Recording Interview Sound Bites Through Blaise Instruments

International Blaise Users' Group

September, 2004

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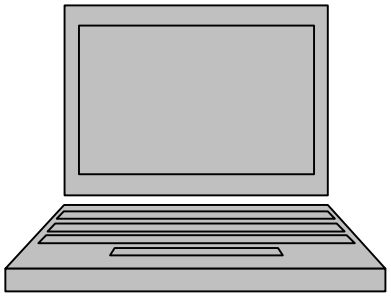
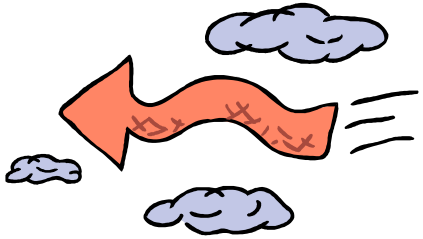
Recording During an Interview

- What: Computer Audio Recorded Interviewing (CARI)
  - Records sound files during an in-person interview
  - Uses the laptop's built-in microphone and sound card
  - Allows monitors to listen to parts of the interview
- Why: For Quality Assurance
  - Supports authenticity checking
  - Can support feedback to interviewers
  - Can support analysis of questionnaire items
  - Can record open-ended items directly

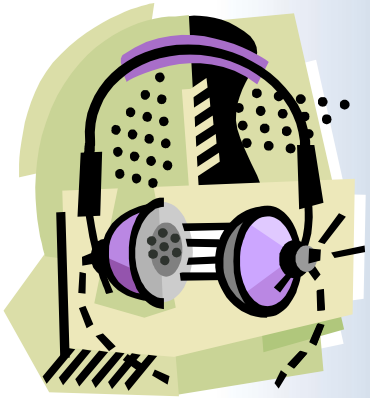
CARI Systems: Conceptual View



Field: Laptop recording, compression, encryption



Automated processes: File management, transfer, tracking, storage

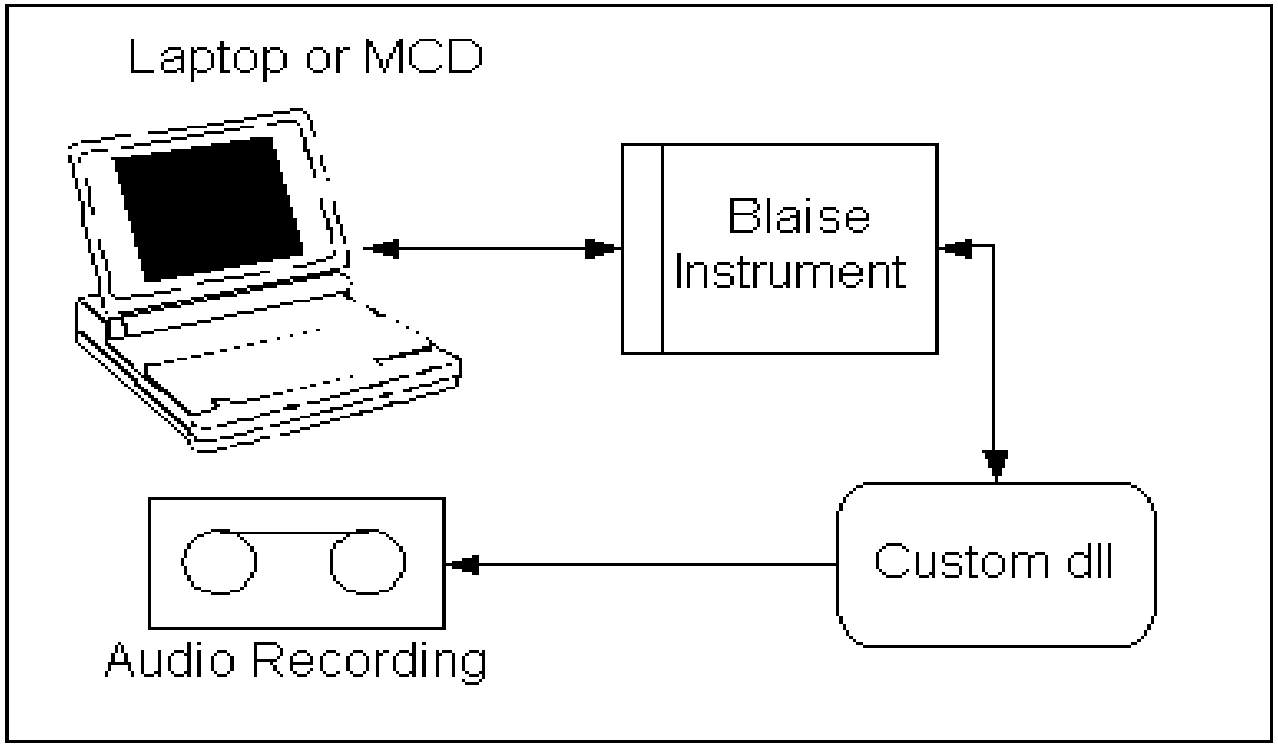


Monitoring: Playback, evaluation, reporting

CARI Background

- System designers: Phil Cooley, R. Suresh, Al Bethke, Research Computing Division of RTI
- Methodology champion: Paul P. Biemer, Survey Research Division of RTI
- Used at RTI 1999 - 2004
- Used now at Battelle, U. Michigan, U.S. Census Bureau, U.S. Bureau of Labor Statistics and elsewhere

Field System



Practical Issues

- Legal and ethical requirement for informed consent:
  - Interviewers provide general consent when trained.
  - Respondents consent at the start of the interview.
  - Respondents can revoke consent at any time.
- Questionnaire modifications
- Sound file naming conventions
- Utility software that communicates between Blaise instrumentation and the sound recording system
- File management, confidentiality and security

Blaise and CARI: A Programming Example

Recording sound for a specific item:

- Consent item as a routed parallel block
- Consent block definition
- Procedure StartStopRecording
- Fields, including flags
- Rules, including calls to start or stop recording

More details are available in the paper.

Consent as a Parallel Block

DATAMODEL CARIExample

{ CONSENT is a routed parallel block;

It is asked at the outset but can also be jumped to via menu command or hot key }

PARALLEL CONSENT

PRIMARY QID

TYPE

STR6 = STRING[6]

Consent Block Definition

```
BLOCK bCONSENT
   FIELDS
      Q1 "@/Do you consent to being recorded?" : (yes "Yes", no "No")
   RULES
      Q1
      { If consent is not given or is revoked, be sure to stop any
      recording in progress }
      IF Q1 = NO THEN
         CONSENTFLAG := no
         StartStopRecording(0,0,'DUMMY',ErrorField)
      ELSEIF Q1 = YES THEN
         CONSENTFLAG := yes
      ENDIF
ENDBLOCK
```

PROCEDURE StartStopRecording

```
PROCEDURE StartStopRecording
  {X -- either 1 (start) or 0 (stop)
  Y -- duration of recording in secs; 0 if no time limit
  QID -- string used to name the resulting audio file
  ERRORFLAG -- indicates if a problem occurred }
PARAMETERS
    IMPORT
      X, Y: Integer
      QID: STR6
    EXPORT
      ErrorFlag : Integer
ALIEN ( 'Recorder.DLL', 1 )    { Delphi DLL which calls an
  application that starts or stops recording of a wave file }
ENDPROCEDURE
```

Fields

CONSENTFLAG : (yes "Yes", no "No")

STARTRECORD "Start Time" : STRING[30]

ENDRECORD "Stop Time" : STRING[30]

INTRO "@/@/Welcome to the CARI demo instrument! In a moment you will be asked to read a passage aloud. Press [ENTER] to continue." : string[1], empty

ITEM1 "@/@/Type 1 and then press [ENTER] when you are ready to begin." : 1..1

Fields, Continued

{ In this example, only item 2 will be recorded }

ITEM2 "@/Please read the following passage: *item text goes here*. @B

@/@/When you are finished, type 1 and then press [ENTER]." : 1..1

THANKS "@/Thank you for your cooperation. @/@/Type 1 and then press [ENTER] to exit." : 1..1

ERRORFIELD "Error flag“ : 0..4

QIDA "CASEID + A" : STRING[6]

CONSENT : bCONSENT

Rules

RULES

{ keep values so that they'll be there when resuming a breakoff }

QID.KEEP

StartRecord.Keep

EndRecord.Keep

QIDA.KEEP

QIDA := QID +'A'

INTRO

CONSENT {We need to be sure we have consent before any items are recorded.}

Rules, Continued

```
ITEM1 { Start recording after this field has been answered }
IF CONSENTFLAG = YES THEN
  IF STARTRECORD = EMPTY and ITEM1 <> EMPTY THEN
        STARTRECORD := Str(Hour(systime)) +
           Str(Minute(systime)) + Str(Second(systime))
        {Activate CARI with no end time specified}
        StartStopRecording(1, 0, QIDA, ErrorField )
  ENDIF
ENDIF
```

Rules, Continued

```
ITEM2  {Stop recording after this field has been answered }
IF CONSENTFLAG = YES THEN
   IF ENDRECORD = EMPTY and ITEM2 <> EMPTY THEN
      ENDRECORD := Str(Hour(systime)) +
        Str(Minute(systime)) + Str(Second(systime))
      StartStopRecording(0,0,QIDA,ErrorField)
   ENDIF
ENDIF
THANKS
ENDMODEL
```

Programming Steps

- Use appropriate hardware.
- Create a custom dll utility to start and stop recording.
- Specify which items should be recorded.
- Obtain consent at the start and allow revocation.
- Activate recording software before each specified item.
- Deactivate recording software after the item, or use a timer.
- Check the consent flag before each recording.
- Check whether the recorder is already running, before issuing a start command.
- Provide a unique name for each saved sound file.

Issues and Concerns

Hardware and Software Concerns

- Recording quality varies with hardware.
- Built-in microphone is best, because it is unobtrusive.
- Choose laptop configuration settings for best quality recording.
- Keep the microphone unobstructed.
- Create a process which is undetectable to interviewer and respondent – no lights, no icon in the tray or taskbar, no system performance change.
- May want to “randomize” the recording of some items.

Questionnaire Administration Concerns

- Informed consent: you must allow refusal at any time.
- Survey specifications of what to record: this can be done by item, section or time.
- Logic: how will you handle flow control, backing up, stopping the recording at a breakoff, etc.
- Amount of time to record: this depends on transmission method, since large files may clog dial-up lines.

Thanks For Listening!

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See also: www.rti.org/publications