not take into account the basic need to be reassured that people feel when they are faced with large doses of foreign oral input. Our experience shows that three students in a group will not encounter the same difficulties and that a systematic sharing of discoveries will soon become a regular working habit. Interactive video language sessions will foster good peer learning habits: systematic sharing of responsibilities with one student handling the dictionary while another enters responses into the computer, and so forth. Some purists may object that communication within the group is likely to take place in the native language, rather than in the target language. The chief purpose of the sessions, however, is to increase comprehension and vocabulary acquisition; in the present configuration there is no provision for recording students' oral production during the interactive video session. Our informal evaluations show that an exchange of a few words in the native language while the group is actively involved in a developing systematic comprehension and vocabulary association habits will not affect the acquisition process. A de facto bilingual atmosphere is thus created with the target language in the forefront and the native language confined to those mechanical activities needed to speed the process along.

Video as a Source of Literacy

The controlled use of video materials can transcend the pitfalls of real-time television—the mind-numbing flow of undifferentiated images that will give birth to generations of semi-literate students capable of understanding the general drift of a foreign program but

incapable of writing a coherent paragraph. If properly handled, in fact, video may develop a new kind of literacy and stimulate vocabulary acquisition more thoroughly than any other known learning process. In the traditional language classroom new expressions are usually introduced with a minimal attempt at contextualization. All too often, however, the reassuring and familiar translation habit prevails. The French expression "à mon compte," for example will be memorized by American students not with its main connotations, but as the French equivalent of "on my own." This problem may remain undiscovered until students find themselves in France confronted with the conversational need to impart the romantic notion of being alone. They will undoubtedly convey an unintended "business" connotation by using "à mon compte," which is normally associated with the independent owners of small stores and businesses and not of being by oneself. This well-known pitfall has affected generations of students at the intermediate level and provided teachers with a reliable supply of good after-dinner stories.

A careful and systematic use of the written text superimposed on the video screen and/ or juxtaposed on the computer when they are uttered will lead to association, not translation reflexes. The video Chauvigny, coproduced by OAVUP and the Canberra College of Advanced Education, provides an example. When the young baker is shown at the cash register, next to the rows of "baguettes" and "croissants" and says "à mon compte," the computer freezes the video frame and offers a multiple-choice exercise, in French, based on possible meanings of the expression. The close interweaving of the visual elementsthe proud store owner in context with his written and spoken words—will inevitably lead to an association of "à mon compte" with a business connotation, reinforced a few seconds later by the computer answers. Experience shows that at a later stage, in class or in a foreign environment, students will spontaneously re-use such expressions in a relevant, reflexive way, without going through the slow and artificial retrieval process based on translation.

This form of literacy through video language acquisition can easily be explained at the beginning of the semester. Students will feel reassured when computer and instructor make them realize that they have actually learned through associations a respectable number of new vocabulary items which can easily be summoned when needed. Believing that the quantitative factor is a strong incentive to learn, we have based our experiments on an average of twenty new lexical items per fourteen-minute interactive video session (a seven-minute video session played twice in succession). In such a context, traditional language tests required for our academic grading rituals will assume a positive new dimension that is easily perceived by students who feel elated when the test questions reveal the sum total of words now at their disposal. A recent survey of high school students in Portugal (Vieira, 1987) has confirmed the power of subtitles by documenting the impact of television on teenagers' lexical and spelling skills in their own native Portuguese. The students were found to write better and use a wider range of vocabulary than their French, American, or British counterparts. This is largely attributed to the continuous showing of Portuguese-subtitled versions of Dallas, Miami Vice, and other foreign programs in their daily TV fare. TV, video, and interactive video can thus improve literacy and composition skills if programs show an adequate amount of visual and written material and if teachers properly integrate the new medium into the existing curriculum.

Media Awareness

Improved lexical memory through association should not be mechanically emphasized as the only approach to foreign language video acquisition at the intermediate and advanced levels. The video language course must also be presented as an introduction to the media, a progressive discovery of the actual "fabric" of television. This can be achieved through a two-stage process: openended questions supplied during the small-group interactive video sessions, followed by even broader discussions in class.

The ultimate goal is to make students more aware and more critical of the media while they are immersed in a novel, stimulating learning process. In a recent experiment, students of English as a Foreign Language at Poitiers were shown an interactive video program on cornea transplants for young children. They watched an ophthalmologist at work examining a baby's eyes from a distance with a small flashlight-like device. At that point the voice-over narrator stated that "a standard eye chart does not work with these young patients." The computer froze the video frame and asked the students what an eye chart actually was. This was an openended question; student responses were recorded but not analyzed by the computer. The resulting 46 student answers were subsequently retrieved and duplicated for classroom discussion two weeks later. Although we assume that most students would understand the expression "eye chart," which is fairly close to the French, in a written context, they did concentrate on the visual element (the flashlight), not on the spoken words. Out of 46 recorded answers, 30 were obvious references to the light, not to the eye chart: "a sort of lamp used to test the eye's defects," "a machine with a light to see inside the eye, etc." Only ten answers were found to be accurate explanations of "eye chart," although an English-English monolingual dictionary is always available in the interactive video viewing carrel. Discussion of examples like these helped students realize that they had been mesmerized by what they saw and had not received the linguistic message. This perception made it easier to explain—in the target language—the diverging and sometimes dialectical relationship between sound and image which underlies television production. Iconoclastic reflexes are a healthy way of combating TV-induced passivity.

By providing open-ended questions focused on a given video segment, the instructor can stimulate students' creativity in the target language and reinforce their sense that the computer is not necessarily a judge, but rather a means of fostering communication with a larger group via subsequent classroom discussions. When characters appears on the screen, questions about their opinions, daily schedule, or the like typically elicit short, uninspired, denotative answers in the traditional classroom setting. In the privacy of a small group, however, students will generally prove more interactive, knowing that they are not going to be judged as persons or condemned for their faulty syntax and accents. They feel stimulated by the interactive video process because they know that a premium is being put on imaginative interpretations and that all answers will be presented in class, will receive equal treatment, and be corrected in an objective, depersonalized fashion.

Reassurance for Teachers

While foreign language students have to be shown the broadening human perspectives offered by interactive video language courses, teachers have to be reassured about their own role and usefulness in this context. A sensible presentation of interactive video authoring should first focus on the long-range, rewarding educational gains teachers can promote among their students in terms of better language acquisition and a more critical grasp of the media. Interactive video programming can also be accessible to all teachers; simplicity of use and ease of access are the guiding criteria in the selection of an authoring system. Language instructors will be reassured when they realize they have the expertise to create their own interactive video material.

The second step consists of demystifying the machine, of showing that small, ad-hoc exercises can be programmed quickly without going through the pains and agonies of learning a computer language. Non-native speakers are instinctively afraid of what Rick Altman calls the "rough edges" (Altman, p. 16) of authentic video material—those unexpected sections of a tape which are difficult to understand and which raise teachers' fear of losing face in the students' presence. Collective re-editing and authoring of imported material by a small group of teachers involved in an interactive video project will serve to smooth out those rough edges. This kind of effort is also the easiest, most reliable way of improving one's own linguistic ability and of bolstering the teacher's defenses against the abrasive onslaughts of students whose French, Spanish, or German accent and syntax are definitely out of tune. Experience has revealed that once they have overcome their initial apprehensions and mastered the software, language teachers will often bring higher levels of creativity to the new task of software development than colleagues in other fields who work with technology on a daily basis.

We propose that teachers use a three-stage approach to work with interactive video:

- Stage One involves the selection, editing, and activation of video sequences by the teachers.
- Stage Two is reserved for small-group study and practice with the video and computer material.
- Stage Three is the essential step of gathering students and instructors in the classroom for discussion, reinforcement, and expansion of the linguistic and cultural modules prepared in Stage One and studied in Stage Two.

The prevailing intellectual operation which gives all three stages their proper dimension and efficiency is the act of *questioning*, manifested as follows:

 mutual questioning among teachers concerning the relevance of the linguistic, graphic, and cultural points selected in Stage One.

The Human Factors in Video-Based Language Instruction

- questioning by students to help one another through the interactive exercises prescribed in Stage Two.
- classroom questioning in Stage Three to obtain adequate feedback about Stage Two.

Once student responses have been gathered, teachers will necessarily begin to question themselves about the appropriateness of their own questions before moving back into another Stage One.

If we attempt to consolidate the above observations into a proposal for a coherent teacher-training program, we must reiterate the wish to see a basic media and communication course included in all programs as a primary requirement. Next would come the emphasis on the systematic identification of the cultural connotations which are embedded in the language of authentic video documents.

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