

**Internal Report**  
**not for re-publication**  
 If you wish to use the contents of this report, please contact Stephen Boyd Davis <s.boyd-davis@mdx.ac.uk>

## About this report

The *Scratch* locative drama was trialled at the BBC FreeThinking Festival 2008 in Liverpool. Forty participants completed questionnaires immediately after their experience; this report is based on those responses.

## About *Scratch*

*Scratch* was developed collaboratively by BBC Radio Drama and the Lansdown Centre for Electronic Arts. It used pre-recorded audio preloaded onto iPAQ pocket computers provided by Hewlett-Packard. The GPS sensor built into each device was used to deliver sounds which were virtually attached to locations in the physical space. As participants moved about in the space, they encountered a number of scenes which together were designed to form a coherent, if fragmentary, drama. Scenes behaved differently if the same place was visited more than once.

## The participants

Participants were recruited principally through the publicity for FreeThinking 2008 – mainly via the festival website. The average **age** of participants was **40**. The gender of participants was **20 males**, **17 females** and **3 null returns**.

## The trial

The experience was advertised in advance (as shown at right). The trial was run in St James's Gardens, close to Liverpool Cathedral, a characterful and striking location. Participants started and ended their experience at the Oratory nearby (marked by a red circle in the aerial photograph below). Each participant was issued with a Hewlett-Packard iPAQ pocket computer and a pair of headphones. The pocket computers had been set up to hide all applications apart from a single on-screen button to start the drama. Project staff started the program for participants at a suitable location within the space (towards the left of the highlighted rectangle, see photo).

The description of the event provided to participants in advance

Come and experience a ground breaking audio drama. You'll be issued with a GPS device, headphones and a space to explore.

How the story of *Scratch* unfolds depends on where you move. You'll encounter characters, overhear secrets and wander into territory that threatens to un hinge all involved.

*Scratch*, written by Penelope Skinner, is a collaboration between BBC Radio Drama and The Lansdown Centre for Electronic Arts. With thanks to Hewlett-Packard.



St James's Gardens, Liverpool. The red circle (bottom left) indicates the base where participants were equipped. The highlighted rectangle shows the area in which the audio drama was explored. Participants were guided to the starting point.

Because it was unlikely that most participants were familiar with 'navigating' drama in the way intended, they were each briefed verbally. They were encouraged to wander in the space; were invited to linger when they encountered auditory scenes; and it was hinted to them that the drama was laid out between their starting location and the far end of the physical space.

## The questionnaire

The questionnaire was separated into seven parts. The responses are analysed in the next section.

1. The first question – asking participants for three words which came into their minds to describe their experience of *Scratch* – was designed to elicit initial responses in the most open way possible.
2. The main body of the questionnaire comprised twelve closed questions, each presenting an opinion which the respondents might hold. They were invited to respond using a Likert scale from *Strongly Disagree*, through *Disagree*, *Neutral*, *Agree*, to *Strongly Agree*. These were subsequently coded as values -2, -1 0, 1, 2. Some questions were phrased so that the desired answer was not obvious and the 'good' answer was not always associated with *Strongly Agree*.
3. In section three, two open questions asked respondents to identify the worst and best aspect of the experience.
4. The fourth section asked minimal demographic questions: only age and gender.
5. Section five posed four questions on respondents' previous experience of audio drama and story.
6. Section six posed three questions about respondents' involvement in other FreeThinking events.
7. Finally, respondents were asked to leave their contact details if they were interested in taking part in future events or helping further with the research.

## The responses

### 1. About the experience

Participants were asked 'What three words come into your mind to describe your experience of *Scratch*?' In the following table the 40 responses, together providing 120 terms, have been grouped into four categories:

- terms which are broadly negative, such as *frustrating*;
- terms which are neutral, such as *ambient* (or not relevant to the drama itself, such as *freezing*); this category was also used for null returns. Many responses in this category were simply descriptive, and not very useful for deciding on the quality of the experience.
- terms which could be considered broadly positive, such as *inspired*;
- terms which seem to reflect the intended character of the drama, such as *spooky* (which might in other circumstances have been considered negative).

This categorisation cannot be exact, and slightly different totals would result if the categorisation were varied. Of 120 possible terms, 19 (approximately 16 percent) were negative; 44 (approximately 37 percent) were neutral; 48 (40 percent) were positive; a further 9 (7.5 percent) were also graded positive as explained above.

1	2	3	4	5	6	7	8	9	10
short in time	narrative	frustrating	spacey	creepy	kitchen	confusion	(strangely) linear	intriguing	Soothing
Garden	ambient	innovative	scary	interesting	garden	bewildered	hammy (acting)	dislocated	Different
interesting	personal	enjoyable	interesting	fun	gothic	seaside	(bit) unchallenging	lost	Cold
11	12	13	14	15	16	17	18	19	20
Intriguing	excellent	[blank]	[blank]	magical	interesting	absorbing	space	time	Unusual
Baffling	sound	[blank]	[blank]	innovative	slow[?]	environment	absorbing	period	Interesting
Fun	quality	[blank]	[blank]	inspired	disappointed	journey	drama	horror	Entertaining
21	22	23	24	25	26	27	28	29	30
Ambience	enormity	atmospheric	radio	superb	classical	zombie- esque	different	intriguing	Interesting
Strange	space	pleasure	comfort	sound	cacophany	relaxing	interesting	disjointed	Mine
Focus	clarity	location	place	quality	clarity	unusual	strange	therapeutic?	Scary
31	32	33	34	35	36	37	38	39	40
Enigmatic	interesting	freezing	spooky	absorbing	original	fun	disappointing	off(button)	Fun
Intriguing	cold	layered	dramatic	Fun	spooky	intriguing	predictable not addressed to me	melodrama	Cold
Exciting	unusual	interactive	odd	intriguing	meditational	exciting		why(bother)	Together

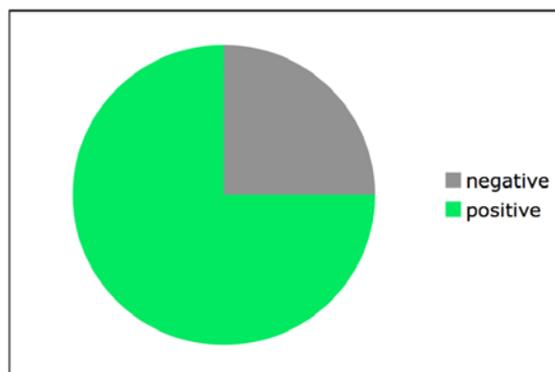
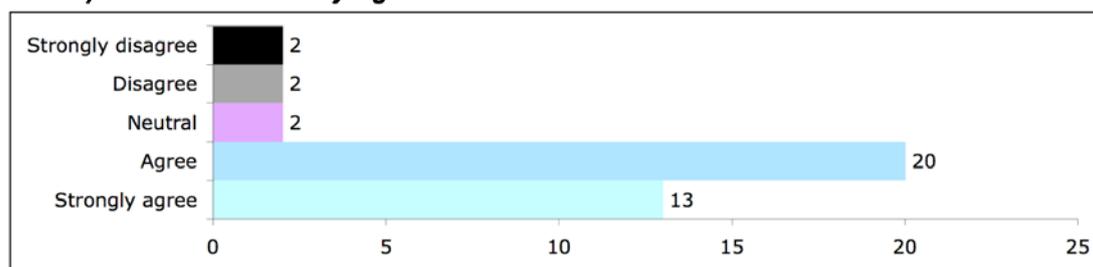


Chart (left) of the negative and aggregated positive terms, as a proportion of the non-neutral responses, amounting to 25 percent negative, 75 percent positive.

### 2. The twelve statements

#### 1. The experience was satisfying as a narrative or drama.

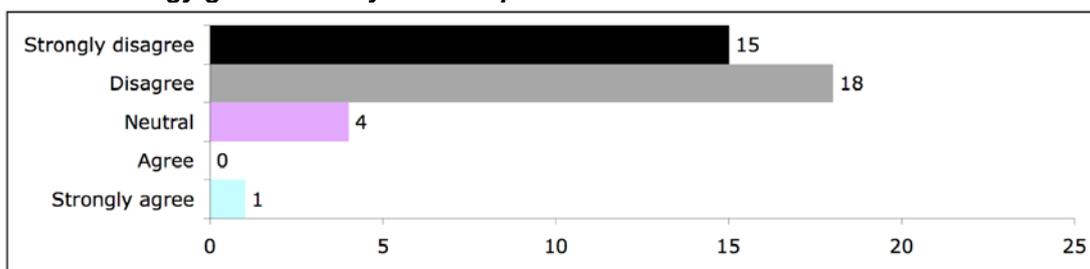


Of the 39 non-null responses, 13 *strongly agreed*, 20 *agreed*, 2 were *neutral*, 2 *disagreed*, and 2 *strongly disagreed*.

The *agree* results accounted for 90 percent of the non-neutral responses, the *disagree* results 10 percent.

This was a **very good** result.

**2. The technology got in the way of the experience.**

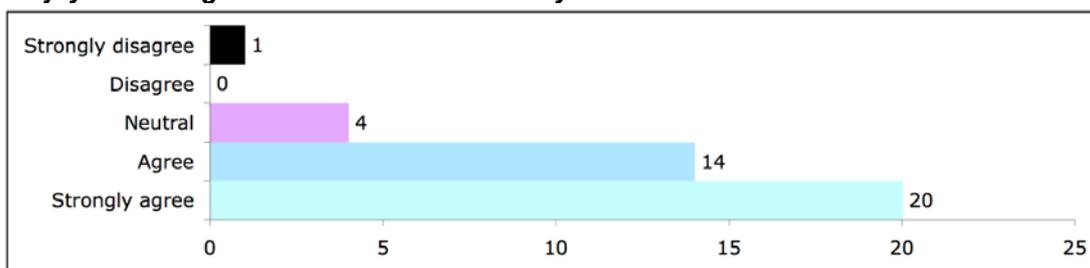


Of the 38 non-null responses, 1 *strongly agreed*, 0 *agreed*, 4 were *neutral*, 18 *disagreed*, and 15 *strongly disagreed*.

The *agree* results accounted for 3 percent of the non-neutral responses, the *disagree* results 97 percent. We wanted the technology to be as 'transparent' to the experience as possible.

This is therefore an **extremely good** result.

**3. I enjoyed moving about to discover the story.**

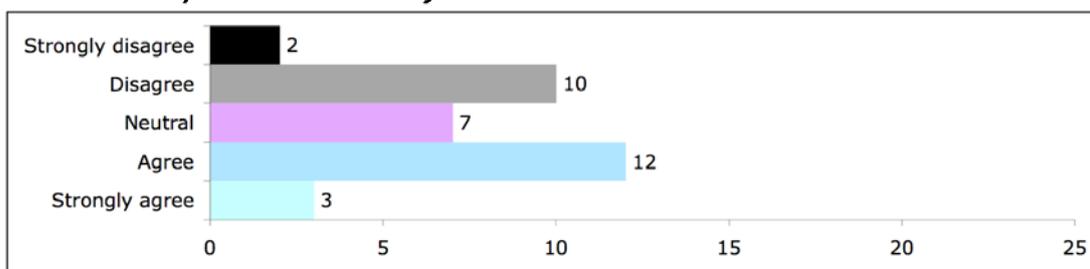


Of the 39 non-null responses, 20 *strongly agreed*, 14 *agreed*, 4 were *neutral*, 0 *disagreed*, and 1 *strongly disagreed*.

The *agree* results accounted for less than 3 percent of the non-neutral responses, the *disagree* results more than 97 percent. We wanted participants to enjoy moving about to discover the story, an aim which was fundamental to the artistic rationale for the work.

This is therefore an **extremely good** result.

**4. I went back to places to see if they were still the same.**

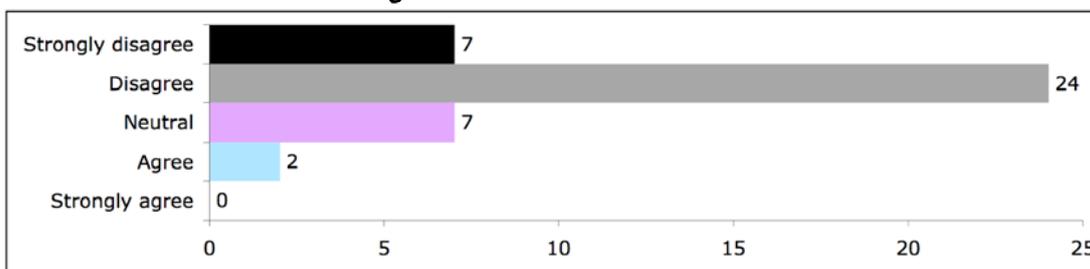


Of the 34 non-null responses, 3 *strongly agreed*, 12 *agreed*, 7 were *neutral*, 10 *disagreed*, and 2 *strongly disagreed*.

The *agree* results accounted for a small majority of the non-neutral responses (about 55 percent), the *disagree* results 45 percent. We had hoped participants would experiment with revisiting places, as the scenes they were designed to vary on subsequent visits. Of course participants could have been briefed in relation to this feature, to encourage repeat exploration.

This is only a **moderately good** result.

**5. Individual scenes were too long.**

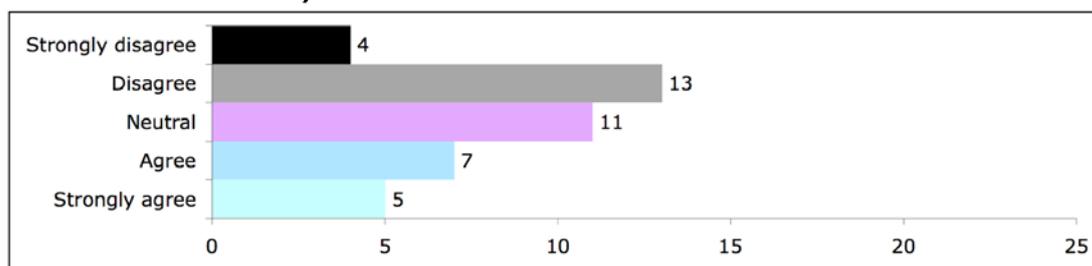


Of the 40 responses, 0 *strongly agreed*, 2 *agreed*, 7 were *neutral*, 24 *disagreed*, and 7 *strongly disagreed*.

The *agree* results accounted for 6 percent of the non-neutral responses, the *disagree* results 94 percent.

This is therefore an **extremely good** result.

**6. I felt in control of the experience.**

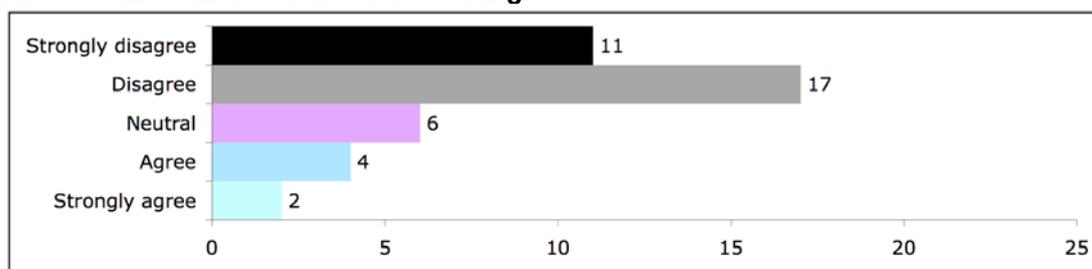


Of the 40 responses, 5 *strongly agreed*, 7 *agreed*, 11 were *neutral*, 13 *disagreed*, and 4 *strongly disagreed*.

The *agree* results accounted for 41 percent of the non-neutral responses, the *disagree* results 59 percent. In retrospect, this question was unwisely phrased. One respondent, interviewed verbally, replied, 'No, I wasn't in control. I didn't want to be.' In light of such a response, it would have been better to ask, 'Did you *wish* you had more control of the experience?' This is probably not a useful finding, though it *may* imply that respondents would have liked more control.

This is an **inconclusive** result.

**7. I needed more instruction before starting.**

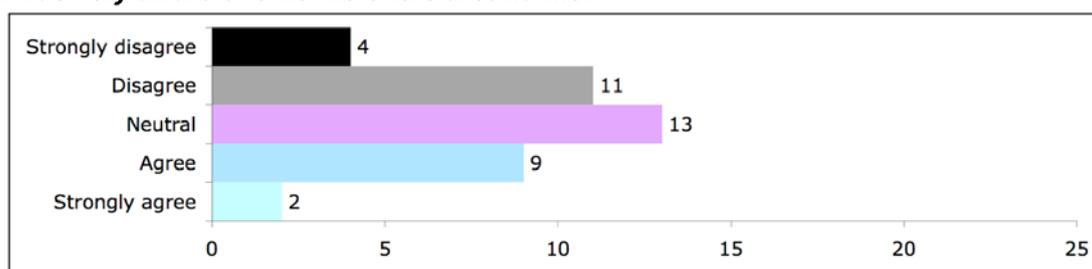


Of the 40 responses, 2 *strongly agreed*, 4 *agreed*, 6 were *neutral*, 17 *disagreed*, and 11 *strongly disagreed*.

The *agree* results accounted for 18 percent of the non-neutral responses, the *disagree* results 82 percent.

This is therefore a **good** result.

**8. I was very aware of other listeners around me.**

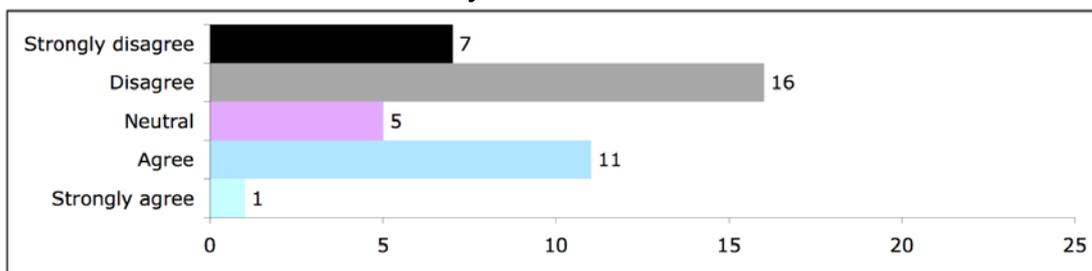


Of the 39 non-null responses, 2 *strongly agreed*, 9 *agreed*, 13 were *neutral*, 11 *disagreed*, and 4 *strongly disagreed*.

The *agree* results accounted for 42 percent of the non-neutral responses, the *disagree* results 58 percent. The usefulness of this question was probably undermined by the fact that some respondents were almost alone in the space while others were there while several other participants were present. In any case it is not clear what conclusions could have been drawn even if the conditions had been the same for all. Is *unawareness* an index of absorption in the drama; is *awareness* a sign of a valuable social aspect to the experience?

This is therefore an **inconclusive** result.

**9. I felt I was a character within the story.**

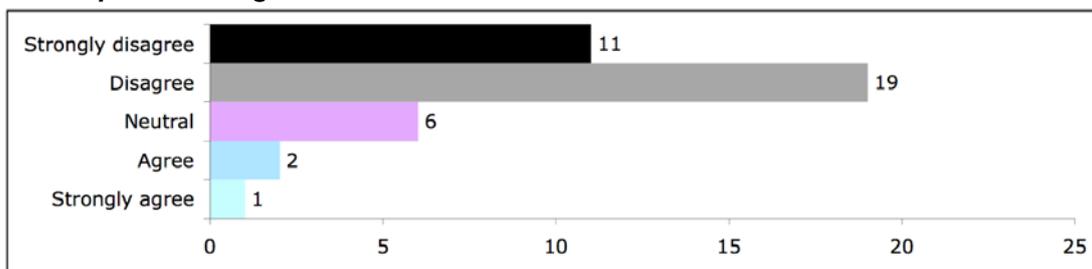


Of the 40 responses, 1 *strongly agreed*, 11 *agreed*, 5 were *neutral*, 16 *disagreed*, and 7 *strongly disagreed*.

The *agree* results accounted for 34 percent of the non-neutral responses, the *disagree* results 66 percent. It was intended that participants *should* feel that they were a character within the story.

This is therefore a **poor** result.

**10. I would prefer having visuals in addition to sound.**

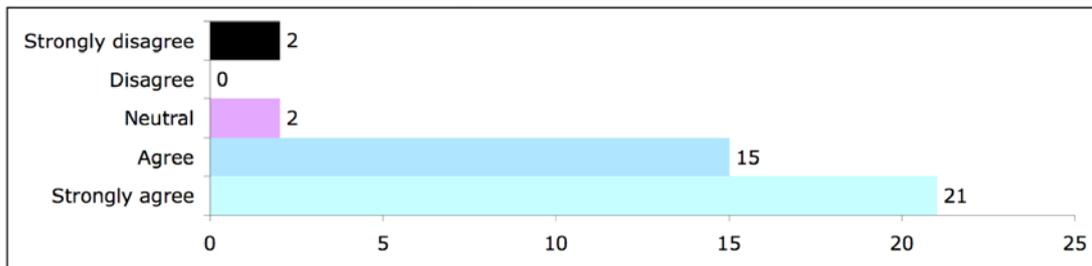


Of the 39 non-null responses, 1 *strongly agreed*, 2 *agreed*, 6 were *neutral*, 19 *disagreed*, and 11 *strongly disagreed*.

The *agree* results accounted for 9 percent of the non-neutral responses, the *disagree* results 91 percent. The experience was intended to be satisfying using only sound.

This is therefore a **very good** result.

**11. I would like to experience more things like this in future.**

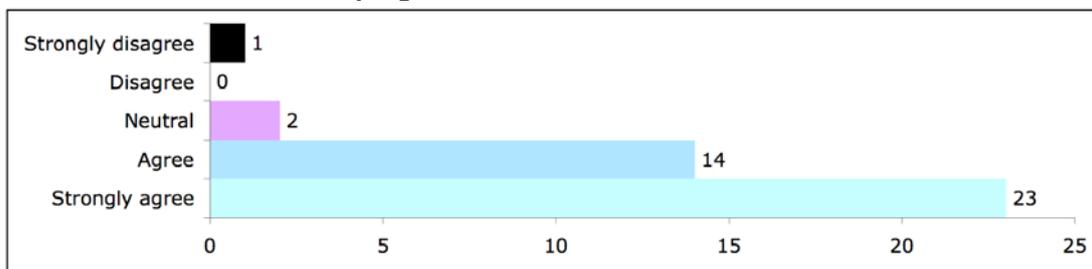


Of the 40 responses, 21 *strongly agreed*, 15 *agreed*, 2 were *neutral*, 0 *disagreed*, and 2 *strongly disagreed*.

The *agree* results accounted for 95 percent of the non-neutral responses, the *disagree* results 5 percent.

This is therefore an **extremely good** result.

**12. This is an idea worth developing.**



Of the 40 responses, 23 *strongly agreed*, 14 *agreed*, 2 were *neutral*, 0 *disagreed*, and 1 *strongly disagreed*.

The *agree* results accounted for more than 97 percent of the non-neutral responses, the *disagree* results less than 3 percent.

This is therefore an **extremely good** result.

### 3. What was the worst / best thing about your experience of Scratch?

Respondents answered these two open questions, with the following results.

#### 3.1. Worst thing

- 1 not understand bits of things
- 2 being sure to have not missed something
- 3 my kit kept repeating some passages over and over
- 4 Camera man sorry
- 5 Weather
- 6 [blank]  
the story seemed utterly unconnected with the garden I was in or what I did
- 7
- 8 bit too hammy on sound effects and editing
- 9 lack of connection to location
- 10 had to wait before we could start the experience  
process was slightly confusing - I wasn't sure if I was missing bits
- 11 limited time
- 12 cold weather
- 14 [blank]
- 15 [blank]  
felt story was poor - not relevant to setting or written for drama and uninvolved
- 16
- 17 Cold
- 18 Cold  
would of [sic] perhaps preferred something more site-specific
- 19
- 20 Nothing
- 21 losing some aspects of the story
- 22 realization how cold it became when ended -- ie. nothing
- 23 only being able to do it once  
not experiencing it again from a different perspective/narrative
- 24
- 25 N/A
- 26 inconsistent story
- 27 [blank]
- 28 GPS stopped midway through
- 29 not sure I heard all the drama
- 30 Nothing
- 31 cold weather
- 32 the cold weather
- 33 Cold
- 34 slight technical hitches
- 35 felt uncertain how long it would take to do properly
- 36 having to change a nappy  
worrying that my baby was awake/crying without me hearing - would be even better to do on your own
- 37
- 38 not interested in story - no relationship to me or place
- 39 [blank]  
wanting to know what happened next for some characters
- 40

#### 3.2. Best thing

- 1 wondering [sic] in a nice place
- 2 the sense of atmosphere
- 3 loved the beginning/waves and voice
- 4 BGM and headphone
- 5 interesting experience  
calm, reflection on relationship between space and narrative
- 6 rats, sea-sounds (though these were confusing when I was in a garden)
- 7
- 8 story/atmosphere developed quite nicely
- 9 potential to develop technology for new storytelling
- 10 new experience
- 11 potential to feel involved in the drama
- 12 superb acoustics
- 13 narrative line too short
- 14 [blank]
- 15 quality of the equipment and the recording
- 16 great idea with strong potential to revolutionise drama
- 17 the space
- 18 Location
- 19 graveyard, dialogue with characters, story great
- 20 the organization team
- 21 Escapism
- 22 Venue  
the location and story enhanced the experience of each other
- 23
- 24 being lost in it / consumed by it
- 25 excellent audio-visual experience
- 26 original experience
- 27 different from a usual Sunday morning
- 28 story and very friendly helpful staff
- 29 use of stereo to immerse you in the drama
- 30 Everything
- 31 exciting to discover the story
- 32 discovering the story
- 33 re-doing it; discovering additional narratives
- 34 very new and unusual experience
- 35 experiencing the narrative within a strange location
- 36 feeling enveloped by sound
- 37 a sense of exploring
- 38 iPAQ
- 39 [blank]  
Seeing others stop still. Being kept still and noticing things around me normally missed. Being told a story.
- 40

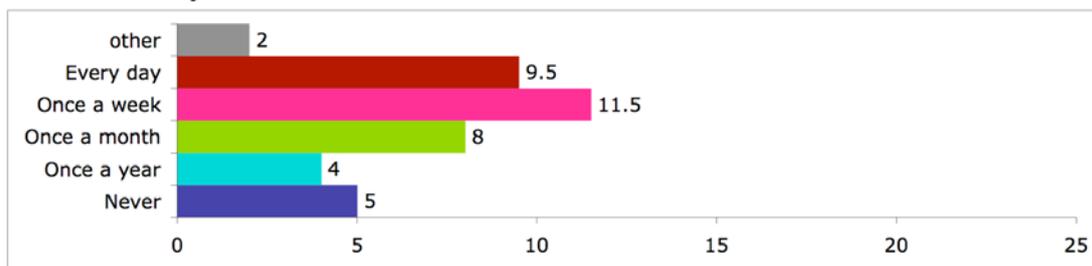
### 4 About you

This section posed two basic questions on age and gender data – see page 1.

## 5 Your experience of audio drama and story

Scratch participants were asked about their radio and drama listening habits. The sample is not typical of the population at large, principally no doubt because of the channels through which the audience were recruited (see Section 6 *below*). The numbers against the bars represent the actual number out of the 40 respondents. In the discussion below each chart these are converted to percentages. All percentages are rounded to the nearest integer.

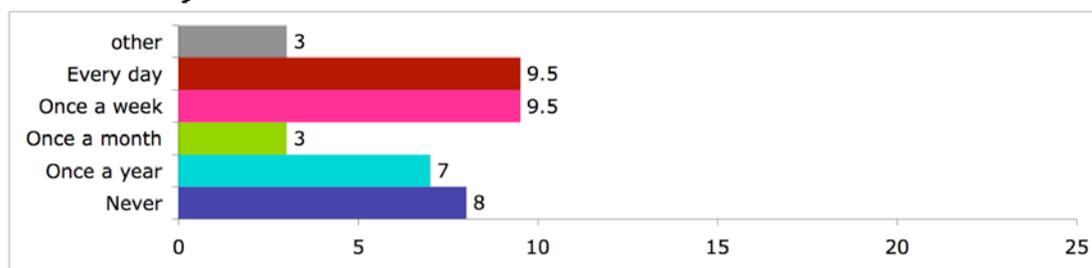
### 5.1. How often do you listen to drama on the radio?



The largest proportion (29%) assess themselves as listening to drama on the radio approximately once a week, while the next largest (24%) say they listen once a day. Together these account for 53% – just over half the total. A total of 23% listen only once a year or never.

These findings suggest a significant level of prior commitment to listening to radio drama.

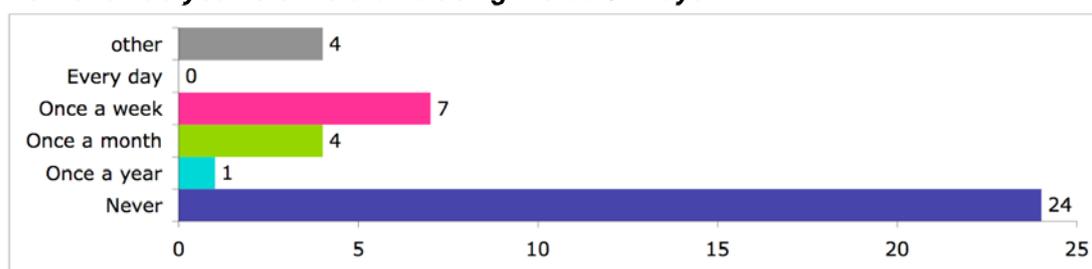
### 5.2. How often do you listen to BBC Radio 3?



The responses to this question tend to be bimodal: in other words, they cluster around frequent or very frequent listeners to Radio 3 at one extreme and very occasional or non-listeners at the other. Those who listen every day or every week total 48%; those who listen once a year or never total 38%. The middle rank, the once-a-month listeners, account for only 8%.

These results seem to suggest that Scratch attracted two contrasting audiences: a large number of habitual Radio 3 listeners – and a new audience quite unfamiliar with the station.

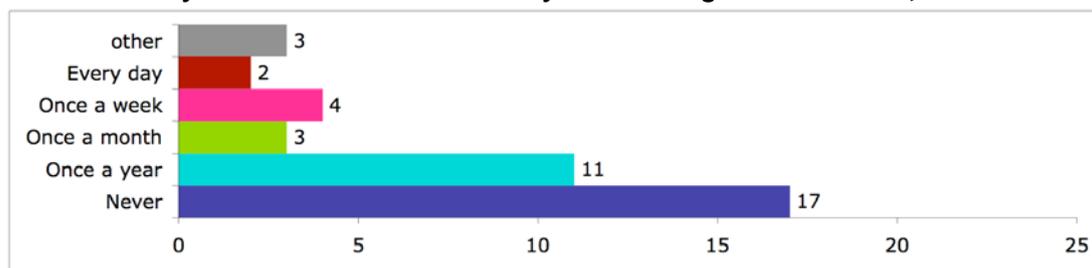
### 5.3. How often do you listen to drama using the BBC iPlayer?



In this result there is again some clustering near the extremes, but this time more than twice as many respondents said they *never* listened to drama using iPlayer (60%) as those who used the service once a week or once a month (total 28%).

The small proportion of iPlayer users suggest that the audience was not dominated by technophiles. The fact reported above, that 97% of listeners said they did not find the technology got in the way of the experience is particularly pleasing given this audience's background. (See 2.2)

#### 5.4. How often do you listen to a drama or story as a 'talking book' cassette, CD or downloaded file?



Between a fifth and a quarter of the audience (23%) listen to a drama or story as a 'talking book' cassette, CD or downloaded file more often than once a year. Over 40% never do.

This again suggests a broadly non-technophile audience (and audio-cassettes – even CDs – hardly count as 'technology' in the everyday sense of the term).

### 6. You and this event

Respondents were asked how they heard about the Scratch event, their involvement in other FreeThinking 08 events, and how they heard about FreeThinking.

#### 6.1. Where did you hear about this Scratch event?

44% said they heard about the *Scratch* event through word of mouth, a friend or a relative. Another 20% either said they had seen it in a FreeThinking festival leaflet (5 people) or mentioned a poster or leaflet specifically seen at FACT (3 people). Four respondents said they knew of it from Radio Merseyside and one from Radio 3. Three knew of it through the Friends of St. James (St. James Gardens was the venue). Two mentioned the website. Three were 'insiders' – one speaking at the festival, one a Radio Three employee, once contacted by email. There were two others who left this question blank.

#### 6.2. Are you attending other events at the Radio 3 FreeThinking Festival 08?

No	19	47.5
Maybe	3	7.5
Yes	14	35
other	4	10
Total	40	100

There were four null responses: of the remainder, over half (53%) said they had no plans to attend other FreeThinking events, while just over a third (35%) said they had. Three respondents were undecided. The proportion of people not attending another festival event suggests that *Scratch* attracted new audiences not already committed to the festival.

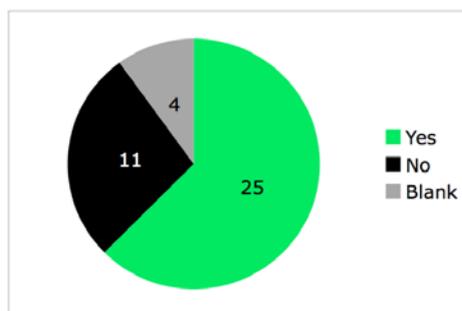
#### 6.3. How did you hear about the Radio 3 FreeThinking Festival 08?

Nearly a quarter of respondents heard about the Festival through a friend or relative. A slightly smaller number left this question blank (and another two answered "no"). Seven said they had seen a flyer or poster, of whom three specifically mentioned FACT. Three respondents cited "BBC", "R3 publicity" and "radio" respectively. Three cited the local press. Two cited the Liverpool 08 guide. Three only knew of the festival because of their attendance at *Scratch*. Friends of St. James were again cited (1) and one respondent said "Live in Liverpool, work in the Arts".

## 7. Future contact

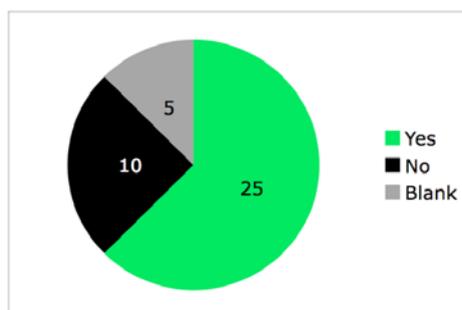
Finally, the forty respondents were asked two questions about their potential future involvement.

### 7.1. Are you happy to be contacted with follow-up questions as part of this research?



Twenty-five respondents (70% of those who answered) replied **yes** to this question. Eleven (31% of those who answered) replied **no**. Four did not respond.

### 7.2. Would you like to be informed about future experiments of this kind?



Twenty-five respondents (72% of those who answered) replied **yes** to this question. Ten (29% of those who answered) replied **no**. Five did not respond.

Especially given the normal reluctance by respondents to commit to future actions, it is pleasing that nearly three-quarters wish to be informed of future experiments of this kind.

## Summary conclusions

The primary aims of this trial were broadly two:

1. To undertake a live technical trial of locative drama with a range of participants unfamiliar with the medium, *evaluating the experience of users* and assessing the technical challenges to be overcome;
2. To trial one particular example of the genre, discovering whether it was *artistically satisfying to listeners, whether any aspect of its implementation impeded the listener's pleasure, and whether listeners were excited by the possibilities of the medium*.

This report has presented the response of forty listeners in respect of the questions indicated in italics. In the summary that follows, only non-neutral responses are recorded. For the details of each response, please see the preceding pages.

*Scratch* was a positive experience for the great majority of respondents. It is clear that it was artistically successful – ninety percent found it satisfying as a narrative or drama (see 2.1.). Seventy-five percent of the terms used by respondents about the experience were positive (see 1). Respondents enjoyed the special nature of the experience – ninety-seven percent enjoyed moving about to discover the story (see 2.3). Only six percent thought that individual scenes were too long (see 2.5). Ninety-one percent were satisfied by a wholly aural interactive experience – they would not have preferred to have visuals as well (see 2.10).

Very few listeners said that the technology interfered with their enjoyment of the drama – ninety-seven percent disagreed with the suggestion that the technology got in the way of the experience (see 2.2).

Listeners were excited by the possibilities of the medium. Seventy percent would like to be informed about future experiments of this kind (see 7.2). Ninety-five percent said they would like to experience more things like *Scratch* in future (see 2.10) and ninety-seven percent thought it was an idea worth developing (see 2.12).

Stephen Boyd Davis  
Head, Lansdown Centre for Electronic Arts  
November 2008