

Avon Echoes

An interdisciplinary audio guide for socio-ecological connectivity in Stratford-upon-Avon

1.0 Introduction

The River Avon stretches for 96 miles from its source in Northamptonshire to where it meets the River Severn (1). Across the county of Warwickshire the Avon and its tributaries have been the lifeblood of communities in the area for millenia. The role it has played in the lives of those living near it is varied, from water provisioning to recreation, supporting biodiversity and facilitating travel. Despite our need for the river our relationship with it is often exploitative. Pollution in the Avon has consistently been high, with the river at Stratford-upon-Avon reported as polluted by sewage 100 times in 2025, lasting 444 hours (2). Yet most people still don't understand our reliance on it and don't realise the need they have for the river until it is taken away or threatened either by local actions or global events like climate change. Therefore, it is essential that resources exist to help the community reconnect with the river and protect it.

For anyone researching the historical, cultural or literary significance of Stratford-upon-Avon, there is certainly no shortage of sources. It is a heritage-proud town due to it being the birthplace of William Shakespeare. In the late 19th Century Shakespeare was dubbed the "Bard of Avon" and it is this connection that has pushed Stratford to be perhaps the best known of the UK's eight Avon rivers (3). However, despite the prominent role the river plays in the landscape here, even highlighted in the town's name, there's currently no single source of information on the river in the local library or online. The disparate nature of river knowledge in itself argues for something new.

Therein lies the thesis behind this essay and its accompanying proposal. The river is a prominent local point of interest and therefore tourists and locals alike should be offered an opportunity to learn about its vital role in an engaging way. An audio guide, delivered via a mobile based app, designed as a tool to facilitate this, would help people see the river in different ways, understand how we shape it and have been shaped by it. To protect the river for the future an emotional connection needs to be created between people and the river, for them to recognise the myriad trade offs at play.

This essay is the foundational scholarly basis for the audio guide proposal. It will explore both theoretical frameworks to aid an interdisciplinary approach to the river and explore the themes relevant to the guide. The topics explored are grouped into interdisciplinary themes to better understand the synergies and conflicts present along the river. No theme stands in isolation, therefore both this essay and the audio guide will encompass this interdisciplinary approach.

2.0 Theoretical Frameworks and Literature Review

Theoretical frameworks are essential to this project because they provide the analytical lenses through which the audio guide will convey the complexity of the river and our connection to it. These lenses will allow for the interpretation of the river as more than physical infrastructure or aesthetic feature but as multiple components of a socio-ecological system. While traditional models of environmental education are certainly effective for the dissemination of crucial information, in this case they would fail to foster the emotional connection and sense of civic duty needed to inspire the safeguarding of the river for the future. Therefore this essay utilises frameworks that emphasise human experience and environmental reality, specifically interdisciplinarity, blue space theory and place-based education (PBE).

2.1 Defining the interdisciplinary minded community

To address both the resource gap and the lost connection with nature in Stratford-upon-Avon the guide adopts an interdisciplinary framework. Interdisciplinarity uses multiple disciplines to address complex issues that cannot be solved by one discipline alone and seeks to integrate insights to achieve better understanding (4). In this case, the resource gap is actually a lack of integration as well as information. Integrations between ecological data, historical narrative and public accessibility. By creating an interdisciplinary minded community this project moves beyond multidisciplinary and provides users with the tools to assess their environment holistically (4).

2.2 Blue space theory and human wellbeing

Another theory central to this guide is blue space theory which argues that proximity to water has significant positive impacts on human health, psychological wellbeing and social connectivity, amongst others (5). In this project an aim is not just to provide knowledge about the River Avon it is also to facilitate a connection and provide community engagement. By highlighting the river's role for the environment alongside what it provides for people this guide aims to provide further human wellbeing for a wider group of people, essentially extending the blue space theory to more participants (6). Alongside this, by integrating blue space theory, users of the guide will see the benefits provided and recognise the need to protect our blue spaces for future generations (6).

2.3 Place-based education and environmental citizenship

The core of how the audio guide will convey information is based on the principles of PBE, an approach that transforms the town into a living classroom. PBE is a key format that can engage locals and visitors within the town, deepening the connection to the local environment by experiencing it first hand. This method uses experiential and contextual learning to ensure that users are active participants in knowledge they are gaining (7). The audio guide will also feature prompts at each stop to encourage users to "Think Water". By giving the user the opportunity to use their imagination, guided by the audio narrative, they are able to interpret the story for

themselves, something that is incredibly important for developing an emotional connection to the landscape. Enabling place-based education in turn creates a sense of civic duty as well as fosters environmental citizenship, two desirable outcomes for the audio guide (7,8).

2.4 Traditional Didactic Education

An alternative approach, and indeed the most traditional, would be didactic education. It is important to mention this as it highlights the need for approaches outlined above. Didactic teaching, involving a direct method of knowledge transfer from instructor to learner, has its merits in certain environments like schools and universities using specific curriculums. However, what this project aims to do is provide a learning structure where knowledge transfer is not the only outcome. Given the need to create a community learning experience for people from varied backgrounds and education levels, an interdisciplinary, experiential approach is required to truly engage the Stratford community (9).

3.0 Thematic Analysis

3.1 Site and topic selection methodology

The selection of the seven stops (see accompanying proposal for map) for the audio guide was determined by assessing points on the river that display either a conflict or a synergy between natural and anthropogenic forces. Rather than a linear historical tour, these sites represent sites of cultural significance whose presence interact with the natural environment and provide opportunities for interdisciplinary discussion. It was important to select sites that have cultural significance as this is a key entryway for people in the area, given the town's tourism is driven by its history.

In order to facilitate an interdisciplinary analysis within this essay, the stops have been categorised into three thematic groups: The Engineered Environment, Recreation and Ecological Conflict, and Sacred and Sensory Spaces. By grouping the overarching themes as such the analysis is able to move beyond isolated facts and instead synthesise the diverse perspectives, such as hydrology, economics and theology, present along the Avon. While these groupings will still be present throughout the narrative within the audio guide itself, it will take on a more segmented nature given the descriptive aspects needed to engage the user at each specific stop and to engage in learning from place.

3.2 The Engineered Environment (Stops 1, 2 & 5)

Stratford-upon-Avon began its transformation to the town we know now around the end of the 12th century (10). The river has played a vital role in its establishment as a market town being used as a transport route as well as powering industry at sites like Lucy's Mill (11). Hydrological

uses of the river, for industry, travel and flood management show just how important the river is for human development and maintenance. It does however come at a price. The river has been broken to serve a purpose. The pollution of the river to serve these purposes continues to this day and gets increasingly worse (2). It's not just local impact though, global climate change is changing the nature of the river, extreme flooding as well as extreme droughts put great stress on the river (12).

The ecological trade off is further compounded when we look at Cox Island from the Tramway Bridge. The juxtaposition of humanity's expansion across the water next to the retreat of wildlife to a singular space. While it is vitally important that both sites exist it is indicative of a wide trend, we sacrifice nature for our needs. However, just up river in sight from Stop 2 users can see the beginning of the nature reserve. A site built upon an old landfill site that has been very successful showing that we can give land around our rivers back to nature (13).

3.3 Recreation and Ecological Conflict (Stops 3 & 7)

The Swan Gardens act as the final stop, connecting the churchyard back to the Bancroft Basin via the Royal Shakespeare Company Theatre grounds. A short stretch of the route but an area that hosts multiple interdisciplinary connections. The audio guide could of course not fail to mention the role that Shakespeare has in creating the town we experience today.

Experiencing water through literature can help us understand the cultural significance it plays. Shakespeare's exploration of water is present throughout his plays, from vast sea journeys in *Hamlet* and *The Tempest* to dreams and propaganda in *Richard III* and *Pericles* (14). He could have even drawn upon his own experiences of the Avon flooding and the destruction it causes as inspiration for *The Tempest* (15). The tourism created by Shakespeare's history in Stratford-upon-Avon is what drives the upkeep of the area but in a way is also what destroys it. The open air Holloway Garden Theatre which sits in the Swan Gardens every summer creates significant soil compaction and damage which can increase the risk of flooding, impact biodiversity and threaten soil fertility (16).

Recreation on and around the river has long created conflict with its ecology. Building upon the industrialisation of the river, in the late 19th and early 20th centuries an increase in "boat club activities, regattas and weekend rowers and punters" further pushes wildlife from its home and changes the very nature of the river (17).

The way we interact with the river and its surrounding land is troublesome but there are some groups working to combat this. Citizen scientists from groups like SafeAvon and Stratford Climate Action have taken the charge in monitoring and protecting the space by taking water samples and measuring for pollution. These individuals are often from groups that use the river for recreation, highlighting that though there are conflicts, synergies can be created.

3.4 Sacred and Sensory Spaces (Stops 4 & 6)

The themes that have been explored so far very much focus on conflicts between nature and humanity, however the final theme looks into sites where synergies are created. It's important for this audio guide to explore the duality of the nature/human intersection, that it can be exploitative but also complimentary. The interdisciplinary connectivity at play at these sites creates a rare synergy between natural and anthropogenic forces. These sites provide users with a place for reflection in the middle and towards the end of the route.

Much of the audio guide is of course spent listening but to the narrative, not nature. This is the noisiest section of the river due to the man made weir, an engineered waterfall used for flood management that also creates a perceived natural sound that draws people in. While stop 5 discusses the negative impacts of the weir on the river here the user is invited to step back from the audio guide and experience the rushing sound of the water as a "keynote sound" of the landscape (18). This sound provides a sensory anchor for the blue space and invites users to explore how sound and nature can impact human wellbeing.

There are few spaces in Stratford-upon-Avon, or indeed anywhere, that remain largely untouched over time. However, there are sites that do come close to this, perhaps with only minor aesthetic changes taking place vs wholesale purpose change. The Holy Trinity Church is an excellent example. While changes have been made to the church itself, as recently as the Victorian era, the religious history of the site goes back to the ninth century (3). Therefore, for over 1,000 years there is a site along the banks of the Avon that has provided sanctuary, not just for people, but for wildlife (19). The river at this point acts as a natural boundary that has helped shape the town's spiritual identity for centuries and also provides a bridge between land and water for fauna and flora.

4.0 Community engagement

4.1 Digital format

The digital features of the audio guide are necessary to facilitate PBE. The audio guide acts as a storyteller providing the necessary context to help users make sense of their surroundings. Additionally, the app would utilise location stamps to unlock the narrative at each stop therefore making learning from the place itself essential.

A digital format is not perfect, however. Using a digital medium is also creating a barrier to in person experience if the user relies too heavily on the app. To try to counter this the app will need to be simplistic in design only providing access to the map and the audio vs offering more screen heavy interactions. The location locked audio also means that the user has to physically be at the location in order to access the narrative, enforcing PBE.

4.2 Marketing and PR

To build awareness of the guide and reach potential users a multi-strategy marketing campaign is crucial. There are a number of local news outlets that can help drive interest in the audio guide and journalists can be invited to try the guide for themselves. Alongside traditional media it is of course important to develop a digital presence. The tour can be hosted on local guide websites and on social media. Building an online community is just as vital as an in person one. It's via these online channels that tourists can see what is available to them outside of the usual Stratford activities.

4.3 Accessibility

Creating a varied and interdisciplinary community means ensuring inclusivity. There are some clear issues with the audio guide when it comes to an accessible user experience. While the majority of the route is accessible to wheelchair users and provides plenty of rest areas for those who need it, it does feature a bridge that is only accessible via stairs. This means taking a lengthy diversion or double back on the route for some users. As part of an inclusive campaign the local council could be engaged to increase accessibility on the bridge but as a short term solution an alternative version of the guide can be provided to experience all sites on one side of the river.

While the nature of an audio guide is beneficial for visually impaired users as it can feature heavy description, it is inaccessible for the hearing impaired. As part of the development of this guide, and to make it an inclusive experience, work could be undertaken to provide a reading companion to the audio guide for those who need it.

5.0 Conclusion

There is a clear opportunity for PBE about the river in Stratford-upon-Avon. The format and themes explored in this essay highlight the need for the integration of multiple fields to create new knowledge for the community. Having people understand the conflicts that exist can help raise awareness, develop new perspectives and challenge a traditional way of thinking. All of which can help drive forward the protection and development of our vital blue spaces.

This particular format is also highly replicable and therefore provides a framework that is easy to establish in other towns. Stratford-upon-Avon may be unique in its heritage but the issues and challenges present are certainly not. Devising new ways for people to think about water in their local community is going to be crucial in years to come as global climate change and anthropogenic activities continue to cause harm to the environment.

6.0 References

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