

Latitude Festival

Evaluation Report

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Summary

The present work is part of a post-doctoral research project, *Generic Venues: Researching the impact of science communication in non-traditional locations*¹. This in-depth public engagement research project involves a thorough investigation of best practice in science communication within 'generic' venues - locations where audiences naturally congregate and have 'ownership' of the site; spaces that are not normally associated with scientific learning. The research is taking place at the Science Communication Unit (SCU) at the University of the West of England, Bristol (UWE, Bristol) and is funded by the Fundação para a Ciência e Tecnologia¹, a Portuguese governmental institution.

This report summarises audience based evaluative data from activities of the group Guerilla Science² that took place at the Latitude Festival in July 2009. These activities were used as a case study for the research project mentioned above.

¹ <http://alfa.fct.mctes.pt/index.phtml.en>

² <http://www.guerillascience.co.uk/>

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1. Introduction

Guerilla Science is an independent group of young science communicators who are committed to take science to music festivals:

*'Guerilla Science is committed to creating relaxed, unconventional and eye-opening atmospheres to help give more people a deeper appreciation of what science is really about, and how beautiful and complex reality truly is.'*³

In July 2009 Guerilla Science hosted seven talks, performances and interactive laboratories in the Literary Salon at Latitude (Figures 1 and 2). This was the team's first visit to this particular festival, although they had previous experience of running similar events in other locations. The Literary Salon was a simple marquee area with a board outside announcing the events that would take place inside. The location was very good, near a food zone, a popular location with high rate of footfall. Guerilla Science members actively promoted their activities before they happened, by going around the festival and talking with people, letting them know what was going to happen and inviting them to participate.



Figure 1. Images of Guerilla Science activities, at Latitude Festival (Photo Credits: Guerilla Science).

³ <http://guerillascience.co.uk/page/index.php?id=95&lang=1>



Figure 2. Map of the festival layout. The location of the Literary Salon is indicated by the blue dot.

1.1. Venue

Latitude Festival is an annual music festival that takes place in Henham Park (Southwold, Suffolk). Latitude contains a comprehensive bill of musicians, bands and artists across four stages, as well as elements of theatre, art, comedy, cabaret, poetry, politics and literature⁴. There was an admission charge for the festival: £150 for a weekend ticket and £60 for a day ticket. Under 13's entrance was free providing they were accompanied by a ticket holding adult aged 18+.

⁴ http://en.wikipedia.org/wiki/Latitude_Festival

1.2. Activities

Seven separate Guerilla Science activities took place over the course of the Festival:

- **Mastering Memory:** *'An exploration of the nooks and crannies of your mind and a lesson in how to remember everything you thought you never could.'* With memory maestro Richard Bowdler and Dr Adrian Owen (MCR Cognition and Brain Sciences Unit, Cambridge University).
- **Mysteries of the Universe:** *'The science of the very strange: invisible dark matter, parallel Universes, and particles that can be in two places at once.'* With Dr Martin White (CERN, Geneva).
- **Centering on Pleasure:** *'A celebration of the neuroscience of ecstasy with new discoveries about joy, passion, and longing.'* With Dr Morten Kringelbach (Department of Psychiatry, Oxford University).
- **A Beginner's Guide to the Universe:** *'A tour of the Universe to the edge of space and time - and still home in time for last orders.'* With Dr Maggie Aderin-Pocock (Astrium Ltd).
- **Beatbox Laboratory:** *'Could science help you beatbox better? We found out with a series of live experiments.'* With Dr Aaron Williamon (Centre for Performance Science at the Royal College of Music, London) and Beatboxing expert Yasson.
- **Music on the Brain:** *'Discovering how music affects our brains, alters our moods and changes our world.'* With Dr Jessica Grahn (MCR Cognition and Brain Sciences Unit, Cambridge University) and Dr Gianna Cassidy (Glasgow Caledonian University, School of Engineering and Computing).
- **It Is Rocket Science!:** *'A critically acclaimed one-woman show that brings the history of rockets to life.'* With comedian Helen Keen.

2. Evaluation methodology

A variety of evaluative techniques were employed in order to judge the effectiveness of the Guerilla Science activities in the chosen venue. Through the application of multiple complementary methodologies a range of both quantitative and qualitative data was collected. Audience reactions to the activities were collected in four ways:

- **Exit interview** - 'Snapshot' interviews (~90 seconds' duration) took place with members of the audience across the three days of the event. 'Snapshot' interviews are specifically designed to capture short and immediate feedback from participants in busy locations. A copy of the audience interview schedule is included as Appendix I.
- **Observations** - The activities were observed by the evaluator, who took extensive contemporaneous notes on the size, composition and reactions of the audience. A copy of the observation schedule is included as Appendix II.
- **Staff interviews** - Interviews took place with staff involved in both managing and delivering the activities. Staff members were asked to provide both formal and informal feedback of their impressions of the event. A copy of the staff interview schedule is included as Appendix III.

2.1. Ethical issues

Ethical approval for the project was granted by the University of the West of England, Bristol after the submission of appropriate procedural details to the relevant Ethics committee. Participant anonymity was maintained throughout the data collection and analysis phases, and the interview

participants provided informed consent prior to participating.

3. Metrics

At this point it was not possible to have access to the total number of visitors attending the Latitude Festival 2009. Guerilla Science estimated that they reached 535 people reached during the event.

4. ‘Snapshot’ interviews results

Interviews were conducted by Margarida Sardo and Mia Kukathasan (Guerilla Science). 27 snapshot interviews were conducted over the course of the three-day festival, based on a semi-structured interview schedule and using an audio recorder. Once transcribed the interview contents were analysed to identify common themes.

4.1. What attracted visitors

Members of the public had different motivations to participate in the activities. Common reasons included:

- Saw it in the programme
- Was passing by
- I enjoy science
- It’s in the dry
- It’s something different

4.2. Overall satisfaction

The feedback for the activities was very positive. Answering the question ‘How did you enjoy this activity?’, participants responded:

‘It was really informative, especially the memory bit because I have problems remembering stuff, so it’s always good to have techniques.’

‘It was quite good, it was better than I was expecting actually.’

‘It was good, it was really interesting, engaging.’

‘It was interesting. On a scale 1 to 5 I would rate it at about 4.’

‘It was good, he was talking about something complicated, but making it very basic, so you get people engaged.’

‘I find them both [the talks] very inspiring.’

As their favourite part of the activity, participants pointed out aspects such as audience participation, a specific speaker, how simple and accessible the event was and the fact that ‘real’ science was involved.

The aspect mentioned most frequently as participants’ least favourite was the fact that the music outside was too loud and that they couldn’t hear the speaker or audience questions properly. Some participants also identified that having previous knowledge of the subject was their least favourite

part of the activity. A number of members of the public (n=6) were unable to mention a least favourite aspect.

4.3. Purpose of the activity

During the interviews, audience members were asked what they thought the purpose of the event was. Common themes and specific comments are summarised in Table I.

Table I. Participants' perceptions of the purpose of the activity.

Common themes	Example comments
Educate about science	<i>'A place and chance to learn about science.'</i> <i>'it's probably a good audience to try and educate them about science.'</i>
Diversity at Latitude	<i>'Something like Latitude is not just about the music, you get lots of different types of individuals here.'</i> <i>'To make this all experience of Latitude, this diverse interest in mixed and it's a nice addition.'</i>
Mind stimulation	<i>'To give people other things to think about.'</i> <i>'When you stimulate your mind with art, ideas, I think that is the spirit of the festival. So it fits quite nicely'</i> <i>'To get people thinking.'</i> <i>'Just makes you think. Gives you another angle, another way of thinking about something.'</i>
Engagement with science	<i>'To encourage everyone to take interest in science, especially the sort of deep questions.'</i> <i>'To make young people appreciate science and want to be scientists.'</i>
Doesn't know	<i>'I don't know! I was rather surprised to find it here, I didn't expect it to be here.'</i> <i>'I don't know. I like to think it was to educate people, but I don't think I know.'</i>
Other	<i>'To make people understand more about why this sort of research happens and how [it] can affect people's lives.'</i> <i>'Entertainment and information.'</i> <i>'It brings science to life a little bit.'</i> <i>'To make it fun.'</i>

4.4. Attitudes towards science

The interviewed participants had different feelings and attitudes towards science: some found it very interesting and important, while others thought it was boring. Nevertheless, the bulk of participants was positive towards science (n=17) and only 3 participants found science to be boring or something they did not like.

Answers to the question 'How do you feel about science more generally?' can be grouped into 6 overarching categories:

- It's exciting / amazing
- It's part of my life
- It's very interesting
- It's important
- I love it / I like it
- I don't understand it
- It's boring

Some specific comments:

'I think science is something that is quite exciting, quite amazing really. I struggled quite a lot when I was at school, so I really only got an appreciation when I got older.'

'I use science everyday, so it's part of my life.'

'I'm an ignorant and I want to learn more.'

'It's interesting, we are both a bit of nerds, so we find science quite interesting.'

'I generally don't like things I don't understand. Science always was kind of tricky for me but I enjoy it.'

'Science was pretty boring at school.'

'I'm very interested and became very interested in the last years.'

'I'm generally interested in science. We love the Science Centre in Glasgow, we are members and we take the grandchildren there.'

4.5. Learning

The vast majority of participants (74%) stated that they learnt something from the activity, while 13% felt they refreshed some concepts they already knew. Another 13% felt they did not learn anything new with this event. When asked if they had learnt something from the activity, comments included:

'I think I have heard most of the things before, but it's always nice to see people talking about it, especially in a group. Different ways of approaching the subjects.'

'Yes, I guess some of the connections, why the brain works, things like that.'

'To be even more inquisitive than I already am.'

'I learn that it sounds like there is new technology to mapping brains.'

'I wouldn't say I learnt, I would say I enjoyed watching it.'

'I think I refreshed some memories!'

'I learnt plenty of new things. Plenty of particles that I have heard the names of, but had no idea what they were for.'

4.6. Past events

When asked if they 'ever participated in a science-related event like this one', there was almost a balance in participants' answers: 46% stated they have already participated in such events, while for 54% this event was the first science-related activity they have ever participated.

It can be said that this event attracted participants that are already engaged with science, but also attracted even more participants that never had contact with science-related events.

4.7. Future events and recommendation of the activity

All the participants said that would like to participate in a similar activity again in the future. They would also recommend it to others. Some people expanded their answers:

'Yeah, more lectures, I'm really interested in that.'

'Yeah, in fact I'm going to recommend it to my housemates.'

'I would recommend it, I thought it was really good.'

5. Staff interviews results

As part of the evaluation process, 2 staff members were interviewed, as well as 3 researchers involved in delivering the activities. Key themes that emerged included:

- **Enjoyment:** all members interviewed enjoyed being involved in the activities.
- **Motivation:** staff and researchers interviewed like to communicate and are interested in taking science to the general public. More specific motivations included:

'I was quite interested to see how to extend my interaction with the public. It helps frame the scientific questions that we ask sometimes. To find out what the public are interested in, the social questions they have.'

'I have this desire to tell people about what I know.'

'It's nice to have something that people can relate to, in an informal context and that [they] can enjoy as well.'

- **Purpose:** in the opinion of the interviewees the purpose of the activity was:

'Engagement with the public in science and raising awareness how art and sciences can potentially interact.'

'I assumed the purpose was to increase the profile of science. It was also to convey science to people in a fun way that they could perhaps digest a bit easier.'

'To educate the public on matters of science in an informative matter, and give them a chance to chat to scientists.'

'To encourage people to think.'

- **Visitors' reactions:** staff members were very pleased with the audience numbers, reactions and questions and felt participants were very interested in the activities on offer. The staff involved also felt it was easy to engage the audience with the activities.
- **Favourite aspect of being involved:** the contact with the public was the most valued feature mentioned by organisers and researchers. Particular aspects included being able to chat with members of the public, the establishment of a platform for both scientists and non-specialist audience to engage with each other and the opportunity to talk to the public.
- **Least favourite aspect of being involved:** staff tended to focus on specific logistical details such as a specific equipment malfunction and administration work / bureaucracy. One interviewee could not point out a least favourite aspect, as he enjoyed it all.
- **Improvement:** members of staff and presenters involved provided the following comments about aspects they thought could be improved:

'To script the activity a bit more and [there] probably could have been a rehearsal.'

'I don't think I would make any changes.'

'More speakers and, with more funding, be able to provide more materials, more hands-on stuff.'

'A more diverse range of activity types.'

'It was quite hard to work with the background noise. That is the only thing I can say for improving.'

'The physical arrangement of the room.'

- **Future participation:** All members interviewed would like to participate again in similar activities.

6. Successes and challenges

6.1. Successes

- Participants felt very comfortable while engaging with the activities and with the speakers. The overall feeling was that they wanted to know more and had a very active approach to the experience.
- People that wanted to actively participate did so without any need for encouragement. There were always questions and comments being made.
- Many participants came on purpose for the activities (they arrived at the venue before the event and waited until it started). However a large proportion of the audience were attracted to the activities whilst they happened to be passing by, and then decided to stay.
- Many of the researchers involved in the event were able to develop their skills and experience in engaging with the public. They were very keen to participate in similar activities again in the future.

- Most speakers were very good, being active throughout the activity and engaging during the presentation. They were also very keen on involving the public participants and most of them used language that was easy to understand.
- Activities with a practical element, where the audience could actively participate, were very well received by the participants, and high levels of engagement were observed.
- The activities attracted a wide range of participants: families with young children, couples, and groups of friends, as well as more mature individuals.
- By attending this event, a high number of participants had their first contact with science-related activities.

6.2. Challenges

- Many people didn't understand the event: what was going on and what was happening. A visual display explaining, in a simple way, what Guerilla Science is and what is involved would be very helpful in clarifying participants' expectations.
- The layout of the room was not always appropriate to the activities, especially during the first day. There were a few couches facing different directions, however participants usually prefer to face the speaker and the presentation slides. The Guerilla Science team spotted this problem on the first day and rectified it, which improved the overall layout of the room.
- It would be very helpful if the remaining activities could be announced at the end of a talk (and not just the next activity). This could be made, for example, using small flyers that people could take with them, so they would not forget about the times and activities.
- Audience members were clearly frustrated at having to stand for 10 – 15 minutes while waiting for problems with the equipment to be solved. All the equipment involved in the activities should be tested before the beginning of it.
- Both staff delivering the talks and audience members mentioned the background noise and other sound problems. This issue can be improved in future events, either by trying to get a location further away from the main music arenas, or by scheduling the activities in a way that they do not coincide with the bigger concerts. Both options were suggested by staff involved in delivering in the event.

7. Conclusions

Latitude festival is not just a music festival, it includes a variety of activities, from literature to poetry, art, comedy and theatre. Members of the public were generally very surprised but very pleased to find elements of science. The activities organised by Guerilla Science fitted very well with the general programme and audience. In a venue like this one, where people pay an entrance fee, activities such as the ones performed work very well and have a great potential for success. People want to be entertained and are attracted to anything that looks different.

The evaluation shows that there is a wish for more activities like these ones, and this view is shared both by the participants and the staff involved in the activities. The event was overall very successful and was able to engage with a high number of members of the public, who were very pleased with it.

APPENDIX I - Snapshot Interview Schedule

Thank you very much for agreeing to participate. It won't take very long and I'd appreciate it if you could be as honest as possible regarding what you think about this activity.

- What attracted you to this event today?
 - Where you walking past, happened to be here or did you learn about it and came by?
- How did you enjoy the activity?
- What was your favourite aspect of the activity?
- What was your least favourite aspect of the activity?
- What do you think the purpose of this activity was?
- Did you learn something new today?
 - What?
- How do you feel about science more generally?
- Have you ever participated in a science-related event like this one?
- Would you like to participate in this sort of event again?
- Would you recommend this activity to others?

Thanks very much for participating!

APPENDIX II - Observation Schedule

Location: _____

Date: _____ Time: _____

Record the following observations over a 10-15 minute time window:

General Problems? (accessibility, logistics, weather, scheduling, etc)			
Audience Males			
Audience Females			
Audience Type (size of groups, multi-generational, age range?)			
Staff delivering the activity: (Age, appearance, confidence, enthusiasm)			
Activity Type: How long does the activity take?		Count Observers:	Count Participants:
Engagement: (How were they attracted to the venue? Do they get involved or just observe? (watching, asking questions, touching equipment, taking brochures))			
Dwell time: (How long are they staying?)			
Group dynamics Are they talking to each other? Is conversation about the activity? Are they working together or as individuals?			
Comments made or questions asked: (lecture / discussion?)			

APPENDIX III - Staff Interview Schedule

Thank you very much for agreeing to participate in this interview. It won't take very long and I'd appreciate it if you could be as honest as possible regarding what you think about this activity.

1. Did you enjoy participating in this activity?

Why?

2. What motivated you to participate in this event?

3. What did you think was the purpose of the event?

4. How did the visitors respond?

5. How easy or difficult was it to engage the audience in this activity?

6. What was your favourite aspect of being involved in the activity?

7. What was your least favourite aspect of being involved in this activity?

8. What sort of feedback did you get from the audience?

e.g. did any of them approach you with questions or comments?

9. How would you improve this activity?

10. Would you like to participate in a similar event again in the future?

Thanks very much for participating.