Earth Echoes An Evaluation

Health and Wellbeing through active and cultural engagement Cultural Strands of the 7th International Conference on UNESCO Global Geoparks

53

Daisy Sutcliffe – November 2016

A Barne Last

#TheRockConnectUs-Introduction to the Project

Earth Echoes was performed in front of 700 international delegates, a global audience via a live stream and 500 members of the community from the English Riviera UNESCO Global Geopark; on 27th September 2016 – the performance marked the opening of the 7th International Conference on UNESCO Global Geoparks.

Geology brought together a diverse group of people and organisations to enable the creation and performance of Earth Echoes. Professional musicians and arts organisations, a local authority, a team of professional artists across a range of disciplines, a group of young composers, the English Riviera UNESCO Global Geopark and, most significantly, a large cross generational group of people, 8 to 80 years old from the local community.

#TheRockConnectUs...

Like geology, in many ways for the participants and performers, the creative process, the process over time of making Earth Echoes, is as important, if not more important, than the piece that has been made, this performance that we offer. Within that journey, people have changed. Friendships were made, layer by layer over time, minds broadened, new knowledge gained. Human beings who once were strangers across the generations talked, played and shared together. Lives have been changed, for some in the tiniest way, for some in enormous as yet unfathomable ways. These things are significant.

And now, #TheRockConnectUs again...

We offer you this unique collection of Earth Echoes materials in a spirit of sharing and with the certain knowledge that at this time in the world there is more that connects us together than the numerous things which too easily seem to separate us. We hope you enjoy our offer. Only time will tell.

#TheRockConnectUs....

We hope our collection of materials inspire you in your own journeys of discovery.

You will find the rest of the materials **here** including:

- Our Earth Echoes Learning Pack
- A short documentary film revealing the process in /behind Earth Echoes
- The Score of Earth Echoes
- The Script of Earth Echoes

Do let us know how you use the materials

#TheRockConnectUs.....

What is a UNESCO Global Geopark?

UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development. A UNESCO Global Geopark uses its geological heritage, in connection with all other aspects of the area's natural and cultural heritage, to enhance awareness and understanding of key issues facing society, such as using our Earth's resources sustainably, mitigating the effects of climate change and reducing the impact of natural disasters. By raising awareness of the importance of the area's geological heritage in history and society today, UNESCO Global Geoparks give local people a sense of pride in their region and strengthen their identification with the area.

For more information about the UNESCO Global Geopark programme click **here.**

The English Riviera Global Geopark

In September 2007 the English Riviera received international recognition for its rich geological, historical and cultural heritage, it became one of just 57 areas around the world to endorsed by UNESCO and welcomed into both the European and Global Geopark Networks. Since then the Global Geopark Network has grown and as of Sept 2015 there are now 120 UNESCO Global Geoparks.

Situated within the stunning, rolling hills of South Devon, Torbay's geology has created the beautiful coastline of today, which fundamentally links the rich diversity of landscape with wildlife, people and culture. Undeniably, the geological tale behind the English Riviera Geopark is quite spectacular and one of extremes. From a seascape bathed in the warm and beautiful tropical seas of the Marine Devonian to a landscape of arid, barren Permian desert and from our earliest relatives, living in caves, to modern civilization. The Geopark's outstanding historical contribution, both in terms of the development of geological and archaeological sciences is astounding, from the Huttonian Theory, to the naming of the Devonian Period by Sedgwick and Murchison and even Pengelly's discoveries influencing world wide public opinion as to the antiquity of man.

The shape of the Bay provided the naval fleet safety during times of crisis and thus was a catalyst for the building of the Napoleonic Forts while its sheltered natural harbours led to the growth of what, at one point, became the UK's largest fishing port. The beauty of the area influenced the early development of a tourism industry thus instigating the requirement for the exploitation of its geological resources in the form of extensive limestone quarrying, in addition to the marble and terracotta industries.

For more information about the English Riviera Global Geopark click **here.**

The Seventh International Conference of the Global Geoparks Network

The Global Geoparks Network (GGN), of which membership is obligatory for UNESCO Global Geoparks, is a legally constituted not-for-profit organisation with an annual membership fee. The GGN was founded in 2004 and is a dynamic network where members are committed to work together and exchange ideas of best practise and join in common projects to raise the quality standards of all products and practises of a UNESCO Global Geopark. The international conference takes place every two years and has previously been staged in China (2004) Northern Ireland (2006) Germany (2008) Malaysia (2010) Japan (2012) and Canada (2014). The seventh conference took place in September in Torquay and had a theme agreed at the conference in Canada of 'Health and Wellbeing through Creative and Active Engagement'. This was designed to encourage exploration of how wellbeing can be measured beyond the traditional economic indices of GDP.

The Evaluator and the Evaluation Brief

This report was commissioned by Torbay Council on behalf of the English Riviera Global Geopark. It is written by researcher, facilitator and producer, Daisy Sutcliffe who was asked to evaluate Earth Echoes' impact on participants' health and wellbeing, in keeping with the conference theme:

'Health and wellbeing through creative and active engagement'

Before I started my PhD in 2013, I managed a ground breaking arts programme for the Jurassic Coast World Heritage Site where, between 2008 and 2013, I forged and managed partnerships and collaborations between the World Heritage Site Partnership and arts organisations. This was achieved by brokering and supporting 34 creative projects that helped to manage the Site in some way. This was a large scale action research project – the Jurassic Coast was the first natural World Heritage Site in the world to attempt such an integrated model of working with the arts sector. The long term outcome of the arts programme is that the Jurassic Coast management plan incorporated the arts as a cross cutting approach to the Site's management, advocating collaboration with artists wherever possible.

During the time that I spent working as part of the team, many questions

arose for me around the development of the United Nations Educational Scientific and Cultural Organisation (UNESCO) and the United Nations, the World Heritage Convention and other international conservation instruments within UNESCO such as the Global Geoparks programme; neo-colonialism, arts and aesthetics, science and creative practice. What are we conserving, how, for who and to what end? I am exploring these in more detail through my PhD with the School of Geographical and Earth Science at the University of Glasgow.

My research into Earth Echoes is undertaken as an independent researcher, and the views expressed are my own, drawn from my observations and the data that I have collected. My initial conversations to clarify the brief made it clear that this would not be a piece of advocacy, but a piece of independent research.

I would like to thank everyone involved in this project. It has been a great privilege to travel the journey with you and be entrusted with very personal stories and insights. I hope that this report does them justice. Making such a welcoming environment to create the Opening Ceremony for the conference in, and the performance being received with a standing ovation is testament to the hard work and commitment of all.



Introduction to health and wellbeing and arts

Many thousands of arts and health and wellbeing projects have taken place in the UK and around the world over the last few decades, and much research has been done looking at the relationship that the arts have with health and wellbeing. The positive impacts on health and wellbeing of both participating in and being an audience member for the arts are well recognised and documented. A quick google scholar search on the topic brings up just over 100,000 peer reviewed papers. There are two dedicated peer-reviewed journals: Arts & Health: An International Journal for Research, Policy and Practice and The Journal of Applied Arts and Health, and now even an Oxford Textbook for Creative Arts, Health and Wellbeing.

During 2013 and 2014, The University of Glasgow, Durham University, Canterbury Christchurch University, the University of Nottingham, the University of Exeter, the University of the West of England, the University of Derby, the Centre for Medical Humanities, the Public Engagement Foundation and the Lankelly Chase Foundation came together with practitioners in an Economic and Social Research Council project to assess research into the relationship between the arts and health/ wellbeing in the UK. At the end of four seminars, a national network, the National Alliance for Arts, Health and Wellbeing, was set up and the lead researchers produced a paper which is a good introduction to the field:

Theo Stickley, Hester Parr, Sarah Atkinson, Norma Daykin, Stephen Clift, Tia De Nora, Sue Hacking, Paul M Camic, Tim Joss, Mike White & Susan J Hogan (2016): Arts, health & wellbeing: reflections on a national seminar series and building a UK research network, Arts & Health: An International Journal for Research, Policy and Practice

The authors point out that there has been a tendency over the last thirty years or so towards evaluative research aiming to build a data set to evidence the direct positive impact of the arts on health and wellbeing, and that while this is growing steadily, "it was recognized that there are dangers of overlooking other forms of research, not least, the conflation of research with advocacy and the obscuring of more critical theories and perspectives."

Pertinent to all research in this field, Tia de Nora from the University of Exeter argued that there are significant theoretical challenges that face research into the arts and health and wellbeing; primarily that when we interrogate what we mean by health and wellbeing, and therefore illness and disease, we find that this isn't a fixed thing waiting for things to affect it. As with everything else in life, the experience of it changes moment to moment, day to day, and year to year, and it is very hard to isolate activities, such as a relatively short term arts project as being causal.

It is in this context that I carried out my small piece of research into the health and wellbeing impacts of Earth Echoes.



Earth Echoes

Like the sedimentary rocks in the Geopark, there were many layers to this project. Within the English Riviera UNESCO Global Geopark, geology has been celebrated through performing arts including dance, music, song, story and drama for over six years. Since 2010, Hugh Nankivell and the GeoCollective have been engaging communities in artistic journeys, workshops and performances inspired by Torbay's geological narrative. They have travelled to previous GGN conferences in Unzen, Japan and Stonehammer, Canada to share their work with the Global Geoparks community and collect sounds from across the world. Earth Echoes is the culmination of this work; a large scale ambitious project anchored in the stories illuminated by the rocks of the English Riviera Global Geopark and Geoparks all over the world, and the communities that live on them.

Guided by a team of geologists, performers travelled through time and space and into the bowels of the earth. They discovered how the continents form and change and tracked life from earliest earth to the complexity of the life we know today. The focus was on the new geological epoch, the anthropocene, that was formally proposed in August during the project, and is named to draw attention to the human impact on, and human responsibility for, the future of life on earth.

Evaluation started in February 2016 with the agreement of an evaluation framework which laid out the aims, methodology and scope of the research. Performing arts sessions started in March, with a small group of people interested in helping to write and compose the music for the show. There were 9 sessions in this stage of the project and 18 people involved; eight as



emerging artists and 10 as participants. This was followed by a rehearsal and devising stage beginning in June and involving 77 people, 12 of whom were emerging artists. This group met 27 times over the course of four months leading up to the performance on September 27th.

During the spring and early summer there were also 16 outreach sessions in school and community settings designed to encourage people to get involved. These sessions involved seven emerging artists and 716 participants. In addition to this, students from the South Devon College met a total of 84 times to work on film and video, costumes, live feed, and theatrical make-up. Finally, in this part of the project, the final days of production were supported by students from The University of Exeter's Applied Theatre degree course who used the project to gain practical knowledge of their subject.

The performing arts layer of the project was supported by a visual arts project involving 900 participants which aimed to create original work inspired by the Geopark to dress the conference spaces with banners, bunting and upcycled furniture. The up-cycling workshops ran over the summer at Lupton House, led by artist Amanda Flemming. Sofas, chairs, lamps and other furnishings were lovingly up cycled over 10 weeks by 20 members of the community. Artists Sarah and Mark Bell held a series of workshops in local schools and at the annual Children's Week festival whereby children were introduced to the concept of the Geopark through finding 'their inner cave artist'. These workshops saw the creation of the bunting. Also led by artists Sarah and Mark Bell, the final strand of work saw the creation of banners which adorned the main conference space at the Riviera Centre. This work as well as decorating the space also became the starting point for the design of all of the conference materials.

Methodology

Given the limited resources available and the fact that the project was developed and delivered by arts rather than health professionals, it was agreed that we would look only at its impact on wellbeing as this would be less intrusive than asking people about their health. Improved wellbeing is clearly linked to improved health by a 2013 study by the London School of Economics¹. This study also made the case, alongside the Social Impacts Taskforce², for using subjective rather than objective data, as objective measures can miss key data such as isolation decreasing while levels of loneliness persist or a healthy life expectancy increasing while satisfaction with health is reducing.

My evaluation focused on the composition group and the group that went on to devise, rehearse and perform Earth Echoes at the Opening Ceremony of the Conference as these people had the longest engagement with the project. The primary aim for the project against which the participants' journey was measured was:

To improve the health and wellbeing of those taking part in the project

I employed four basic methodologies, building up a picture through 'statistics and stories'.

Statistics: Questionnaire

The first methodology was a questionnaire based on 14 standard questions in the Warwick Edinburgh Scale and four standard questions from the Office for National Statistics measures of wellbeing, both widely used to measure subjective wellbeing³. Participants were asked to fill this in before starting their first session with the project, again around half way through, again just after the show on September 27th 2016, and a final time between October 19th and 26th 2016.

Stories: Case Studies

In addition to the questionnaires, twelve people volunteered to be case studies who I interviewed at least once during the project, using a semi-structured interview technique. A conversation was based around five standard questions⁴ and additional questions that became relevant as we talked.

Statistics and Stories: Participatory Action Research

I also gave participants the option to do some participatory action research (PAR) with me where they could help to define what was measured and how, and, although the group only met once⁵, it produced some really useful ideas, and meant that as much as possible, the research was done with the participants rather than to them.

With the help of the creative team and the PAR group, I assembled some visual and creative data including photographs of the sessions, and evaluation exercises, writing exercises done during the composition section of the project, and a writing exercise led by one of the group in July in which everyone was given one minute to write down how the project made them feel. You can

I Fujiwara, D. (2013). A general method for valuing non-market goods using wellbeing data: three-stage wellbeing valuation.

² Adding Subjective Wellbeing to Evaluations – Why and How? (2016) Social Impacts Taskforce

³ Please see appendix I for a copy of the questionnaire.

⁴ Please see appendix 2 for the standard questions that were used.

⁵ The group decided after one session that they couldn't make enough time available to make participatory action research a regular exercise in addition to their voluntary commitment to the project

see some of these quoted throughout the report. [I'll send these through in a separate word document with the ones that I want to use in brown – can you add these in as makes sense with your design, a more stylish version of a speech bubble perhaps? Also see other quotes for case studies – need to define which came from which exercise somehow through your design]

Stories: Observation

In addition to being available on the phone and by email, I attended one composition session, three rehearsal sessions and the final dress rehearsal and show, and talked generally to artists and participants whilst there, also taking photographs to record the process. The PAR group also sent photographs through to me of some of the sessions that I had missed, with their observations about the sessions.

Limitations

All of these methodologies have limitations in addition to limited resources.

• The quantitative data is only indicative as the project was only a small part of the lives of the participants and they have been quick to tell me that there were other factors that should be considered in their answers on particular days.

- There was a relatively small sample size the total number of people engaging with this part of the project was 77 of which only 28 filled in questionnaires at the beginning and either on show day or in October which was needed for a comparison like for like.
- It was not possible to do a control.
- The interviews were self-selecting rather than randomized, which means that it is unlikely to be representative of the whole group.
- Participatory Action Research was not built into the design of the project which made it an additional commitment for those members of the group who volunteered to get involved.
- It is impossible to observe everything that happens in a project, and it is always from the observers' viewpoint.

Despite these limitations, it is possible to gather some data that helps to paint a picture of the experience of the project and its impact on participants to some degree.





Statistics

Questions I to 14 on the graphs below show the difference in participants' answers on the Warwick Edinburgh Scale, which asks people to answer on a scale of 1-5, I being low and 5 being high, questions related to wellbeing. Questions 15 to 18 on the graphs relate to the ONS questions, which ask people about their wellbeing on a scale of I to 10. The last of the ONS questions asks about levels of anxiety, so, with the exception of this question, improved wellbeing will show an increase on the graph.

Graph I shows the difference between the answers that participants gave as they arrived at the project for the first time and those that they gave just after they performed. You can see that there was an increase in all of the questions with the exception of the third ONS question, "Overall, how happy did you feel yesterday?" which showed a statistically insignificant (4.6%) decrease. There is also a marked increase of 61.2% in the level of anxiety that participants indicated, the final question. Given that they had spent the day before they filled out the form doing a seven hour technical and dress rehearsal as well as their normal activities, I think that this is unsurprising – the last two ONS questions specify how were you feeling yesterday, and graph 2 shows the longer term impact of the project where these trends are not repeated.

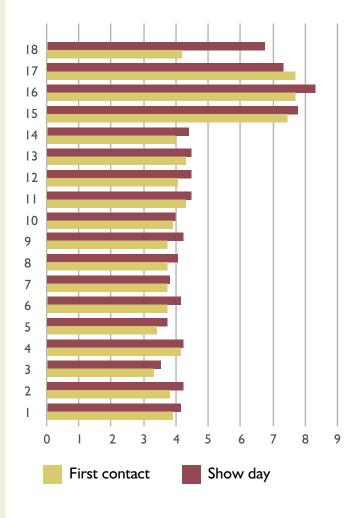
Returning to graph 1, the average increase was only significant for 10 of the 18 questions.

On the Warwick Edinburgh Scale these were:

- I've been feeling optimistic about the future
- I've been feeling useful

Graph I

Difference between answers from first contact and show day - 14 questions Warwick Endinburgh then 4 questions ONS



- I've been feeling relaxed
- I've had energy to spare
- I've been dealing with problems well
- I've been feeling good about myself
- I've been feeling close to other people
- I've been able to make up my own mind about things
- I've been feeling loved
- I've been feeling cheerful

The ONS question that showed a significant increase was "Overall, to what extent do you feel that the things you do in your life are worthwhile?"

The questions that showed an increase on the Warwick Edinburgh Scale, but less than 5%, so not statistically significant were:

- I've been feeling interested in other people
- I've been thinking clearly
- I've been feeling confident
- I've been interested in new things

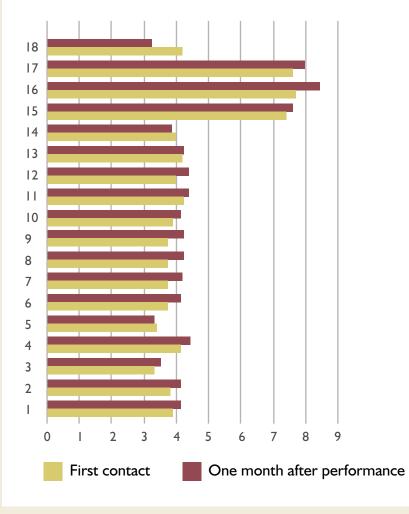
The ONS question that showed an insignificant increase of less than 5% was "Overall, how satisfied are you with your life nowadays?"

Although I find some of this surprising: according to other project evaluations I would have expected confidence to grow and possibly relaxation to diminish for example, it is perhaps unsurprising that with 3-10 hours per week absorbed by the project and getting to know the other seventy-six participants, that interest in other people or other new things was not significantly increased.

Graph 2 shows the difference between the answers that participants gave as they arrived at the project for the first time and those that they gave about a

Graph 2

Difference between answers from first contact and one month after the performance 14 questions Warwick Endinburgh then 4 questions ONS



month after the performance and project were over. Here again ten of the eighteen questions show a significant increase. On the Warwick Edinburgh scale these were:

- I've been feeling optimistic about the future
- I've been feeling useful
- I've been feeling interested in other people
- I've been dealing with problems well
- I've been thinking clearly
- I've been feeling good about myself
- I've been feeling close to other people
- I've been feeling confident
- I've been feeling loved

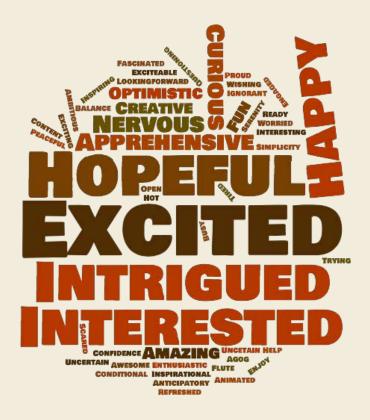
Not significant

- I've been feeling relaxed
- I've had energy to spare
- I've been able to make up my own mind about things
- I've been interested in new things
- I've been feeling cheerful

The ONS questions all showed movement in the direction of better wellbeing, but only two were significant. These were the same two as before, with anxiety levels now down by 21.5% from the beginning of the project. I would question whether this was a direct and ongoing impact of the project, and suggest that perhaps it was natural to be more anxious than normal on the first meeting of a new project, even though the question asked "how anxious were you yesterday?". The fact that these questions are designed to be asked in person and were in this case asked on a form might have also skewed this

particular result as it was the only one where a high number indicates a lower wellbeing, and being the last on the survey it may not have been read as carefully as I would have hoped.

The final question on the questionnaire requested three words that summarised how the project made the participants feel. I have turned these into word clouds. Word clouds represent lists of words according to how many times the word is repeated, so the larger the word here, the more people wrote it to describe how the project made them feel. This one shows the words from the composition group.



You will note that excited comes up a lot at this stage of the project, alongside words like interested.



This one is from just after participants had performed on September 27th



The words that people used to describe their feelings here have changed substantially from those at the rehearsal stage of the project, with happy, relieved, proud and elated now being most widely used. This is similar to the final one from October, with happy and proud featuring again alongside satisfied, nostalgic and grateful, indicating that the performance and project are now in the past, and bring back pleasant memories.



There are many papers about analysing word use against subjective wellbeing⁶, many looking at social media, and although there are ongoing debates about

⁶ For example see Schwartz, H. A., Eichstaedt, J. C., Kern, M. L., Dziurzynski, L., Lucas, R. E., Agrawal, M., ... & Ungar, L. H. (2013, June). Characterizing Geographic Variation in Well-Being Using Tweets. In ICWSM. Kramer, A. D. (2010, April). An unobtrusive behavioral model of gross national happiness. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 287-290). ACM

what can be classed as 'positive' or 'negative' words, it is clear that words indicating engagement can be linked to higher wellbeing, and those indicating a lack of engagement, such as boredom, are linked to lower wellbeing. I suggest that these words indicate a high level of engagement and therefore high subjective wellbeing throughout the project. It is hard to get a measure of the difference in wellbeing over time using this methodology, but the words used speak for themselves to a degree.





Case Studies

Several themes emerged during both general conversations with the cast during my visits and through the interviews that I did with people who volunteered their time to support this research. Firstly, was the professionalism and generosity with which the project came together:

"it just makes me feel relaxed and really at home, you know there's nice people and you can always interact with them, you can ask them anything, and they'll give you a great answer and yeah, nobody's tense or anything, and it's all really relaxed and lovely... It gives me a good wellbeing spiritually, it gives me empowerment, it says to me, hey I've met these great people through this, I'm going to do the best that I can for this, I'm going to really push myself for this and really do great at this and reap the rewards..." (male aged 17)

"I think there's a very positive atmosphere here, you know very supportive, and they [the leaders] just want to put the show on. It can be a problem with some drama groups because you get egos, but there's none of that here, because we're all learning together here, we're all learning, I'm more comfortable with performing but I'm not so comfortable with singing, so we're all learning something together, helping each other, which I think is very important, and something I want to see more of in Torbay, so it would be nice

if we can somehow carry it on" (Male aged 64)

"I think the ending [of the show] that's why it's so poignant because actually it's beautiful and horrendous at the same time. It's that ambiguity that's difficult, and that's why, it's just been so different from anything else I've been involved in, it's just so exciting, and everybody is so lovely, it's been a fantastic group to work in and Hugh is just amazing, I mean the music is beautiful and it's gorgeous to sing it. It's been a very emotional thing and tomorrow's going to be horrendous [finishing the project]." (Female aged 60)

Secondly, that people were pleased to be a part of something:

[This project] makes me feel like I'm a part of something, because I'm more used to being alone or just in a little group with my friends, and it makes me feel big, more proud of myself, more confident to do more things, because I'm not a very confident person being honest... the thing is, some people may be caused by depression, like sit in the dark all the time, I sit in the dark quite a lot by myself on my laptop just listening to music, and here it's like, it's helped me to not need to sit in the dark, just get out there, you know as a normal person. (Female, aged 12)

"Yeah, it's quite important to have something to look forward to, to look ahead, and you're part of a team, and it's important that you're there. And that's something I miss now I don't work, well you probably know, a lot of men have this problem when they leave work they lose their position, they don't have status any more, and you're a bit lost really. So it's nice to, and also I was a manager so I was needed, people asked you things, relied upon you, you needed to be there, but no-one cares where you are, so at least when you're part of a team you've got to be responsible and committed, and people rely upon you, they trust you" (Male aged 64)

"I always wanted to act so it's it opens up things and I've realised that I'm a bit

more, not relaxed, but I've started to clean the flat more and shower, so it has a knock on effect, and I suffer with clinical depression" (Female aged 70)

Thirdly, many people commented, especially towards the end of the rehearsal period, that they had found it very challenging, both physically, and in terms of the amount of time and energy that it had demanded from them and the mixed sense of dread and relief that it was coming to an end. This ran across all age ranges:

"I think that in a couple of days I'm going to be feeling desolate that it's not there any more because it has taken a huge amount of time. I have got other things that are going to fall into that time, and I'm hoping that I can join the Choral Engineers. But I do think it's going to feel a bit like having your leg chopped off because it's for me been all consuming." (female aged 65)

"I'm going to be sad that it's ending, then I'm going to be quite happy that I did it because it's quite hard to speak out loud. I wasn't nervous about that, but I will be nervous in front of everyone.

And I don't want it to end... But then again no rehearsals, I'll get to go to gym again. And also not having to wake up." (two males aged 8)

"I have found it very very stressful, but although not entirely in a good way, I have found parts of it enjoyable, I hope that I've made new friends, I hope that we might change the world a bit, and if we pull it off tomorrow, I know what a wonderful feeling that is to get to feel that yes we did a good job, there's always this terror that you're going to be the person who messes up big time and if you don't there's a feeling of euphoria that somehow you didn't" (Female aged 65)

Finally, that people felt relieved at talking about the theme of the project, it provided a space for expression about themes that many of the participants found deeply concerning. People also commented that they had been given

the opportunity to do something about it through the project and its reach:

"I think that this has been one of the most incredible things and I've been involved in lots of things and this has taught me so much about things that I only knew the periphery of. The sort of, every week we come, the thing has developed and grown, and every time I go home and think, aah, that's what that means, in terms of the geology, and just what the whole thing's about." (Female aged 60)

"Yes, [talking about the environment and the fossil record] has made me a bit depressed actually the whole thing. Because things that we're singing like 'where are we going?' and 'please help us', I've been doing that all my life, I mean I've been saying to myself where are we going? and why are we here? And all these questions, so it taps into deep stuff. So I think it has affected me actually. So it's affecting on a personal level as well as a social level

In what way?

... I don't think I could give you a polar [answer], I can't say whether it's better or worse, I think that it's opened up stuff" (Female aged 70)

Yeah! Yeah absolutely [it feels good to be doing it]! Because it matters. You know it's not some you know singing and dancing stuff, you know happy clappy making people cheerful, it's making people think, and the ripples in the pond. All the people coming here [conference delegates] are coming from a very big pond, and you never know, we'll never know what impact we might have, but some things will be different because of it and that's the best we can do. (Female aged 63)

One female participant in her 60s talked especially emphatically about how the project had been a positive impact on her health and wellbeing:

Interview on 24th July

I always feel better when I leave than when I arrive. I'm quite anxious at the moment – waiting for results from tests that I knew would come up this summer, and still waiting, so things which bring me joy and engage me and mean that I'm with other people enjoying themselves gives me something to think about. The more demanding it is the better, and so being a human [character] who is singing and moving and even saying a few words all means that it takes up more of my time and attention and that is very welcome, so it's intellectually stimulating as well as emotionally nourishing.

...I'm fitter than I was – yes it's a direct result of this – I do Tai Chi, but this has improved my stamina. I also have M.E., so I have a limited amount of energy that I can use and when I started this I couldn't get through the first Sunday rehearsal without sitting out some of the time, but now I can get through them, partly because I'm stronger and partly because of the energy in the room which feeds me.

... It has been perfect timing in so many ways - everything about it is perfect.

The participant added in October "The whole project steadily increased my energy levels, feelings of being connected to other people, zest for trying new things, and positivity about the future. I am amazed and delighted to find that these have not diminished since the performance was completed."

Conclusions, recommendations, and suggestions for further research

As I said in the introduction, there are limitations to the conclusions that can be drawn from the statistics given the sample size and the fact that the project was only a part of the lives of the participants. However, I think that we can say that the statistics do show a significant overall increase in the group's wellbeing over the course of this project, although there is no statistical evidence that this was caused by taking part in it. It is also of note here that the impact of projects such as this often continues through the life path and this is very difficult to measure as the group disperses and funding comes to an end. There is a lack

of longitudinal studies (those that follow a group over a long period of time) around this theme for this reason. The methodology was intentionally devised so that some longitudinal data can continue to be gathered in the future, and this would be a helpful addition to the national data set.

The group was a very supportive caring group, and several of the participants commented to me that they were surprised by how little ego was present throughout the project, and how they admired the generosity and work ethic of the artists that they were working with as testified in the statements above. While this applies to many arts projects, it does not apply to all of them; some of these findings could be generalised to arts projects, but it is important to note that these findings were specific to this project, the subject matter, and the tone that was set by the professionals involved. As can be seen from the comments of some of the participants, there was a sense of involvement, commitment and increased self worth through being part of something meaningful. On reflection I would argue that being part of this particular thing was what many of the participants found so valuable because it connected beliefs, social contact and working together towards something that the whole group viewed as important. Again this was in part because of the professionals involved and the ability that they had to compose and devise in collaboration with the participants.

This shared experience of working together towards something important appears to have been particularly valuable to participants and given rise to indicators of increased wellbeing such as feeling interested in, and close to, other people, feeling optimistic about the future, and feeling useful; all of which are challenged by the subject matter. It is interesting that people seemed to feel energised by the project and its subject matter rather than depressed as might be expected. Participatory arts are a powerful tool for exploring contentious issues such as the fossil record, the anthropocene and the possible end of humanity as they create a safe group space within which emotions and opinions can be expressed and heard. They also allow ambivalence and ambiguity whilst having the potential to convey powerful messages: the sense of underlying confusion is familiar to us all and can amplify a message rather than detract from it in the hands of a good Director and supportive team. Additionally, the way that Global Geoparks are constituted and the importance given to an integrated approach to conservation with and for local communities helped to shape this project and its underlying ethics.

Despite the comments from many of the participants that they had found the project stressful and a difficult commitment to fit into other parts of their lives, I would not recommend changing the structure of the project too much. Projects such as this need a certain momentum and to be one-off opportunities. I would, however, recommend even clearer information about the level of commitment that will be needed right at the start, perhaps hearing from someone who has experienced this project or another equally challenging one. Supporting this, I would also recommend that the researcher be built into the project team from conception. There are two reasons for this, first that the creative team has time to understand what they need and what they are trying to do and to incorporate some of this into other exercises that form the project. This would make the experience smoother for the participants, requiring less of a leap of faith. Second, so that the researcher can understand the multiple layers of the project theme, and get to know the team and individual ambitions for the project a little better allowing for a more nuanced analysis.

Finally, in an arts and health project, I would recommend working formally from the start with health professionals. This could take two equally valuable forms. Projects could possibly be set up to address specific issues that are faced by the NHS, or they could be coincidental like this one, and driven by other factors but still have a positive impact on health and wellbeing. Either way having health professionals involved in project development would allow for a more nuanced understanding to develop locally between the two sectors, encouraging trust and respect. Eventually this would make both more resilient to external factors.

#TheRockConnectUs!

















Appendix 1

Questions for Case Study Interviews

My preamble to interviewees outlined that I would record the interviews and these recordings would be solely for my use with this project, securely stored for the duration of the project and deleted once the final report was signed off. The topics covered would be used to gain insight into the project and help support the research. Interviewees would not be named with any quotes that were used, although I would give gender and age, and where possible I would check quotes before use so that they could make sure that they represented their views accurately.

What is your name?

How old are you (please give a range if you don't want to be precise, for example early 30s)?

Have you done a project like this before?

What made you join this project?

How does the project make you feel?

Do you think it has any impact on your health and wellbeing?

Appendix 2 GeoOpera - Participants Questionnaire

Geo-Opera is a community arts project delivered by Doorstep Arts, with Bournemouth Symphony Orchestra and Barbican Theatre Plymouth on behalf Torbay Council for the English Riviera Global Geopark.

As part of this project, Torbay Council has commissioned an independent evaluator to look at how the activity affects participants' health and sense of wellbeing. We will ask the same set of questions three times during the project, once before you begin, once around half way and once just after the project has finished. We may also contact you again in a year or so to ask the same questions one final time.

Please take the time to get settled and reflect on the questions before you answer them. Your session leader will make time available to you to do this. Please answer the questions as honestly as you can. The whole process from getting settled to finishing shouldn't take more than 10 minutes.

What will happen to the information that I provide?

We will enter it into a database, giving you an identifiable number so that your name will not be kept with the answers that you give and we can match your answers to the ones that you gave before. You will be anonymised, that is, we will never talk about you by name or number, but say things like "around 10% of the group felt that their life was very worthwhile at the beginning of the project".

If you are interested in being more involved, we would like to identify a few people who want to share their stories of the project with others, perhaps at the conference, perhaps with the evaluator or both. These people will only tell their story in their own words and again the data from the questionnaires will not be associated directly with them. If you are interested in doing this, please tell your workshop leader.

Please sit down, get comfortable, and close your eyes for a minute or two before starting. You might find that bringing your attention to the soles of your feet, palms of your hands and the place where your eyelids meet helps you to think about how you feel today. Please only answer the questions with how you feel right now unless you are instructed to do otherwise.



Name:

Group:

Date:

Where 1 is none of the time and 5 is all of the time, please score the following statements:

I've been feeling optimistic about the future

1 2	3	4	5
-----	---	---	---

I've been feeling useful

1 2	3	4	5
-----	---	---	---

I've been feeling relaxed

1	2	3	4	5
---	---	---	---	---

I've been feeling interested in other people

|--|

I've had energy to spare

1	2	2	1	5
1	Z	5	4	5

I've been dealing with problems well

|--|







I've been thinking clearly

	1	(r	
4	2	2	4	-
			4	5
-	-	0		0

I've been feeling good about myself

Г					
	1	2	3	4	5
	-	-	5		3

I've been feeling close to other people

1		2	3	4	5
---	--	---	---	---	---

I've been feeling confident

1	2	3	4	5
---	---	---	---	---

I've been able to make up my own mind about things

1	2	3	4	5

I've been feeling loved

4	•	2		-
· ·		4	Δ	5
-	2	5	т –	5

I've been interested in new things

1 2	3	4	5
-----	---	---	---

I've been feeling cheerful

1	2	3	4	5
---	---	---	---	---







Now please answer the following four questions about your feelings on aspects of your life. There are no right or wrong answers.

1. Overall, how satisfied are you with your life nowadays? (where nought is 'not at all satisfied' and 10 is 'completely satisfied')

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

2. Overall, to what extent do you feel that the things you do in your life are worthwhile? (where nought is 'not at all worthwhile' and 10 is 'completely worthwhile')

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

3. Overall, how happy did you feel yesterday? (where nought is 'not at all happy' and 10 is 'completely happy')

1	2	3	4	5	6	7	8	9	10	
---	---	---	---	---	---	---	---	---	----	--

4. On a scale where nought is 'not at all anxious' and 10 is 'completely anxious', overall, how anxious did you feel yesterday?

1	2	3	4	5	6	7	8	9	10	
---	---	---	---	---	---	---	---	---	----	--

Do you have any other comments to make about the project or your life in general at the moment that you think might be relevant to the way that you have answered the questions?

How many times have you accessed NHS services (GP, nurse, hospital, Occupational Therapist etc) over the last 12 months?

Finally...... Use three words to describe how you are feeling today about the project

