

**29 JULY 1999**

## **EKARVED TEXT LAYOUT**

### **PROTOTYPING RESEARCH REPORT 5**

**Dates of evaluation:** Ease of reading and visitor descriptions of layout: 4 June 1999; comparison of Ekarved and Standard Chinoiserie layouts: 14, 18, 21 & 29 June 1999 and 18 & 21 July 1999.

#### **Brief for Evaluation**

##### **Does the layout of Ekarved text help comprehension and readability?**

The museum needs to establish principles relating to the layout and content of various types of gallery text.

Ekarving is a theory of museum text writing developed by Margareta Ekarv, a specialist in text readability, who was employed to write gallery texts by the Swedish Postal Museum. The technique is now widely used in Sweden and has been tried in some UK museums and galleries, e.g. the Godiva City display at the Herbert Museum and Art Gallery, Coventry, the Egyptology Gallery at Swansea Museum and Nature in Art, an independent museum in Gloucester. Ekarving advocates things such as simple language and rhythm as well as line breaks that reflect natural phrase breaks and is said to facilitate better comprehension and easier scan reading. See the sample subject panels in Appendix C for examples of the Ekarved layout.

While we find most of the advice of Ekarving very much in line with our own philosophy of making the new galleries more accessible to the public, we wish to test the layout to find out whether it helps readability in and of itself. Enquiries with colleagues in Sweden suggest that no formal research has been done there into the effectiveness of Ekarving. The only research carried out in this country is two studies by MA students at Leicester University, both of which indicated a positive response, although they did not isolate the layout from the other factors involved.

This piece of research is about the principles of text layout rather than the specific design, although our graphic designers have produced sample text panels in Ekarved and non-Ekarved formats.

#### **Description of prototype and testing situation**

##### **Test 1: Ease of reading and visitor descriptions of layout**

Ekarved layout texts for Marquetry, Chippendale and Chinoiserie were used as full size mock panels on the wall of the Best of British Gallery behind the furniture displays near the Chinoiserie section. Marquetry was brightly lit, Chippendale in a greyish light and Chinoiserie in a yellowish light. A bench was placed facing the text

panels. Visitors were then invited to sit, read the texts and give an opinion on their ease of reading. They were then engaged in a conversation about the text layout of the panels and its appearance during which the ideas behind the text layout was explained to them. Visitors were also asked to make a self-judgement of their normal reading speed. Four visitors read the Marquetry text first, three the Chippendale and five the Chinoiserie. The texts had been simplified according to general principles for ease of reading in a gallery situation - line length was the issue under investigation.

### **Description of Sample: Test 1**

	<b>Test 1</b>
<b>Number of people</b>	12
<b>Gender</b>	Male = 2 Female = 10
<b>Age</b>	Under 25 yrs = 1 25-34 yrs = 3 35-44 yrs = 2 45-54 yrs = 5 55 plus yrs = 1
<b>English as first language</b>	Yes = 10 No = 2
<b>Country of origin of visitors</b>	UK = 9 Australia = 1 Switzerland = 2
<b>Self-judgement of reading speed</b>	Slow = 3 Average = 2 Fast = 7

### **Findings related to the brief: Test 1**

#### Ease of reading

In general, visitors reported the Ekarved texts as easy and comfortable to read when asked their opinion after reading them.

#### Appearance and descriptions of Ekarved texts

Several visitors had not noticed the Ekarved layout, others had, on reflection, ignored it. Three visitors were critical of it but these criticisms were voiced after an explanation of the text layout had been given to them.

### **Visitor comments about the panels: Test 1**

#### Ease of reading

- Comfortable to read
- Easy
- Fairly easy
- No different to other texts

- Just treated it like ordinary text
- Helps
- Concise to read

#### Appearance

- Looks OK. (2)
- Didn't notice. (2)
- I noticed the layout but it's alright.
- I saw it was not justified.
- It flows visually.
- It doesn't look odd.
- It looks like a poem.
- It looks like a computer done thing - set out like a poem.
- It looks fine - I would not have noticed the difference.
- It's not comfortable - it looks weird. You could drop a line at the end of every sentence instead.

#### General Comments

- I skip read for information. This is getting into poetry and is a bit involved.
- A good idea - I see what you're getting at.
- I like the shorter lines.
- It keeps your concentration - the short lines and paragraphs. I think it would help you to read and think. But the Chinoiserie panel stalls you. It makes you stop skimming and slows you down.
- It makes the Chinoiserie text look long.
- It would be good for children.
- It stops at each idea. It's very good if you are not good at English.
- It makes you think each bit has something different to talk about. It makes you pause after each paragraph. It's not a help to memory - just for quick reading.
- I was aware that each line was like a bullet point.
- I'm used to reading broken text and I still scanned the whole thing.
- I dislike it. It detracts from the message. The rhythm is broken and I think 'Have I missed something? Why have they done this?' It's a bit trendy.

#### **Outcome of Test 1**

It was decided to make a deeper exploration of the issues related to Ekarved text layout by asking visitors to compare an Ekarved text layout with a standard text layout.

**Description of prototype and testing situation**  
**Test 2: Comparing Ekarved and standard text layouts**

The Chinoiserie text panel was selected for Test 2 because, of the three used in Test 1, it had the most obviously unusual line lengths - some were very short and some very long. Visitors in Test 1 had been critical of its layout. It was therefore thought that this panel would provide the opportunity for a severe test of the Ekarved layout. The panel was trimmed and mounted on a board that could be easily moved around by the evaluator. The same was done to the standard layout version of the Chinoiserie panel.

Thus, two boards with the Ekarved text (a) and the standard text (b) could be presented to visitors attached to supports which could be very comfortably read when sitting on a small stool. The testing was done in an open space in the Best of British Gallery, which was divorced from any particular display. Half the sample was asked to read A then B and the other half was asked to read B then A. The procedure for visitors was: read a presented text (A or B); remove the read text from view; read the second text; say which text was preferred from a readability point of view and why; view both texts side by side during a discussion about their readability during which the principles behind the two text layouts were explained by the evaluator. Both texts were thus presented to visitors under similar, including lighting, conditions. After the second interview session, visitors were asked about their educational level – i.e. at what age they left full-time education.

**Description of Sample: Test 2**

	<b>Test 2</b>	
<b>Number of people</b>	103	
<b>Gender</b>	Male = 44 Female = 59	
<b>Age</b>	Under 25 yrs = 28 25-34 yrs = 19 35-44 yrs = 13 45-54 yrs = 17 55 plus yrs = 26	
<b>English as first language</b>	Yes = 60 No = 43	
<b>Country of origin of visitors</b>	UK = 32 USA = 30 Canada = 6 Germany = 5 Japan = 5 France = 4 Greece = 3 Holland = 2	Belgium = 2 Slovakia = 2 Taiwan = 2 Portugal = 2 Australia = 1 New Zealand = 1 Yemen = 1 Korea = 1
<b>Self judgement of reading speed (101 visitors)</b>	Slow = 9 Average = 40 Fast = 52	

Fifty-two individuals were interviewed as couples and nine individuals were interviewed as members of a group of three. Sixty-nine visitors were asked about their educational level.

### **Findings related to the brief**

#### From those who read the Ekarved layout first (55 visitors)

Thirteen preferred the Ekarved layout from a readability point of view and forty preferred the standard layout. Two had no preference.

#### From those who read the standard layout first (48 visitors)

Twenty-two preferred the Ekarved layout and twenty-six preferred the standard layout.

#### Overall breakdown

Of the sample of 101 visitors who made a decision one way or another, 35 preferred the Ekarved text from a readability point of view and 66 preferred the standard layout. Since reading is such a complex activity, 35 is a very small sample of people from which to derive conclusions about the Ekarved layout.

#### Description of the sub-sample preferring the Ekarved layout

<b>English as first language</b>	Yes = 17 No = 18 (50% of all)
<b>Self-judgement of reading speed</b>	Slow = 6 Average = 8 Fast = 21 (60% of all)
<b>Left full-time education after university level</b>	Yes = 19 (79% of all) No = 5

#### Description of the sub-sample preferring the standard layout

<b>English as first language</b>	Yes = 43 (65% of all) No = 23
<b>Self-judgement of reading speed</b>	Slow = 3 Average = 32 Fast = 31 (47% of all)
<b>Left full time education after university level</b>	Yes = 30 (67% of all) No = 15

### Conclusions

- The entire sample, and the sub-samples, within it are highly educated. That is, they are likely to be very experienced readers indeed and may well read for work and pleasure far more than those who have not spent several years immersed in studying at university level.

- Regarding a preference for the Ekarved layout, the findings indicate that, with a larger sample drawn from the V&A's audience, the following trends may emerge: people who prefer Ekarving do not have English as a first language; they rate themselves as fast readers more frequently; and more of them have higher education qualifications.

### **Comments from visitors**

First language is given where visitors had trouble expressing themselves in English. Two of the sample of 103 would make no preference statement or comment one way or another. Accordingly, these comments reflect the views of 101 visitors.

#### From those who read the Ekarved layout first and preferred the Ekarved layout (13 visitors)

- I prefer the flow of it. It's easier and doesn't look as if you have to read too much. It's a bullet format.
- It would be easier in a crowd.
- I like the way it is made up but I am comfortable with both formats.
- You understand the different ideas (French).
- It's clearer.
- The sentences are not continuous and are easier to get at - a good idea.
- It's more expressive, structured and shorter - great.
- It's easier to absorb with that spacing.
- The single lines have more impact and it seems higher up the page.
- The logical lines give assistance (Portuguese).
- For tourists it's better - the other is tiring.

#### From those who read the Ekarved layout first and preferred the standard layout (40 visitors)

- Standard is more put together and compact. When I saw the other I thought 'Why did they do that?'
- Standard is easier - it's chunky and there are no cut-offs so you can go on reading. The other takes longer to read - it slowed me because my eyes were dropping down all the time. It's all very easy English anyway - you are going a bit over the top.
- It (Ekarved) seems patronising and it looks queer - like a mistake.
- Standard is better explained and looks better because it's compact.
- You have to have photographic vision to get the picture from it (Ekarved) - it makes you slow.
- I don't like it (Ekarved) - you could use bullet points instead.
- Standard is easier to follow - the other does not flow and looks odd.
- Standard is easier. It's probably less wordy and less informative. The line lengths make it easier to read and it's more conversational. When you break up the sentence as in the other (Ekarved) I lost track of what you got out of it - it breaks up the flow.
- It (Ekarved) has too many lines.

- With it (Ekarved) the sentences are lost and you lose your place. You have to stop and think ‘Why did they do this?’. The cutting of the lines in it stops you getting the whole idea first.
- I don’t think in lines but in ideas. Maybe when you read you don’t stop like it (Ekarved) does.
- Standard is bigger, easier to read - not so many words to a line. I prefer standard’s symmetry – the other looks busy and standard is compact.
- Standard is clearer and easier to skim through. The other looks like more to read.
- My mind does not say ‘Take it bit by bit’ but ‘Where is the information?’.
- Standard is easier to read - the lines flow and are not short and choppy like the other. I can see why people would be attracted to it (Ekarved) if they were tired - they could just read phrases instead of paragraphs.
- The sentence breaks in it (Ekarved) are terrible. Not all thoughts can go on one line.
- With standard, each paragraph is a complete thought.
- Standard reads easier - with the other you are waiting for the rest of the sentence.
- We are used to standard.
- Standard flows.
- I had to read it (Ekarved) again - it stopped me from skimming.
- It (Ekarved) looks like a poem and it doesn’t help speed-read.
- Standard is more natural - the paragraphs are for one thing. The theory of the other is appealing and you wouldn’t have to read the whole thing because you can tell when to stop.
- Standard is easier for me because English is not my first language. The other is all broken up.
- I much prefer standard - the block paragraphs are easier to read. The other is like the Sun newspaper - a few words to a line.
- I like standard’s paragraphs and don’t like the other’s short lines. If you are interested you will read anything. It (Ekarved) would upset me.
- I had to re-read it (Ekarved) because of pausing to go onto the next line. Standard’s paragraphs help me to read. With the other the key words pop out at me but then they swim about.
- Standard is more concise, together and flowing.
- Standard is more pleasing but the other is better for the museum.
- Standard is more condensed and my eyes don’t have to dart about as with the other.
- Standard holds your interest much longer. The other would make me more interested in the display because I wouldn’t read it.

From those who read the standard layout first and preferred the Ekarved layout (22 visitors)

- The second (Ekarved) is easier. It has shorter sentences but it looks odd. (Dutch)
- The second (Ekarved) felt right and helped me but there is not much difference. (Chinese)
- The second (Ekarved) is more comfortable and looks OK.
- I like the short lines of the second (Ekarved) best. (Japanese)
- The second (Ekarved) is easier to understand. It says it all whereas standard goes on in detail.

- The second (Ekarved) is much clearer to see. You can see what you want to see. With standard you have to take it all in.
- The second (Ekarved) is set out better and looks clearer and bigger. It's quick to read because it's rather staccato.
- The second (Ekarved) looks messy but I prefer things broken up - we use bullet points at work.
- The second (Ekarved) is best - its tabulated and I remember better.
- The second (Ekarved) seems easier - it's like blank verse with letter spaced wider. You feel you don't work so hard. (Nigerian)
- The second (Ekarved) breaks the ideas into sections. It's wonderful for gallery reading. I write distance-teaching materials in New Zealand and we use this technique a lot.
- I understood the second (Ekarved) better. (Greek)
- You read the second (Ekarved) better - it's easier to understand. With standard you have to think of the parts of the thought and with the other it's ready-made. (Greek)
- Standard is like reading a book. With the other you can stop where you want and it's easier to read. The standard one rambles and the other is basically in point form - you can understand it and it's an interesting way of reading. (Freelance journalist)
- The second (Ekarved) is easier to understand - I would like to see it in a museum.
- The second (Ekarved) is simpler. The essence is there - boom, boom.
- The second (Ekarved) is much better - my English is very bad. (Taiwanese)
- With the second (Ekarved) every line is complete - its clearer.
- The second (Ekarved) seems shorter but in more detail.
- The second (Ekarved) is much clearer. I like it itemised. I read for information - I'm a teacher.

#### From those who read the standard layout first and preferred it (26 visitors)

- Standard was easier - there was more detail in it. The paragraphs are enough organisation. The other looks like poetry but it helps when you are translating to your own language. (Spanish)
- Standard is easier to read because you can pick out the sentences more easily.
- I'm used to a paragraph having meaning. I had to read the other (Ekarved) two or three times.
- Standard is clearer and easy to read. It helped my eyes better.
- It (Ekarved) is like a technical form of reading so I like the standard better - it's like literature.
- I was confused by the sentences in the second (Ekarved) being split up and it threw me off the meaning.
- Standard seems more logical - the other is interrupted. Standard is best for me because English is my second language.
- Standard is best - it's further up the page and not chopped up - it seems to go better. The other took too long to read. (Speed reading teacher)
- The layout of standard is better for me. The other makes it look like a job - I would be put off with a lot of it.
- It (Ekarved) looks as if a computer has made it - it's jagged. It's a disaster.
- I'd definitely be put off by a lot of those (Ekarved) labels.

- I don't like the open spaces of it (Ekarved) - it's easier to read standard straight across. It's (Ekarved) a nice theory. It's like bullet points without the bullets.
- Standard is more familiar. The other looks arbitrarily broken up.
- Standard is more natural. The other looks as if it's trying to be poetry. I don't understand why you would want it (Ekarved) because the text is descriptive and not really poetry. With standard the paragraphs are ideas - you should look to the flow of ideas.
- Standard is more usual. The other has longer lines and is tiring to read. It (Ekarved) has rules and no interest - its like a telegram and not literary.
- I could adapt to it (Ekarved) but it's curious.
- Standard has paragraphs like normal writing.
- It (Ekarved) is formal - it's got points.
- It (Ekarved) looks strange. Standard is smoother. You read for interest really. I am used to the standard type writing and the other would irritate slightly.
- Standard is more to the point.
- Standard is easier.
- The spaces on it (Ekarved) don't make sense. Maybe I'm more used to standard.
- It (Ekarved) is disjointed. Standard makes more sense and is easier.
- Standard is more consistent. I prefer its longer lines. The other doesn't make sense.

### **Evaluator's comments and conclusions**

These comments are made with the reservation that reading is a very complex activity and all the issues involved in reading have not been explored in these tests. In particular, we tend to read for meaning and don't think about how we do it. These findings explore an 'after the event' situation.

- It must be remembered that an extreme Ekarved layout was chosen as a severe test. The other two layouts used in the first test were not so obviously different from a standard layout. It could be possible to use an Ekarved layout if extreme versions were avoided.
- It is of note that of the fifty-five visitors who were exposed to the Ekarved text first, forty of them preferred standard text, some of them as soon as they saw it. Those who read standard text first were almost equally divided in their preferences. This division of the entire sample tends to point to making standard layout the first choice.
- It is noticeable that visitors often refer to the 'bullet point' nature of the Ekarved layout. It may be the case that those who customarily read technical material or itemised reports are among those who prefer the Ekarved layout.
- Margareta Ekarv's principles were first developed to help those with literacy problems. These tests were made with a highly literate sample, which contained five people who finished full-time education at age sixteen or below and ten who finished full time education at age eighteen. From the point of view of access, we

cannot say that less highly educated potential visitors would be helped by Ekarved layouts because no one has tested that situation. It would be of interest to do so. In the meantime we know that more than two-thirds of the sample preferred the standard layout.

- With regard to those visitors who did not have English as their first language, it is of note that in this very small sample, 42% of them (18 visitors) preferred the Ekarved layout. As far as visitors for whom English was the first language are concerned, 28% preferred the Ekarved layout. This is quite a marked difference.

### **Actions**

- The Ekarving layout will not be used, although other features of Ekarving, such as simple sentence structure and familiar language, will be adopted.