Review: Science, Poetry, and Music for Landscapes of the Marche Region, Italy. Teaching the Conservation of Natural Heritage: Olivia Nesci and Laura Valentini

This paper makes a valuable contribution in two respects: 1) in exploring new and engaging ways of promoting geoscience and geoconservation to the general public; and 2) in demonstrating links between geoheritage and cultural heritage.

1. My main comment is that the conceptual framework could be strengthened and more clearly set out in the introduction by reference to the wider literature on best practice in interpretation*, particularly in relation to stimulating emotional responses and encouraging memorable experiences involving a range of senses and interactive engagement. Emotional experience and making personal connections can be a powerful basis for subsequent positive actions or behavioural changes by those participating - either people attending the events described or visitors to the sites. At present this is scattered through the text: e.g. lines 83/84 (establish a personal connection so that the public cares to further understand and appreciate the landscape); lines 445/446 (The communication of information of any nature through the emotional sphere is recognized to be much more effective than traditional communication methods); Lines 67, 73, 465 (foster desire to protect the landscape). *For example, building on Freeman Tilden's principles, a key reference here is: Ham, S.H. 2013. Interpretation: Making a Difference on Purpose. Fulcrum: Golden, CO, USA. And on the power of imaginative storytelling, see: Strauss, S. 1996. The Passionate Fact. Storytelling in Natural History & Cultural Interpretation. Fulcrum: Golden, CO, USA.

2. In the title, I suggest 'communicating' rather than 'teaching'. The approach of the study is on engaging and communicating with people rather than didactic methods.

3. Evaluation of the methods adopted is critical in demonstrating the wider value of this type of approach and it is encouraging to see this noted as a next step (line 450).

4. I appreciate the focus of this particular paper is on promoting better awareness among local people, but I think the authors could draw more links with geotourism and point out the potentially wider relevance and value of their work to this field, particularly in the conclusion.

5. In places the text is written in a personal style (frequent use of 'you') and using emotive language (e.g. 'guzzling by the jaws of erosion'). I can see that this is appropriate for presentations to the public but is less suited for a scientific publication where more measured language is appropriate.

6. There are some further comments, edits and points of clarification which I have itemised below to assist the authors in finalising the paper. I have also made suggestions for alternative wording for the authors to consider to help clarify the meaning.

Title
Suggest colon rather than full stop after Italy

Abstract
Line 10. arouses rather than arouse
Line 11. comma after Italy and which rather than that
Line 18. geosites rather than geo-sites; their rather than its
Line 19. arriving at rather than to; their rather than its; appreciation might be better than knowledge?
1 Introduction
Line 23. comma after audience
Line 23/24. might be better expressed as ...in several contexts: e.g. protests or movements promoting important social and environmental issues....
Line 27. Tracking used approaches might be better expressed as Evaluating existing approaches?
Line 29. raising people's awareness of complex topics; no full stop after topics
Line 35. no comma after time; learn about
Line 37. has expanded greatly rather than has been very numerous
Line 38. ideas have emerged
Line 39. no hyphen in geotourism
Line 41/42. Quotation should be in parentheses
Line 49. has produced; great might be better and more measured than amazing
Line 51. delete us
Line 54. suggest high rather than enormous biodiversity
Line 55. and geodiversity? I think you need to add geodiversity here
Lines 55/56. Maybe reword as ... was the birthplace of eminent historical and literary figures [if that applies] (e.g. name one or two), while many others (e.g. name one or two) have travelled through the area
Line 63. address rather than addresses
Line 65. Choices about what?
Line 66. dash rather than comma after communication; dash rather than comma after poetry
Line 67. people's desire?

2 Objectives and methods
Line 69. arriving at
Line 70. I don't understand what the problems and weaknesses of a place are? Do you mean its fragility, natural hazards, geological/scientific problems, socio-economic problems or what?
Line 71. Why must it? Some places are not necessarily attractive. Some may be awe-inspiring but not beautiful. Some discussion of landscape aesthetics and appeal might be appropriate here. The aesthetic appeal of physical features has been an important factor in tourism over the last few centuries (from the Romantic movement onwards) and more recently in geotourism
Line 75. insert and before the culture
Line 77. follows rather than proceeds through?; comma after view
Line 78. delete which things.
Line 79. delete a before simple
Line 82/83. Providing the system...... is not a sentence
Line 83. End this paragraph after environment. Start new paragraph as The second step is to establish... and run on to next sentence This second step
Line 87. suggest insert and before more

2.1 The working method
Line 90. Three sites or Twenty sites?
Line 92. in the region
Line 95. delete a
Line 97. Do you mean characteristics rather than peculiarities?
Line 98. key words relating to the place; the atmosphere it evokes
Line 100. delete the before musical
Line 102. Delete as hereafter described
Line 104. Insert is before aptly
Line 106. At other times; comma after times
Line 107 is rather than was; associations rather than the association
Line 110. Suggest foster love for a place rather than make you love a place
Line 111. emerges
Line 112. natural rather than naturalistic
Line 114. elements rather than contents?
Line 116. Delete we; delete of this work
Line 117. Delete just published
Line 118. Delete same
Line 119. which can be enjoyed rather than you can enjoy
Line 121. where the book is also available in interactive form
Line 122. results rather than contents? no comma after events
Line 123. the individual places?

2.2 Description of the events
Line 124. Consider 'Live events' as an alternative section heading
Line 127. means of simple and popular language; reading rather than acting of poems; performance rather than performing
Line 128. delete of ancient music (this was explained above); The project, as described above, includes
Line 129. took place
Line 130. delete one; employment rather than employ
Line 133 has rather than have
Line 134. delete will; represent the links between the science.....
Line 136. delete in
Line 137. delete comma after public
Lines 140/141. Delete text from 'some of them.......locations but'
Line 141. involving rather than searching; what is a suggestive place?
Line 144 Fortress; comma after Maniscalco"
Line 145. Insert 'the' before program
Line 146. also from elsewhere in Italy?
Line 147. after potential, insert and is

2.3 Experience with the public
Line 151. delete a
Line 154. it is rather than it's
Line 154/155. Suggest rephrasing ....to quantify these factors because they depend on several variables (e.g. the advertising before the event, the season and the weather, the beauty of the place and how difficult it is to reach)
Line 156. What is receptive capacity?
Line 158. delete just? the book was published in 2019
Line 160. Suggest rephrasing...We have the material to propose and deliver public events and collect the responses of the participants.
Line 161. presented rather than proposed?
Line 162 schools and museums
Line 164. the shows are
Line 165. comma after Region); cultural event rather than moment?

3 The three case studies
Line 168. Suggest the title of the section is simply 'Case studies'
Among the many amazing landscapes of Italy we focus on three case studies from...

Do you mean the beaches are eroded by the sea only during the strongest storms, whereas the less protected rocky ridges are more exposed to wave erosion?

Is it not that the anthropic causes are superimposed on the natural ones?

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Sediment load rather than solid flow?

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Line 377. Suggest re-wording - filled with debris deposited by streams flowing off the adjacent slopes. The debris originated from glacial and periglacial processes as evidenced from.....
Line 380. at depth
Line 381. which rather than that
Line 383. the Sibillini’s thrust plane. What is this?; in all its majesty?
Line 387. for excursions or for visitors, rather than excursionists
Line 389. delete the before Mount Vettore, and again line 392
Line 393. the left
Lines 394/395. form open ground fractures 30-40 cm wide
Line 396. key words; characteristics rather than peculiarities?
Line 400. The natural cycle of nature tends to plan ..... The meaning of this sentence is unclear
Line 424. The music selected is Johann.....
Line 428/429. heights?
Line 433. delete here proposed

4 Discussion and conclusions
Line 441. seeks to promote
Line 443. You could make a stronger statement here - Art has great power......and provides an powerful means to communicate specific subjects.
Line 447. comma after background; indicates rather than uphold? landscape origins rather than problems posed?
Line 450. delete able; interpretation methods rather than proposing ways?
Line 456. described above
Line 458. to rather than inside

References
The references to Bartolini & Peccerillo and Sala & Westley are not cited in the text.
The references to Curtis and Curtis et al are not in alphabetical order.

Figure captions
Figure 2: Panoramic view of Mount San Bartolo.
Figure 3: Pebble beach (upper) and substrate eroded by waves (lower).
Figure 4: Panoramic view of the active cliffs of Mount San Bartolo.
Figure 6: The Apennine ridge seen from Mount Nerone. Mount Petrano is located between the incision of the Bosso and Burano streams. Mount Catria is in the background.
Figure 7 - delete bracket after Scaglia Rossa Fm
Figure 9: Delete the before Mount Petrano
Figure 13: Delete the before Mount Vettore