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AUTHOR

Lide, Francis; Lide, Barbara

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#### **ABSTRACT**

A need exists for a large fund of short, disconnected video materials designed specifically for rapid selective access and for use either in the classroom or the language laporatory, starting at the earliest stages of instruction. A theoretical model for creating these materials could be the language learner in public places in the target culture, communicating, functioning, and satisfying intellectual curiosity. Situations could include signs and ads with obvious or familiar contexts, signs for which the context must be inferred, signs and inscriptions requiring that a context be easily understood, materials that must be read to initiate a conversation, and purely conversational exchanges. In such situations the learner must be able to articulate the message orally in a manner recognizable to the native speaker. Two competing video technologies are useful--the video cassette recorder (VCR) and the laser videodisc. The VCR allows reading and writing, while the videodisc allows only reading. However the videodisc offers many advantages over VCRs, including greater capacity, precise and instantaneous cuing, and superior freeze-frames. In producing suitable materials for video use, three principles must be ept in mind: discontinuity, brevity, and maximum simplicity of production values. (MSE)

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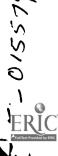
# position or policy Authentic Camera-Produced Materials for Random-Access Video Delivery

Francis Lide and Barbara Lide Michigan Technological University, Houghton

In second language teaching, the use of materials produced by still cameras. motion-picture cameras, and video cameras is a vast field of endeavor. It encompasses still photographs in textbooks; still slides; films in the target language; student-produced video skits; prerecorded videocassettes purchased abroad; videocassettes recorded from broadcasts abroad; films and video materials provided by foreign embassies, consulates, and information agencies; video letters exchanged between schools here and in the target culture; and video programming brought in by satellite dish.

Within this larger area, the concern here is with camera-produced materials that meet the following criteria:

- 1. Authenticity. To be authentic, materials must, with few exceptions, be shot in the target culture, and the communicative situations and short dialogues must not be contrived but re-created as they actually occurred or, in the case of set utterances, typically occur.
- 2. Suitability for use not as ancillary materials, but as actual teaching materials for developing skills in reading and visual literacy on the one hand and oral communicative competence on the other.
- 3. Suitability for use at the elementary and early intermediate levels especially the former.
- 4. Delivery to the classroom or language laboratory through video.
- 5. Suitability for selective use by random access.



All current video technologies have a cuing capability, but to the authors' knowledge there have been no collections of materials created for foreign language instruction and specifically designed for random access. In 1983, Otto (3) reported on a project at the University of Iowa for creating an archive of 3000 still images suitable for use in the entire spectrum of courses offered in departments of German. The archive was being put together with an eye toward delivery by random access through the laser videodisc, the results, however, have not since been made available, apparently because of the setback the technology suffer 'n RCA ceased production of its stylus videodisc in April 1984, a suffrom which the separate laser disc technology is only now beginning to recover (Wall Street Journal, 7; 8; 9)

So far, the tendency in developing video materials has been toward continuity rather than random access. The best-known pioneering materials were the Guten Tag series in German, first introduced in 1969, and the Zarabanda series in Spanish, first available on video in 1973 (The Video Sourcebook, 6). Both were developed before rapid visual search of the tape became available to the nontechnician user, and both, originally created for instruction via television, were designed to be used in their entirety in the packages made available for academic settings. Departments leased or purchased the video component, adopted the accompanying textbook, and organized all or part of the elementary sequence around the series Both programs had fictitious story lines, with Zarabanda taking the more elaborate form of the soap opera. Both were slow paced, and in the Guten Tag series, at least, a great deal of footage was devoted to long shots with no dialogue

More recently, CBS Fox has produced John Rassias's fast-paced, pizzazzy Contact French (4), a ten-lesson videocassette series designed for use in its entirety

The Montevidisco program in Spanish at Brigham Young University (Gale, 1) takes learners on a simulated visit to a town in Mexico Conceived at the outset for interactive use with computers in the language laboratory, the materials produced for the videodisc were authored according to an intricate script that was designed to provide for extensive branching (over 1100 possible options) Targeted for the post-intermediate level, the program has found some use among intermediate students as well

An alternative to using video materials specifically created for use in



foreign language instruction is to secure and adapt materials created for general use within the target culture. Thus, members of the Department of Foreign Languages at the Air Force Academy conducted an experiment in 1983 in which a twelve-minute, made-for-TV German film, *Klavier im Haus*, was copied onto a laser videodisc and developed with the aid of a computer program for interactive instruction toward the end of the first-year sequence. The emphasis was on the effectiveness of CAI in connection with filmed materials rather than on the potential of videodisc technology. The authors found that a major limiting factor was the availability of suitable material on videodisc (Schrupp, Bush, and Mueller, 5).

Despite these exciting and important initiatives, there remains a significant unmet need for a large fund of short, disconnected video materials designed specifically for rapid selective access and usable either in the classroom or the language laboratory, starting at the earliest stages of instruction.

### Theory and Examples

As a theoretical model for creating these materials, we propose the language learner in public places in the target culture, communicating, functioning, and satisfying an intense intellectual curiosity. The major strength of camera-produced materials, after all, is to bring to the learner the actual sights, sounds, and communicative situations encountered where the language is spoken. The language learner in the target culture is an ideal construct. In reality, however, few adolescents and young adults have the intense intellectual curiosity about all aspects of the target culture that we would wish for them. Nevertheless, it is precisely this curiosity that should permeate all our camera-produced materials. Additionally, real youthful learners abroad have the option of avoiding annunicative situations that put their language proficiency to the test. They also have the option of ignoring language on signs that request constraints on behavior (e.g., No parking), thereby leading to irritation with Americans on the part of natives The teacher must, therefore, assume the role of the ideal learner in the target culture in identifying and recording video materials for later delivery to students at nome.

The following are some examples of language learners communicating, functioning, and satisfying their intellectual curiosity in the target culture.



#### Second Language Acquisition

18

You are in Lucerne walking along the swiftly flowing outlet to the Lake of Lucerne. On the railing separating the walk from the river, you see a long red-and-white pole with a large metal hook on the end. Near the pole is the sign. Oeffentliches Rettungsgerat. Missbrauch wird bestraft. (Public lifesaving equipment. Misuse subject to criminal penalties.) This information is not trivial, it can lead to cultural reflections about the well-behaved Swiss and the behavioral norms one must adhere to in a well-ordered society if livesaving gear is to be left about, unlocked and ready for instantaneous use when needed, any tampering with it must be subject to criminal sanctions.

You are on the upper deck of an excursion steamer going up the scenic portion of the Rhine. You see a young man raise a gate and go round a corner Interested in exploring ships, you would like to follow him. But then you see a sign reading. Fahrgasten ist das Betreten der Kommandobrücke untersagt (Entry to the bridge prohibited for passengers)

You are driving a rental car in Paris, desperately looking for a parking place You finally find an empty space but see a sign posted on the adjacent wall Sortie de voiture Defénse de stationner (Driveway No parking) You must heed this sign at the risk of being towed

In the course of your travels through Germany, you see a billboard that is part of a very clever ad campaign for Kodak film. It is a closeup shot of two ladybugs mating on a twig. The copy reads Kodak Filme sehen das Glück besser als der Mensch (Kodak films see happiness—or good luck—better than a person) This billboard conveys two interesting cultural messe ges the ladybug is widely considered an omen of good luck in Germany (it's also called a Gluckskafer, or good-luck beetle), and no one seems to find the mating ladybugs offensive

You are in Paris and hungry for an inexpensive snack. You see a place that sells foods over the counter for consumption on the street. You read the large bill of fare posted there, go up to the counter, and say "Un croque-monsieur, S'il vous plaît ("Grilled ham and cheese, please")

While window-shopping in Trier, you are struck by a fascinating display in a confectionery shop window. Some of the boxes of candy displayed bear the label Asbach Uralt, which you recognize as the name of a German brandy. You look closer and see some individual pieces of candy displayed, together with a small card reading. Weinbrand-Bohnen, 100 Gramm, DM 4 25 "Braildy breans? Aha, this must be chocolate with some sort of brandy fillings," you say. You rehearse the pronunciation of Weinbrand-Bohnen, walk into the shop, and say "Hundert Gramm Weinbrand-Bohnen, bitte" ("One hundred grams of brandy beans, please")

While strolling under the Alster Arcades in Hamburg, you see some people seated at café tables, but you see no waitress. Before taking a seat at one of the



tables, you ask one of the customers "Entschuldigung, ist hier Selbstbedienung?" ("Is there self-service here?") The customer replies "Nein, Sie werden bedient" ("No, you will be waited on ") You nod your thanks polite!y End of exchange

Though the utterances in these examples lack surface structure, they are neither trivial nor irrelevant to language learning; they illustrate precisely the way to communicate effectively, even with minimal exposure to the language Structure is less important than visual literacy and the ability to articulate one's message orally in a manner recognizable to the native speaker

#### **Delivery Systems**

What innovative foreign language teachers have not had the desire for some magic by which they could deliver to their students these and similar impressions and situations—in something close to their original impact and authenticity—at appropriate points in the course of instruction? Two competing video technologies are now available to deliver these impressions the popular videocassette recorder and the laser videodisc. The videocassette is a read-and-write medium, while the videodisc, at present, is a read-only medium that requires professional equipment for recording and cannot be used to record television broadcasts or to generate one's own programming. The VCR's read-and-write capability has secured for it a commanding lead in the consumer electronics market: laser videodiscs are firmly established in training and sales applications in the private economy, and analysts predict a bright future for them in the emerging field of electronic retailing. As a vehicle for delivering cameraproduced materials, the VCR suffers from certain inherent disadvantages in comparison to the laser disc. The latter has 54,000 frames per side, each frame capable of storing a still photograph, and the random-access cuing is precise and instantaneous, allowing any frame on a side to be accessed within three seconds (Wall Street Journal, 8). The VCR, by contrast, is a linear-access system that cues less precisely and more slowly. The laser disc produces superior freeze frames, whereas achieving good freeze frames with a VCR is technically more complex, so that a truly satisfactory freeze-frame capability tends to be limited to more expensive machines.



#### Second Language Acquisition

20

The examples of the language learner in the target culture given above can be classified into five categories. (1) signs and ads with obvious or familiar contexts (the ladybug poster); (2) signs for which the context must be inferred (the sign on the Rhine steamer); (3) signs and inscriptions that require a context to be understood easily (lifesaving equipment); (4) materials that must be read in order to initiate an oral communicative exchange (bills of fare, the sign in the confectionery shop); and (5) purely conversational exchanges and dialogues (the café in Hamburg) For situations in which materials must be read, the most readily available method of recording the material has been still photography, and photographs in textbooks and slides on the projector screen have been the modes of delivery

### Supplemental Visual Materials

The profession owes a debt of gratitude to the authors of supplementary textbooks featuring photographed signs and ad copy-books that have opened our eyes to the potential of signs and ads as teaching materials and that have led to a laudable, if unevenly followed, trend toward the inclusion of such materials in conventional elementary and intermediate textbooks. The passage from camera lens to textbook, however, inevitably involves a considerable loss of impact and effectiveness. Printing costs usually necessitate using black-and-white photos and reducing the image in size Much of the small print becomes illegible, and the source photos must frequently be cropped to the point where any inclusion of both text and context in the same shot becomes almost impossible. The use of establishment shots to create a nonverbal context for the text to be read is not effective in books because learners can bypass them at will. Finally, when anything finds its way into a textbook, there is an inevitable loss of authenticity. One encounters printed texts in the real world and one encounters them in textbooks, and both students and teachers have long been conditioned to make that unconscious distinction. In getting photographs for reading and visual literacy into textbooks, foreign language professionals have done their work well; the limitations have been those of the textbook as a vehicle for delivery.

Color slides do not suffer from these textbook-related limitations. With slides, both the photography and the organization of the shots for



presentation are completely within both the control and the capabilities of the individual teacher. The sequence of establishment shot and closeup is also in the teacher's control. Projected in color onto a large screen, slides possess great impact. Since the projected image is large and realistic, it can also function effectively as the learner's conversation partner in simulating communicative situations. One projects the bill of fare, for example, and asks the student to order the *croque-monsieur*.

But slides also have disadvantages. The room must be darkened, and setting up can be time-consuming and embarrassing to the teacher if it does not go smoothly Slides also tend to deteriorate markedly when subjected to the heat of the projector lamp for the rather prolonged periods common in instructional uses. At eighty slides per carousel, storage is not as compact as is possible in other technologies, and cuing is cumbersome Indexing and physically sorting and re-sorting slides according to theme, situation, vocabulary, or grammatical structure are extremely time-consuming

With materials for reading and visual literacy, video has at least three possible roles. First, as Otto (3) has noted, it is a vehicle for compact storage and efficient delivery of still photos. Second, video is a means of enhancing stills. Third, it can be used to record the material directly, thereby supplying both the nonverbal context for the text to be read and the perspective of the learner in the target culture.

# Laser Videodisc Technology

The most promising technology for storage and delivery of stills is the laser videodisc. With one photograph stored on a single frame and 54,000 instantly addressable frames per side, a single disc has a storage potential that far exceeds the current capacity of the entire foreign language profession to generate photographs with texts on them. The system is like a giant slide carousel in which the slides are cued electronically rather than sorted and rearranged physically

Here are some examples of what could be achieved pedagogically through such a technology. The teacher shows these billboards advertising Kodak film.

Visual of owl Text Kodak Filme sehen das Nachtleben besser als der Mensch (Kodak films see night life better than a person does) The photo of the owl helps make the word Nachtleben (night life) clear



#### Second Language Acquisition

22

Photo of a small boy blowing up a large yellow balloon caught ir the very moment of exploding Text Kodak Filme sehen den Knall besser als der Mensch (Kodak films see the bang better than a person does) The pictorial of the exploding balloon belps students guess the meaning of Knall (bang)

Billboard with the mating ladybugs and the copy Kodak Filme sehen das Gluck besser als der Mensch (Kodak films see happiness better than a person does) Students are rewarded with a laugh when they solve the communicative problem

So far, the three posters shown are linguistically identical except for the substituted direct object. While learners enjoy the advantages of repetition in learning a straightforward use of the comparison of adjectives, the changing visuals keep the repetition from becoming boring.

A billboard with a front view of the head of an eagle Text Kodak hat Filme, die besser sehen als das menschliche Auge (Kodak has films that see better than the human eye)

In this example, the text is the same as that of the preceding billboard, but with one grammatical and two vocabulary differences. The word Auge has been added, and the noun Mensch has become the adjective menschliche. But this text contains a relative clause, which makes it suitable for inclusion in another series devoted to that grammatical feature.

Billboard Polaroid Die Sprache, die jeder sofort versteht (Polaroid The language that everyone understands immediately)

Sign in subway admonishing passengers to be helpful Hilfe, die nur ein Lacheln kostet (Help that only costs a smile)

Sticker on car Wir sind die Leute, vor denen uns unsere Eltern immer geu arnt haben (We are the people our parents have elways warned us about)

These examples could be continued indefinitely Photographic materials delivered in such a fashion enjoy the strengths of using short pieces of discourse for reading while they minimize the weaknesses. When extended discourses are used as reading materials, there is a near-random mix of idioms and grammatical structures, and the vocabulary is dictated by the subject matter and, therefore, is difficult to control. These disadvan-



tages are compensated by the fact that the context, once established, tends to work for the entire discourse, the longer the discourse, the greater the number of context clues for understanding any given segment. With short discourses, difficulties of vocabulary, structure, and reference are controlled by the simple process of selection, and a given structure or lexical item can be presented with a density impossible to achieve in a single longer discourse. With each new short discourse, however, the context clues must be established anew. This disadvantage is overcome with photographed ads and signs, for the context is established almost instantaneously by the nonverbal elements of each new image.

The same shot can be classified according to a variety of categories. The organizing principle demonstrated above was structural, but it could just as easily be any other relevant principle. As Otto (3) has pointed out, however, such a large number of separate images so compactly stored would have to be indexed using a computerized database program.

Video also has the capability of enhancing the way still photographs are delivered. Instead of consigning a photo to one frame on the videodisc, the image can be held for a given length of time, and a voiceover can be added to supply the ideal subvocalization. There are undoubtedly other possibilities as well

# Capturing Context on Videodiscs

When a context must be inferred for a sign or inscription, or when context and text cannot be captured in the same shot, the material should be recorded with a video camera for video playback. Video also has the capability of supplying the perspective of the viewer in the real situations in which texts are read. Thus most traffic signs would gain in both realism and context if they were videotaped from the perspective of the driver or front-seat passenger. One starts to park in the empty space at the curb and then zooms in on the sign. Sortie de voiture. Défense de stationner. The sign is read on voiceover. Freeze frame.

The most a still photograph can convey while still being close enough for the lettering to be legible is a periphery. The sign on the Rhine steamer, for example, shows only a white surface with a row of rivets. The inference that the sign is on a ship, though possible, would probably not be made by many viewers. One would need a second or two of video



footage of the ship tied up at the landing bridge and then a short zoom-in to the ship's bridge Fadeout. On the upper deck the camera shows a crew member entering the bridge and then zooms in for a closeup of the sign. Voiceover Freeze frame.

As for the photograph of the lifesaving equipment in Lucerne, no still camera is capable of effectively showing a swiftly flowing river. Here the video camera would assume the perspective of the traveler walking the street, pan around toward the river and the famous covered-bridge landmark, scan the lifesaving pole, and finally zoom in on the sign. Hold for voiceover Freeze frame. Since both Lucerne and the Rhine are popular tourist destinations, it is important that the pan-around identify the location. The student who has already been to either place will experience the excitement of recognizing the locales, the one who visits them later will reread the sign and remember his or her foreign language instruction favorably

Many posters with a great deal of print—such as posters showing a large number of wanted terrorists or a poster giving all the details of a folk festival with beer tent—are impossible to catch successfully using still photography. Here the video camera assumes the perspective of the passerby reading the poster, zooms in on it, and scans the material at a slow reading speed.

## Conversational Exchanges on Videodisc

Recording and playback on video is also the ideal method for presenting oral communicative exchanges based on prior readings. To record the shopper at the confectionery shop, for example, the camera approaches the window, pans around, and zooms in on the Weinbrand-Bohnen. The pronunciation is rehearsed on voiceover, and the camera enters the shop and approaches the counter, where an employee takes the order. Freeze frame. Student response

A video or motion-picture camera is also the only available means of recording short conversational exchanges, such as the question concerning self-service in the cafe in Hamburg. As Lide and Lide (2) have pointed out, the genre model in creating this sort of material should be the American television commercial with its ability to dramatize an entire situation in two or three sequences within sixty, thirty, or even ten seconds. A short



bit of video footage of no more than five seconds is usually sufficient to establish the context before the exchange itself, and actual conversational exchanges between strangers are short, usually involving no more than one major turn per speaker and one conversation terminator.

The video camera offers a vast potential for dramatizing a large number of entirely separate conversational exchanges and even individual set phrases. Among the possibilities are introductions [including the reciprocal reflexive Nous nous connaissons bien (We know each other/ourselves well), or the German equivalent Wir kennen uns schon], farewell expressions (Darf ich mich verabschieden?), asking directions, and making purchases (in full-service bakery and butcher shops, for example), to name only a few

To ensure authenticity, it is essential that set phrases be dramatized as they actually occur, and that conversational exchanges be experienced on site and scripted immediately afterwards. Otherwise, one can create a long dialogue of the sort in which the learner pesters the ticket agent in the railroad station for detailed departure and arrival times, when in real life he or she should read that information from the departure poster. The profession should focus on speech acts for which there is a real need

## The Potential of Videodisc Technology

The exciting potential of a video technology capable of a high-quality freeze frame and instantaneous random access can hardly be exaggerated. As a breed, foreign language teachers are notoriously faultfinding about their teaching materials, so that no coherent program of such materials can be expected to satisfy all innovative teachers. Teachers and departments are also understandably reluctant to buy an expensive video series that requires the reorganization of one or more entire courses around it. Furthermore, if instructors at the college level are to use video-delivered materials in class in addition to the regular textbook, class time is at a premium, many course supervisors and department heads persist in defining teaching success in terms of covering a given amount of material in the book. The solution to all three of these problems lies in a computer-driven video player connected to a large monitor, with the entire system permanently installed in the classroom. With such a system, a huge body of materials can be accessed selectively as occasions present themselves, without restructuring courses, and with efficient use of class time.



26

The unmet need in the profession is for a substantial body of materials created for use in this fashion. In producing these materials, three principles should be kept in mind:

- 1. Discontinuity. The individual disc should not be thought of as a single-theme resource but rather as a resource base for selective viewing. Still photography is discontinuous by its very nature, and youthful American audiences have been conditioned to discontinuity from childhood on by watching fast cuts in movies, TV programs, and commercials
- 2 Brevity. The material should be concentrated, not only for compactness of storage but also to make efficient use of precious class and laboratory time. Clips for teaching reading should be programmed to go to freeze frame as soon as the zoom-in or voiceover is complete. Again, Americans are conditioned to brevity in their viewing of short TV commercials. Brevity is also an important means of controlling costs.
- 3 Maximum simplicity of production values. In video, elaborate production values drive up costs; consequently, they take the creation of materials out of the hands of foreign language professionals and place them into those of producers and marketers. It is understandable that no American commercial enterprise or foreign government information agency wishes to be connected with materials that are so amateurish as to invite derision. But painful amateurishness is a function of what is achieved in "elation to what is attempted it sequences are long and plots ambitious, the results will, of course, be disastrous if the acting is wooden and the directing clumsy. But embarrassment is less likely to be the outcome if what one attempts is more modest and utilitarian. Furthermore, if the principles of discontinuity and brevity are adhered to, the entire storage vehicle will be thought of as a collection by various hands, and a few clips of marginal quality will not impair the usefulness of the rest of the collection.

In the laser videodisc, technology now exists to deliver efficiently, in random-access fashion, authentic camera-produced materials to foreign language learners. There is some expectation that the laser disc can be developed into a read-and-write medium (Wall Street Journal, 9), and the



next half decade may well see the commercialization of still another video technology that will combine the read-and-write characteristics of the VCR with the compact storage, high-quality freeze frame, and immediate random access of the laser disc. The foreign language profession must continue to examine the feasibility of the laser disc and to be ready with experience and suitable materials for delivery by any new technology

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