Twenty-four models of Geotourism

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Anze Chen, one of the founder of the discipline of Tourism Earthsciences and Geopark of China.
Outline

1. Chinese definition on geotourism
2. Geotourism development (types, forms & models)
3. Future of geotourism
1.1 Origin

- The ideas and practices of Geotourism all originated from China, and Chinese attaches great importance to the combination of travel and knowledge.

- **Representative figures:**
  - **Shen Kuo** of the Song Dynasty of China. When he investigated the Yandang Mountain in 1074, he recorded the Yandang Mountain and dalongqiu which located in Zhejiang Province and figured out they were the results of water erosion.
The other outstanding traveler: Xu Xiake (1587-1641)

• Created a new atmosphere of the combination of travel and scientific research.
• His research on the formation, classification and distribution of limestone landforms are over 200 years earlier than those of the European scholars.
But as a terminology, “Geotourism” was first put forward in Thomas A. Hose’s paper published in *Environmental interpretation* in 1995.
1.3 Main disagreements

Until now, there are about 10 different concepts about this terminology.

Main disagreements focus on the following two points:

(1) “Geo” refers to: Geology, Geography and Geoscience?
Our point of view:

- “Geo” : Geoscience = Geography + Geology

Therefore, development of geotourism resources is not only about the geological landscapes, but also includes a variety of geographical landscapes.
Geological landscape resources and corresponding geological tourism activities

Geological landscape resources

- Stratigraphic section
- Structural features
- Rocks
- Minerals
- Fossil
- Geologic hazard
- Paleogeomorphology

Geological tourism

- Historical geology
- Tectonics
- Petrology
- Mineralogy
- Paleobiology
- Environontology
- Geomorphology

Transform

Creativity

- Geohistory Tourism
- Structural tourism
- Rock tourism
- Mining tourism
- Exploring tourism
- Black tourism
- Paleogeomorphology tourism

Geological tourism
Geographical landscape resources and corresponding geographical tourism activities

Geographical landscape resources
- River landform
- Glacial landform
- Karst landform
- Marine landform
- Gravity landform
- Wind-erosion landform

Cultural geography landscape
- Glacier tourism
- Karst tourism
- Marine tourism
- Gravity tourism
- Wind power tourism
- Emotional tourism

Quaternary Geology and Geomorphology
- Cultural geography

Transform
Creativity

Geographical tourism
The second divergence is:
Geotourism market is the **Niche tourism market** or **Mass tourism market**?

**In our viewpoint:**
- Geotourism market is mainly mass tourism market, which includes:
Market of Geotourism

- General visitors
- Students from primary and middle school
- Nature lovers
- Professional fieldworkers

- Natural sightseeing
- Education
- Exploration

- Also it includes niche tourism market, e.g.,

- Scientific research
Geotourism is a kind of activity beneficial to the visitor’s mind and body. It focuses on geology and geomorphology as well as their relationship with ecological and cultural environments. It is about sightseeing, leisure, research, learning, scientific investigation, exploration and health maintenance. It enhances visitors’ knowledge and appreciation of Planet Earth. It encourages sustainable economic development and improves livelihood of local people.

In short, geotourism is a spiritual enhancement tourism activity through accessing geological and geographical landscapes.
Geotourism: Niche tourism or Mass tourism?

In our viewpoint:

- Geotourism market can be mass tourism combining conventional mass tourism with geology and geography.
- It is also a niche tourism market e.g., for professional fieldworkers.
Market of Geotourism

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Transform Creativity

Geohistory Tourism
Structural tourism
Rock tourism
Mining tourism
Exploring tourism
Black tourism
Paleogeomorphology tourism
2. Geotourism development

2.1 Types of Geotourism

2.2 Form of Geotourism

2.3 Models of Geotourism
2.1 8 types of Geotourism

- according to the functions of the geological and geographical landscape it provides for the tourists, 8 types of geotourism are put forward.

- Appreciation type of geotourism
- Research & learning
- Discovery
- Metaphorical
- Recreational
- Entertaining
- Eating/living
- Shopping
The appreciation type geotourism is a tourist activity which is not only characterized by appreciation of the external beauty of geological landscapes but also interpretation of the scientific beauty for tourists.
• The research and learning type geotourism refers to a series of outdoor educational tourism activities based on local geological landscapes.

• These interesting, participatory, and exploratory activities are mainly designed for kindergarten children, elementary school students, secondary school students and their parents.
What is the discovery type of geotourism?

The discovery type geotourism is a tourist activity which traces disappeared geology phenomena based on existing geological landscapes through restoration and reproduction of prehistoric geological process to meet tourists' curiosity.

What kind of geological landscapes resources will be used?

Focus on the Interesting geological processes like volcanic eruptions, earthquake faulting, organic evolution, dinosaurs extinction, and land-sea changes.
(4) Metaphorical type of Geotourism

The metaphorical type of geotourism refers to geotourism with the new connotation derived from metaphors of existing geological landscapes.

- Diamond: it implies
  - everlasting love
  - So we can design all kind of products of geotourism which combines the geological knowledge and the culture of ‘love’.
(5) Recreational type of Geotourism

- Tourists can take part in recreational activities which are under the local geomorphologic or geological environment.
  - Finding the geological treasure, bookstore or taproom of geotourism.
Tourists can take part in entertainment activities designed with local geomorphologic or geological characteristic. Etc: Geo-performance, 5D Movies, Adventure Activity.

dinosaurs extinction performance: performance based on a story about dinosaurs extinction because of volcanic eruptions

During the night, the volcano suddenly erupts, and the air is filled with smoke. The red magma soars, and hot magma flow corrodes all living things. Make tourists feel the appalling power at the moment of volcanic eruption.
(7) Eating and living type of Geotourism

- The eating and living type geotourism refers that tourists eat food with local geological elements or live in local geological theme hotels.

Some food Designed with geological Elements.
The shopping type geotourism refers that tourists appreciate and purchase local tourism products under the geomorphological or geological environment.
What are forms of geotourism?

• Forms of geotourism are about research on methods and patterns with which tourists have access to geological landscapes.

• Three forms of geotourism can be divided according to abundance, value of geological landscapes and relationship with original tour routes.
It means a certain tour route having abundant geo-phenomena and typical geological scenic spots among which there is a clear interpretation topic.
(2) Insert form of Geotourism

It means that intact, typical, and concentrated geological scenic spots are not able to independently attract tourists, but can be 'individually' inserted into existing tour routes.
(3) Random form of Geotourism

- It means that a small number of poorly developed geological scenic spots are not able to attract common tourists.
- This form of geotourism depends on existing tour routes among landscape scenery. Tour guides can add interesting geological knowledge into tour description in a relaxing, random, and flexible way, acting as ‘icing on the cake’ to the existing tour routes.
What is the model of Geotourism?

- Row represents the 8 type of geotourism,
- Columns represent the 3 form of geotourism,
- Therefore totally there are 24 kinds of combinations
<table>
<thead>
<tr>
<th>Type</th>
<th>Appreciation Type</th>
<th>Research Type</th>
<th>Truth-Seeking Type</th>
<th>Metaphorical Type</th>
<th>Recreational Type</th>
<th>Entertainment Type</th>
<th>Eating and Living Type</th>
<th>Shopping Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coherent Form</td>
<td>coherent form appreciation type</td>
<td>coherent form research and learning type</td>
<td>coherent form truth-seeking type</td>
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</tr>
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</table>
Although the situations are different in different geological parks of different countries,

there is always a model that fits into each park
03. Future of Geotourism

3.1 Features of Geotourism

3.2 Significance of Geotourism

3.3 Prospects of Geotourism
Geotourism is one of the most able to meet the needs of the modern tourist market.

3.1 Features of Geotourism

- Informative
- Interesting
- Participative
- Low-carbon
- Compatibility
- Wide applicability

Sweet Zone

- Aesthetic Experience
- Knowledge Experience
- Entertainment Experience
- Escapist experience
3.2 Significance of Geotourism

1. Protecting geological heritage

2. Popularizing scientific knowledge of Earth

3. Carrying out geotourism and promoting local economic development

**Relationship:** The first two are public service work; Geo-parks’ sustainable development needs the support of geotourism, which is the best way to achieve Geo-park public welfare objectives.

**Goal 1:** Through the Geotourism Commentary to understand, appreciate and protect Geological heritages; at the same time, through creative design, to meet travelers’ fundamental purpose of pleasure, experience and knowledge. (Educational Entertaining)

**Goal 2:** Geotourism is one of the best ways to popularize scientific knowledge, to carry out environmental education. (Blending science in Tour)
3.3 Prospects of Geotourism

Geotourisms’ own characteristics

Experience needs of external source markets

Broad and bright prospects for development

All of you to promote and cooperate with efforts
Thank You