Conducting verbal reports with L2 listeners

Michael Yeldham,
The University of Hong Kong



Introduction

- Verbal report (VR): a research technique where an individual reports his/her thoughts while performing a task.
- Commonly employed to research the cognitive processes/ strategies the learner uses.
- For reading and writing tasks, the learner can simply 'think aloud' while concurrently doing the task. ... There is a great deal of L2 research on this type of VR (Bowles, 2010).
- However, for tasks such as <u>listening</u>, VRs are more complicated, as learners can only report their thoughts <u>retrospectively</u>. ... There is little L2 research on how to conduct such VRs.



Introduction

- A listener's VR is best done immediately after the utterance they are reporting on (commonly an utterance about 2 sentences long), when the listener's thoughts can still be accessed from working memory (WM).
- One key issue in conducting such VRs, though, is whether to prompt (question) the listener to elicit his/her thoughts.
- There are two main views here on prompting:
- (1) No (information processing view)
- (2) Yes (constructivist view)







(1) Information processing (IP) view

- From this view, the individual's reporting of the sequence of their thoughts is considered important (Simon & Ericsson, 1993).
- So, best to minimize, or <u>avoid prompting the learner</u>, to reduce interfering with:
- (a) the learner's thoughts(b) reporting of their thoughts
- To compensate for lack of prompts, the VR can be focused on aspects of researcher interest through:
- (a) explicit pre-task instructions, and(b) a verbalization warm-up task.

Views on VR mediation (prompting)

(2) Constructivist view:

- Prompts are useful/needed (Pressley & Afflerbach, 1995).
- Listening is seen as multi-dimensional (Vandergrift, 2003), where learners build meaning through any possible means (and reporting sequence of thoughts is not very important).
- In addition to pre-task instructions and warm-up task, interviewer questions are seen as useful in focusing the learner's report on the area of research interest (Cohen, 2011), and helping to retrieve their thoughts.
- Here, issue is not whether prompts are used, but what type of prompting is best.



The study

Three mediation styles were examined

Style 1: Unstructured mediation (constructivist view)

Characteristics	Rationale
 Qs asked flexibly in response 	 Researcher can explore areas
to preceding learner	of interest.
comments in VR.	
 Qs focused mainly on comp. 	 Strategic processes more
difficulties. e.g.,	likely to be consciously
'Why did you say?'	accessible for report at times
'How did you know?'	of comp. difficulty.

Style 2: Partly-structured mediation (constructivist view)

Characteristics	Rationale			
Abbreviated version of Style 1,	Final Q to elicit any			
 Plus, at end of every interviewer-learner 	thoughts not reported			
exchange, added Q:	earlier (esp. discourse			
'Was there anything else you were	level processing).			
thinking that you forgot to tell me?'				

Style 3: Unmediated (information processing view)

Characteristics	Rationale
Backchannels (uh-huh), or no prompts.	Prompts not used,
 VR focused instead by pre-VR instructions 	to avoid limiting or
(also used before styles 1 and 2, asking	interfering with
learner to say what heard, and what	learner's
thinking while listening).	processing.

Participants

14 lower-intermediate non-English major Taiwanese university learners, drawn from 2 first-year General English classes.

Research questions

- 1) Which mediation styles do the participants prefer most/least, and why?
- 2) Which mediation styles provide the most/least useful data for listening strategies research?

Instruments/Analysis

- 1) Post-VR learner interviews: Examine emergent themes.
- 2) Examine content of learners' VRs, quantitatively and qualitatively.



Materials and procedures

- 5 listening texts used
- Each divided into segments, and text stopped after each segment for the learner's report. (Each segment one longer sentence/two shorter ones – short enough to recall, but long enough to require discourse-level processing and avert verbatim recall).
- Total of 21 segments: Text 1 7 segments
 <u>Texts 2,4</u> 4 segments
 <u>Texts 3,5</u> 3 segments

These arranged into 3 text blocks (A,B,C), each of 7 segments

 All 21 segments were played to each learner (using a different mediation style for each text block)

Table: Mediation style and text block used for each learner

Mediation	Order of text blocks						
style	Sal	Kev	Dot	Wen	Cate	Sam	Kim
1	A	В	С	Α	В	С	Α
2	В	С	Α	В	C	Α	В
3	C	Α	В	C	Α	В	C
4	Nina	Dave	Di	Bev	Al	Liz	Rob
3	С	A	В	С	Α	В	С
2	Α	В	C	Α	В	C	Α
1	В	C	Α	В	C	Α	В

- □ To balance text effects, order of text blocks (A, B, C) rotated between the learners.
- To balance presentation order effects, for half of the learners, order of styles used was style 1, 2, then 3. This order was reversed for other 7 learners.

Pre-VR procedures

- ☐ Prior to each VR, learner **performed** warm-up tasks to get used to verbalizing thoughts.
- ☐ Then VR instructions were read to the learner:

"Now we're going to play some listening passages to you. We will regularly stop each passage after every sentence or two, and each time we stop it, we'd like you to tell us **what**

you heard, and also what you were thinking while you were listening. Please tell us everything that was in your mind; please give us as full and as accurate an account of your thoughts as you can."

Learners' preferred (✓), least preferred (x) style?

Table: Learner mediation style preferences (from interviews)

Style															Tot.
1	Sal	Ke	Dc	×	Са	Sa	<u></u>	Z	Da	D.	Be	A	Liz	Rob	176
		<	Ť	en en	Ite	3	3	Nina	Ve		<			Ď	
1			1	1	1	75.4	1	1	1	1	1	27	1		+8
2	1	1				1						1		1	+5
3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-14

Style 1: Unstructured mediation (Questions: Why did you say ____? etc.)

Style 2: Partly-structured mediation (Style 1 + "Anything else...?)

Style 3: Unmediated (no questions)

The 8 learners who preferred Style 1: their reasons

- It helped to guide them what to report on (5 comments)
- ☐ Elicited more information (3 comments)
- Reminded them what they had been thinking (2 comments).

Bev: "Qs help guide me to say what thinking processes to report on."

Cate: "Qs draw attention to important parts, thus my response is more detailed."

These same learners' reasons for not choosing Style 2

- ☐ Earlier Qs elicit all info, so final Q unnecessary (7 comments)
- ☐ Felt pressure to answer final Q (2 comments)

The 5 learners who preferred Style 2: their reasons

- ☐ The final question helped <u>remind them</u> of any thoughts they had missed reporting (3 comments).
- ☐ ... However, 2 learners suggested the style may have given them some assistance (2 comments):

Sal: "The final Q made me reflect on everything I've heard."

Kev: "The final Q gave me another chance to think."

... Positive reactivity here?

These same learners' reasons for not choosing Style 1

☐ Style 1 is less complete than style 2 (2 comments)

All learners' reasons for disliking Style 3 (unmediated):

- Don't know what to talk about (7);
- Will forget things (3);
- Have to do everything by myself (2);
- Nothing was asked, so I'll talk less.
- Feels like I'm talking to myself;
- Feels like being interrogated;
- Too much like a test



Which style provides best/worst data for strategies research?

Strategy/ behaviour		The second 7 learners		
	Style 1 (mediated) used first	Style 2 (mediated + final Q) <u>used</u> <u>second</u>	Style 3 (unmediated) <u>used third</u>	Style 3 <u>used</u> <u>first</u>
Lower-level strategies ¹	43	39 (+ 2 more after final Q)	19	23
Higher-level strategies ²	29	23 (+ 4 more after final Q)	23	9
Total strategies	72	62 (+ 6)	42	32
Interpret text only (no strats)	2	8	11	11

- 1. Lower-level strategies: Use key word, piece key words together, translate 16
- 2. Higher-level strategies: Predict, infer, elaborate, use imagery, monitor comp.



Style 1 (Unstructured mediation):

- Style that elicited most lower-level and higher-level strategies (Table on previous page).
- But also gave useful insights into how these strategies were used through the text (example shortly).

Style 2 (Partly-structured mediation):

- □ Similar results to style 1 although slightly fewer strategies elicited, as fewer prompts used.
- Not much information yielded by final Q ('Was there anything else you were thinking that you forgot to tell me?')

Style 3 (Unmediated):

- Fewer lower-level and higher-level strategies elicited than styles 1 and 2 ... especially when it was the first style used.
- Compared with styles 1 and 2, it often elicited vague, or generalized descriptions of strategies used ("I linked the words", "I translated", "I guessed the meaning"), with no evidence to show that the strategy was actually used, or little indication of what information (lower- or higher-level) was used or the specific comp. problem the strategy addressed.



VR example from Style 3 (Unmediated) – Bev

1-1 [Text]

S: [Interpretation] Thinking process ... well ... I took what I heard and I tried to see if there were any words that I've learnt before ... that's all. And then if there were any, I'd try to link them together. Then if I hadn't heard them before ... I'd remember the key words.

1-2 [Text]

S: [Interpretation] Thinking process ... <u>it's also the same</u> ... if I heard some familiar words, I would put them together.

1-3 [Text]

S: [Interpretation] Then...thinking process ... I just took what I heard and then translated it into Chinese ... didn't really have any thinking process.

VR example from Style 1 (Unstructured mediation) - Bev

2-1 [Text]

S: [Interpretation] [...] I think it's a news report. [...]

I: Why do you think that it's the news?

S: Because the way the sentence started sounds like some news. In the news, they will first tell you where something happened. And then it will summarize in a short segment what the news is about. And then after that, it will describe more about why this happened. Isn't the news all like this?

In great detail, Bev elaborates using her rhetorical knowledge to help strengthen her interpretation of the text.

VR example from Style 1 (Unstructured mediation) - Bev

2-2 [Text]

S: [Interpretation]. Yeah. I got it wrong, the last sentence. [...]
So...because I understand this sentence, that's why I know that I got the last sentence wrong.

I: How do you know this sentence is the right one instead of the first one?

S: Because more was said in this sentence, but in the previous sentence, only one statement was made. Yeah, and so I'll be a little...if I missed the sentence, then I miss the whole thing. In this section, where there are more sentences, and I was able to make the right judgements.

The interviewer's question elicits how Bev knows her change in mental model (gleaned from monitoring her comp.) is correct.

VR example from Style 1 (Unstructured mediation) – Bev

2-3 [Text]

S: [Interpretation]

I: How did you know that it said 'if the dog leaves, the duck will be sad?'

S: When the dog leaves...there's the word 'sad', and then also the word 'quack' meaning it keeps making noises. Only until the dog returns will the duck stop make noises and be sad because of the word 'until'.

The interviewer's question draws out the specific lower-level information Bev used to help her interpret the text.

Summary of the results

Mediated VR, esp. that of Style 1:

- (1) was clearly preferred by the learners, esp. in terms of helping to guide their report
- (2) produced the most complete data, in terms of eliciting listener strategies

One interesting implication of the results is that it doesn't seem viable to use VRs with groups of listeners. Labour-intensive, one-on-one data collection seems necessary.





1) Does a mediated VR engender positive reactivity? e.g., Some participants suggested Style 2 assisted their listening by giving them more chance to reflect on what they heard.

Recently, I assessed the VR participants' comp. of the texts (number of idea units they recalled), and I will compare these across the 3 mediation styles.

To examine whether VRs, in general, have a reactive effect, I had other learners from the same 2 classes as the VR participants listen to the texts and recall what they heard. I'll compare their comp. with that of the VR participants. (Both groups had same mean score on a standardized listening test).

Some remaining questions

2) Do the strategies elicited by the VRs truly reflect those used while listening?

Not sure. Although Yeldham and Gruba (2014, 2016) found that triangulation with q'aire and interview data tends to confirm many L2 learners' general lower- or higher-level orientation to listening as shown in their VRs. (But q'aire, interview data still just introspective data)

Some related questions

3) Would the results of this study apply to learners of different cultures?

There might be less need for mediation for western participants. Research by Kim (2002) showed that European-Americans more readily express their thoughts verbally than Asian-Americans.

4) Can these results for immediately retrospective listener VRs be extrapolated to other task areas that require such retrospective reporting, e.g., to research speaker strategies? Mediation likely seems needed. ... Also probably depends on how frequently learner makes report during the task. Probably great need if reports infrequent.

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