

## The Ley of the Land and Tourism development

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### ABSTRACT

In this paper, the authors look into theory that the Earth is composed of energy vortices and Ley Lines connecting vortices of energy. The authors explain the theory to show that the Earth has an energy grid, as shown by research. The authors also propose that this energy grid plays a role in influencing human tourism behaviour, either on a conscious or less than conscious level. The authors explain how the Earth's energy grid may help explain some human tourism and will illustrate with some data that there is some evidence that this may be so.

**Keywords:** tourism, destination selection, geocomfort zones, ley-lines, spatial positioning, attractivity

### INTRODUCTION

Presently, tourism is an increasingly important industry, which – especially in areas, where there is little other possibility for employment - gives earnings to a significant part of the population. In marketing strategies, the emphasis is laid usually on communicating the specially created image of the place and bonuses, to attract people. When desiring to increase the popularity of a destination, or wanting to understand the failures of marketing, the usual strategy is to see the strong and weak point in services and infrastructure and to correlate the statistical properties of the changes in the flow of visitors to factors like financial crisis, health risks, etc.

The possibilities of expanding tourism are usually also assessed according to the availability of attractions, human resources and services. Not all the developments pay of though, as clients seem to be at times unpredictable. These variations in preferences may be due marketing effectivity, information availability, general political and economical conditions or of

statistical character. Sometimes, however neither of these factors can fully describe the reasons for success or failures of a destination.

This paper takes a non-conventional approach, as it tries to explore the possibility of correlating available data on local and global “energy field” anomalies with human preferences or neglection for certain locations.. It will try to postulate hypotheses about correlations between anomalies within this field – sometimes called Ley Lines and vortices – with the degree of attraction a particular area, place or destination exerts on people. Thus it will try to explore an assumed property of Earth that could be employed for understanding success or failure of some destinations that perform better or worse than the standard of services or geotourist of tourist attractions would enable to predict.

As the assumed energy field covers the Earth, and as the traditional model assumes that humans react to changes in the state of that energy field, the question that the authors will explore is whether these assumed energies of the Earth play a role in

influencing choices that individuals make when choosing their destinations for holidays. In a sense, it may be that the economic choice that individuals make when it comes to holidays is influenced by geographical factors linked with the Earth's naturally emanating energies and that these factors play a role in the economic pull factors in tourism economic. The hypothesis that we are exploring is whether expressed tourism demand is partly a function of the pull factor of these energies present at particular locations.

The paper will be structured in the following way. First, we will explore the theory of Ley lines and vortices on the Earth's surface and deal with how these energies can be located and measured. Then we deal with the theory of how these energies are lined with the economic decision-making of holiday destinations. Following that, we explore some of the methodological issues to be explored in such an investigation. If possible, we will use some statistical measures to find if there are links between the Ley Lines, Earth vortices, and tourism flows.

## WHAT ARE LEY LINES AND VORTICES?

The concept of Ley Lines is that there are certain energy isolines that are manifested on the surface of the Earth. The existence of these lines is assumed e.g. in some schools of Feng Shui or Vastu Shastra<sup>1</sup> and in Europe it was used in geomancy. In the 20<sup>th</sup> Century it was expressed e.g. by Alfred Watkins in his 1921 book, "The Old Straight Track". The concept is that there are straight energy lines that connect places. These energy lines are felt by the human system and humans react to it by altering the state of mind they are in. Since 1972 it

is known that the moment our mind identifies with some mood or emotion, neurohormones are produced in the brain that are flushed within second to the whole body and the whole body reacts to this mood or emotions. The trigger for a change of mood may come from within or from without. The external influences may be well discernible (e.g. an irritating or pleasant sight or communication situation) or subtle (like a Ley Line). In Vastu Shastra architects are taught also to sit in a building and to filter out from the mental impulses those signals that relate to the feeling the place and building "radiates" or evokes. This type of feeling based assessment has a great variance as the signal to noise ratio is unfavourable if the mind is full of activity. This is why they are taught to attune the mind to alpha and theta dominant states<sup>2</sup>, so that the signals from the everyday point of view become noise and the "noise" from everyday point of view become signal. In this way, when designing and situating new buildings, they should be able to select places that in themselves help to generate a feeling of comfort. We know how long was the way from measuring length by feet, inches and other anthropomorphic units, to standards meters and to the present way of exact distance determination. Similarly, it may take some time to arrive at a metrologically acceptable way of assessing these signals. As mentioned above, the present work is an attempt to assess the information content of the available experiential data and to relate them to the concept of favoured or shunned tourism destinations.

The important buildings in ancient times are said to have been built upon straight lines or points of their mutual intersections that can be estimated either by using models or using specially trained individuals. It seems that a portion of the built environment that we now see around us, especially in those places that are quite ancient, follow this logic. Furthermore,

<sup>1</sup> Vastu shastra belongs to the so called Upa Vedas, where it is called Sthapatyaveda (Vedic architecture). It forms a part of the Atharva veda. Vedas are the classic body of knowledge of the ancient (North) Indian civilization.

<sup>2</sup> Alpha rhythms are in the 8-12Hz domain, the theta domain is 4-8Hz.

some of the built environment in recorded history is in many places on top of more ancient sites. For example, the Vatican in Rome is a built environment, but it is built upon a far more ancient site that is reportedly the site of Mithra worship<sup>3</sup>. So, if the theory of Ley Lines holds some meaning, it suggests that much of the built environment that we now enjoy is a function of planning, either in a conscious or subconscious way, to build an environment along particular pathways that can be mapped out in order to achieve specified emotional response.

A related concept is that the Earth has meridians and energy vortices. The concept is that there are some locations on the Earth that emit more energy (either positive or negative<sup>4</sup> in nature) than others. In this model, some of the locations are emitting more energy from the Earth than others, in some places energies emanate from the Earth and in some places surface energies are merged into the Earth. When with the advance of science and technology a number of ancient information could be reassessed, we can see efforts to see, if the theory of energy fields inducing the feeling comfort or discomfort can be substantiated. Since the 1960ies there have been a number of works that tried to correlate local geological factors with health of living organism at that place. Naturally, correlation was found with toxic emanations (radioactive gases, high content of Hg or other toxic elements in rocks, soil, underground water, etc.). Then came the idea that areas, where geologic (e.g. radioactive mineral deposits), tectonic and hydrogeologic features cause local or regional disturbances in the Earth magnetic field. Such situation was called geopathogene zone and geopathic stress. At

one point F. Kahuda (1980) tried to formulate a “psychoenergetic model” that would mathematically describe these phenomena used by humanity since ages. Subsequently he demonstrated to geological specialists that a suitably trained individual can detect gravity field anomalies like underground mine-works, underground deposits and other features that would be of interest to geologists. Because the results were not achieved by objective, but subjective methods, they did not get into the geological toolbox. Geopathogene zones are, however still a factor considered in environmental analyses (cf. Múdry et al. 2006).

Geopathogene zones are the effects that has been most widely searched also by usual methods of science. Geoneutral zones were defined mostly as places where geopathogene effects were absent. From Feng Shui and Vastu Shastra tradition, however, we get also a notion of zones that induce a feeling of comfort – geocomfort zones. This can be subsequently enhanced by a choice of architectural elements – spatial shapes and orientations. Traditionally, spaces covered by circular domes are conducive to feeling of comfort. This was used mostly in sacral architecture. As said before, the establishment of ley lines or other lines and zones of geomantic type, is done either on the basis of subjective assessment of a person with suitable abilities and training, or on the basis of applying theoretical models. Some have tried to map out more specifically the relationships between the various energy vortices in the world. Figure 1 illustrates the way, how Sanderson (1972) have worked to map out the negative vortices.

In the Soviet Union as well in present day Russia, there was an enormous interest in these subjects. Goncharov N., Morozov V. and Makarov (1972, 1981) published interesting models (Fig. 2b) of polyhedral (energy) grid lines. A model for a geoinformatic information system was defined by Kitov (2009). Figs. 2a and 3 show grids linking places with favourable

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<sup>3</sup> The example of the Vatican is both geographically as well as theologically in keeping with a great deal of continuity, since the Christian and Mithra worshippers' holy sites are in the same location ([www.religoustolerance.org](http://www.religoustolerance.org)).

<sup>4</sup> Positive or negative is a relative description and relates to emotional or feeling response of humans.

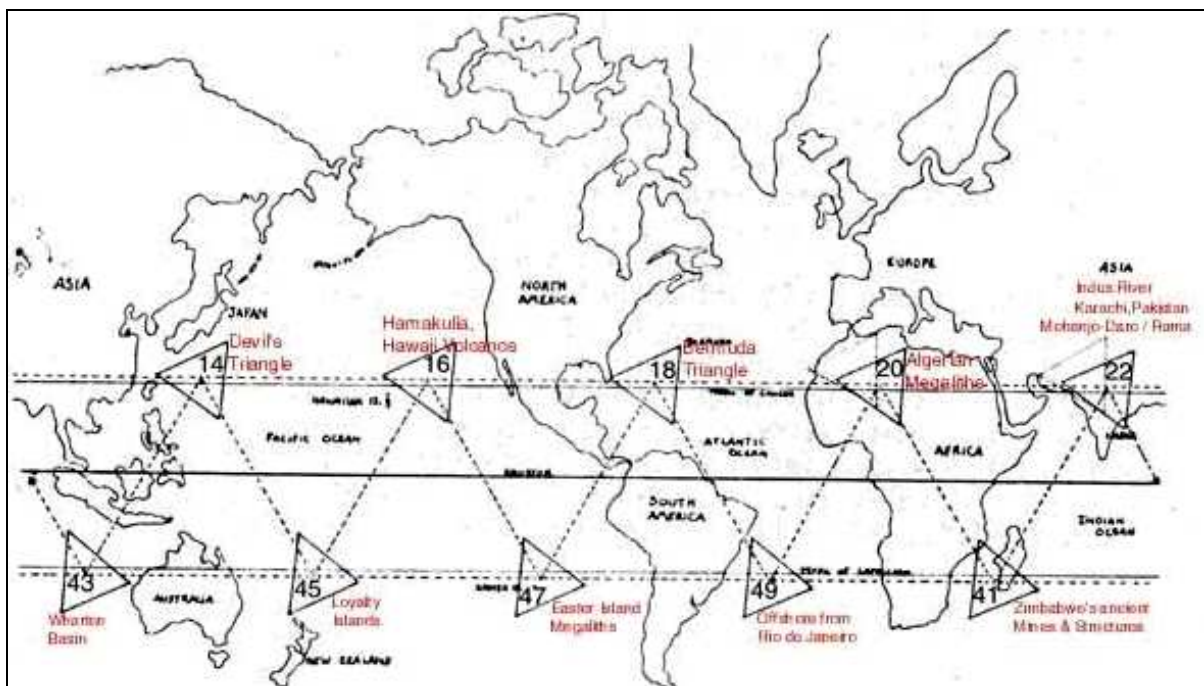
energies. Figs. 2a and 3 do not enable a precise location of the places, but Fig. 2c shows a model that can be used better. Some corrections can be done using georeferencing techniques. Tab. 1.a, b gives some of the sites with Earth's major and minor vortices (adapted after Cayce). Evidently, they convey the "regional", not so much the "local" variations in field quality. It can be seen that in some cases the locations denote attractive areas and areas with well established tourism. The areas, where development could be fruitful

according to these indications, would be perhaps Armenia, Georgia, Iraq and Lebanon (the last two used to be a tourist attraction before the wars). We would have to see whether these, too will develop into successful tourist destinations.

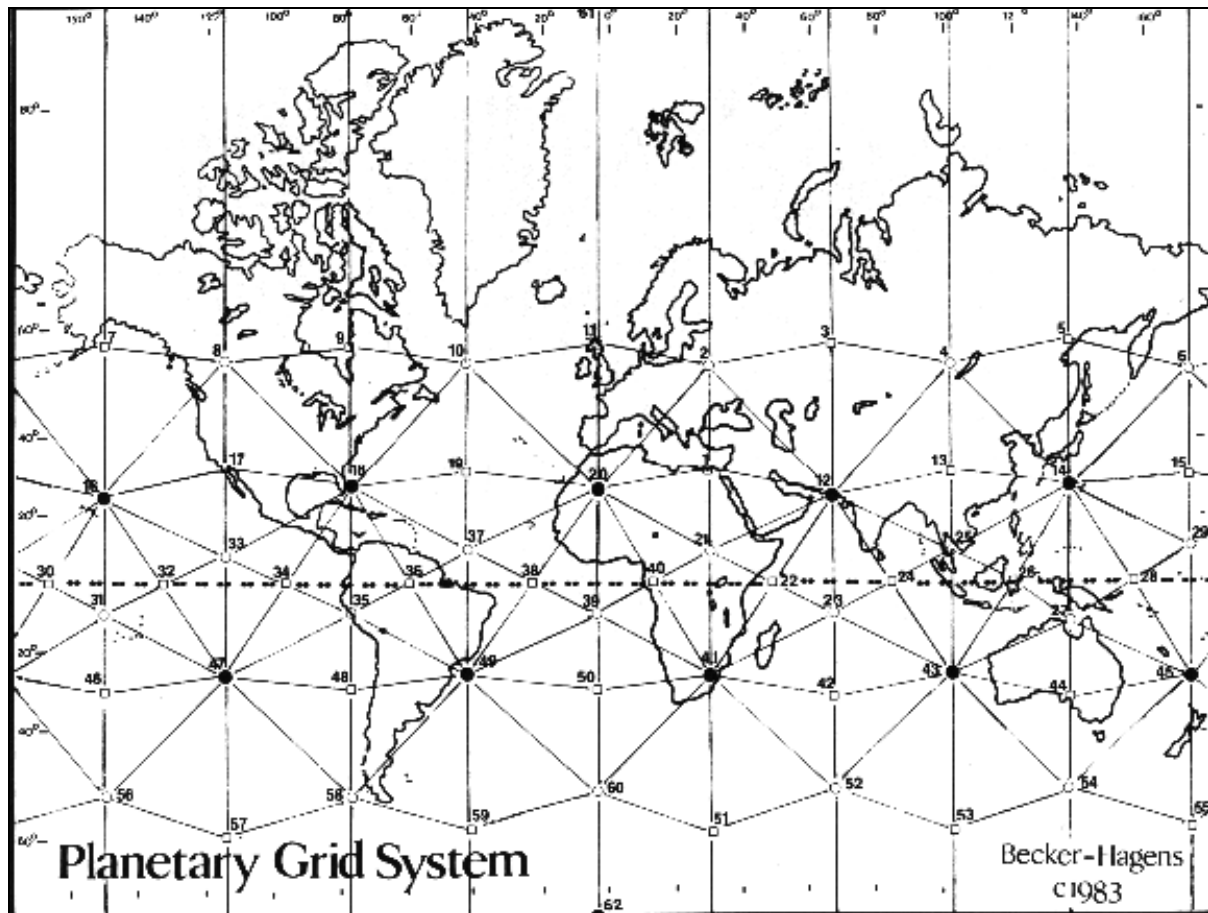
It is also difficult to establish, whether the destinations that are successful in developing their tourism industry and are not mentioned, are positive or negative, and if negative, whether the negative imprint can be offset by suitable marketing and service quality.

**Tab. 1a** List of Major Vortices (<http://www.ofspiritandsoul.com/earth%20vortices/vvrtices.html>)

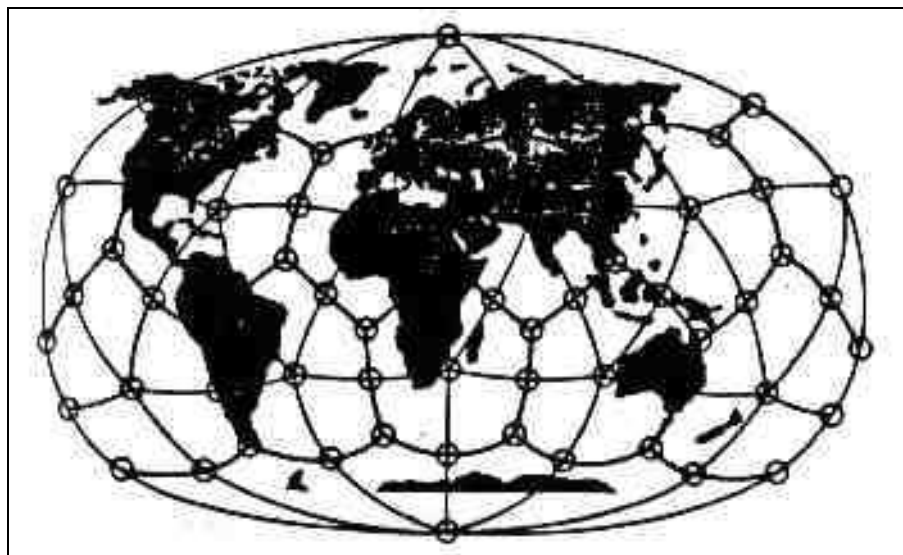
- Avebury, England
- Ayers Rock, Australia
- Bimini- off Florida coast
- Calgary- Canada, including the area surrounding Lake Louise and Banff National Park.
- Easter Island- Chile
- Nepal
- Machu Picchu - The Andes, South America
- Philippines
- Santo Domingo, Dominican Republic
- Sedona, Arizona .US
- Tibet, Lhasa



**Fig. 1** Model based vortices with unfavourable energy. Europe seems to be without such vortices (Sanderson 1972).



**Fig. 2a** The “Planetary grid system” according to Sanders 1972 and Becker, Hagens 1983. We can observe a polyhedral structure similar to that described by Goncharov, Morozov and Makarov in 1973 (Fig. 2b).



**Fig. 2b** A network of cultic sites on the globe, outlined by Goncharov, Morozov and Makarov. They started with the Sanderson model. They claim that these new lines and points, in conjunction with Sanderson's, now matched most of the earth's seismic fracture zones and ocean ridge lines as well as outlined worldwide atmospheric highs and lows, paths of migratory animals, gravitational anomalies, and even the sites of ancient cities.

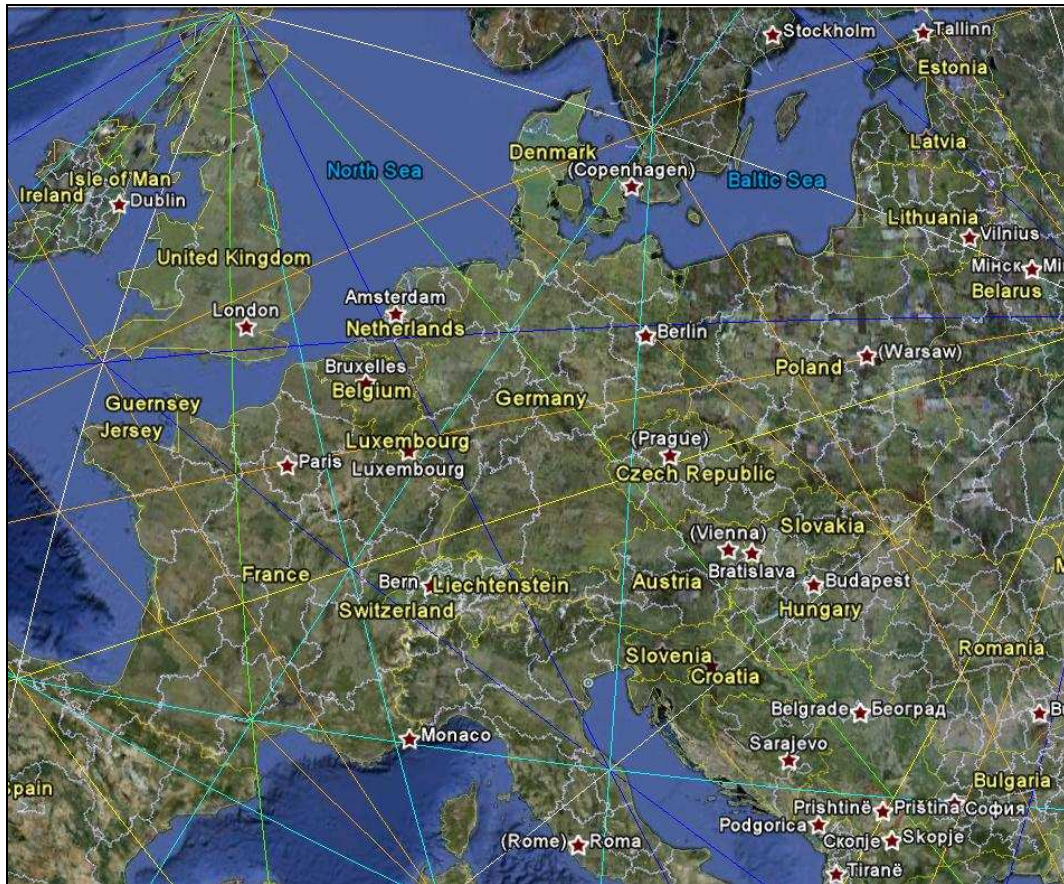


Fig. 2c The Google Earth based grid system in Europe (<http://www.vortexmaps.com/hagens-grid-google.php>)

Tab. 1b Noteworthy Minor Vortices (<http://www.ofspiritandsoul.com/earth%20vortices/vortices.html>)

- Andorra
- Armenia (formerly USSR)
- Azores
- Belize
- Canary Islands
- Egypt in particular the site of the Pyramids.
- Galapagos
- Georgia (formerly USSR)
- Greece and the Greek Island of Patmos
- Himalayas
- India many areas, the source of the Ganges is of great importance.
- Indonesia
- Iraq
- Israel Masada and other areas around the Dead Sea.
- Lebanon
- Madeira the whole island is a minor vortex
- Malaysia
- Mauritius
- Mexico
- Morocco - Marrakech only
- Peru Lake Titicaca (this area, from the Peruvian Mountains right through to Alaska has the longest ley line on Earth)
- Reunion
- Russia. All Archangelsk districts up to Ural. Krasnoyarsk.
- Seychelles
- Switzerland - Zermatt, Leukerbad, almost all of the Valais area, Basle and other areas
- Japan – Osaka and thermal springs areas.
- South Africa- Okavango Delta
- USA – Mount Shasta, Yellowstone Park, Houston to Dallas
- Spain- All the Sierra including Granada, Cordoba, as well as Almeria and Sierra Morena.

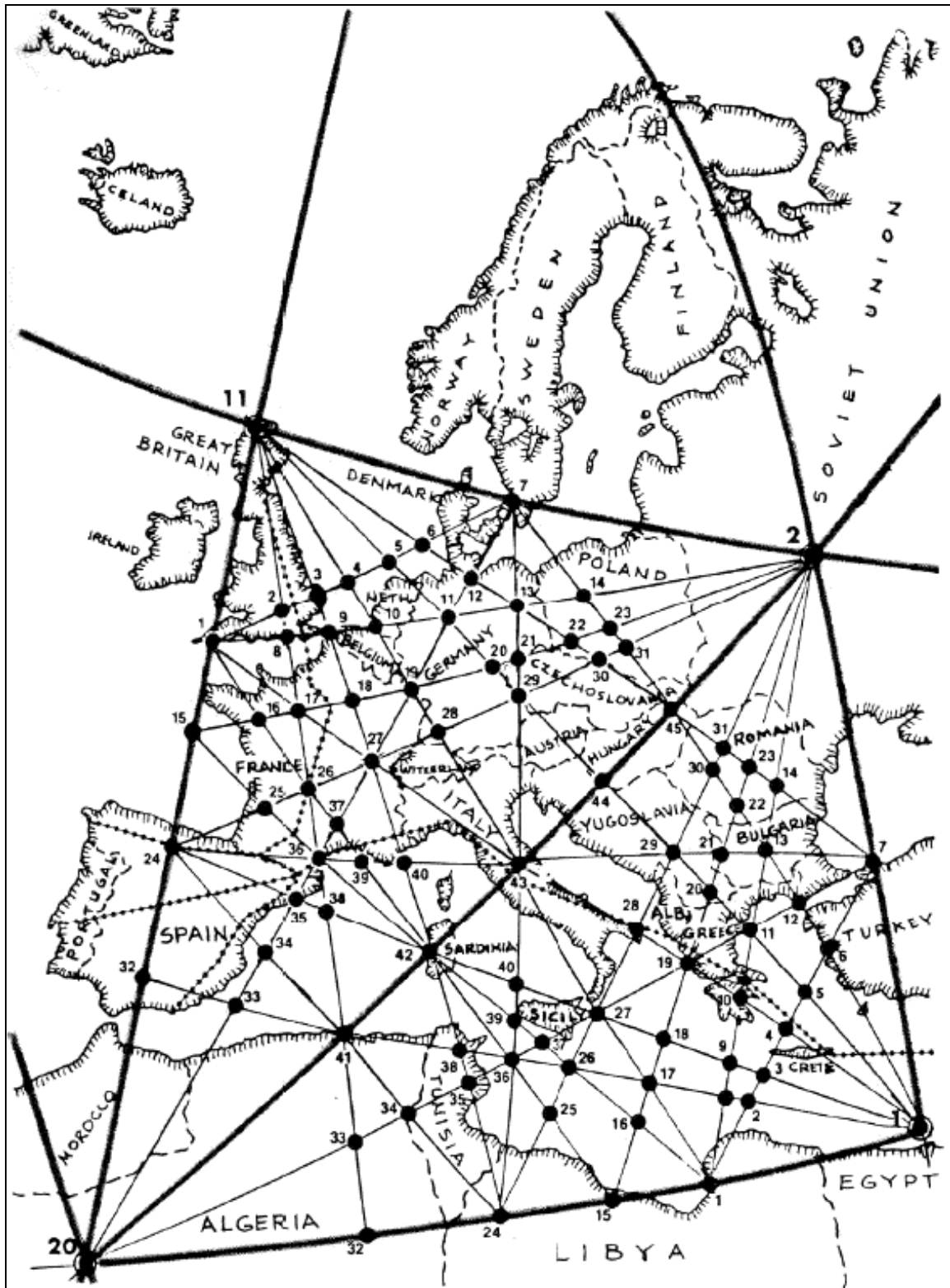


Fig. 3 A grid of places with favourable energies (Becker and Hagens). A modern version of this grid is on Google Earth (see Fig.4). There are also indications of places with favourable energies, in spite their not being vortices.

Countries shown in Tab. 2 seem to be the most important ones with favourable energy structure. Interestingly some cities therein do not have this quality.

The overall concept is that the energy vortices give humans an ability to experience enhanced feeling of comfort as well as psycho-spiritual experiences, especially in places where there are positive vortices or just a high levels of positive energies of the Earth (the term “negative” is in the sense of geopathogene effect, the term “positive” is used in the sense of geocomfort effect). The theory of this has

been described in some details by others (see for example, Cowan, 2003; Dannelley, 2001; and Sanders 1992).

From the Grid atlas on the Google Earth (Fig. 4) we can see that a small vortex is at the Nagy Bozsza village in Hungary, near the Slovakian border. When looking into the natural environment, we can see (Fig. 5, 6) that the area is attractive. Still, it remains a question, whether it has a greater attraction for tourists than other places around. In order to establish that factor, a survey will have to be carried out.

**Tab. 2** Countries with favourable energies

(Source: <http://www.ofspiritandsoul.com/earth%20vortices/vortices.html>)

- Australia- this is a country of significant positive energy. There is also negative energy though, including some cities.
- Austria- most of the Alps and rivers, but not cities.
- Belize
- Brazil of most importance are the rainforests and Iguassu Falls
- Canada- Vancouver Island, Northern Ontario, all of Banff area
- Chile
- China - Provinces of Guangxi and Guangdong-there is much negative energy elsewhere in this country.
- Cyprus- almost the whole island
- France, Brittany is the most important
- Iceland- the North West and South East have good energies, although there is also a great deal of negative energy perhaps due to its geological position.
- India- very significantly almost the whole of the continent of India (apart from some cities) has positive energy.
- Italy- Veneto area. Venice, Padua. Verona, Lake Como, Lake Maggiore-the latter of greater significance. All of Umbria.
- Malaysia
- Mexico – Sonoran Desert area, Chihuahua
- Netherlands. Much positive energy but no vortices.
- Sinai Desert - as far as the Nile Delta, but not Alexandria
- Sweden, some areas
- Switzerland- Large area south of Geneva this does not include Lake Geneva.
- South America- part of Andes from Machu Picchu to Lake Titicaca-powerful energies- this stops abruptly at La Paz.
- Tunisia and Algiers
- Turkey- a great many high energy areas.
- United Kingdom- area of Cornwall, Wiltshire, Nth. Wales (Aberglaslyn area); Lindisfarne Isle, Trossachs and Oban in Scotland
- United Arab Emirates
- USA- San Diego, much of California, Lake Powell and Canyonlands to the right of Escalante Desert. S.E. corner of Utah Nth East Idaho, Wyoming, particularly Rock Springs area.



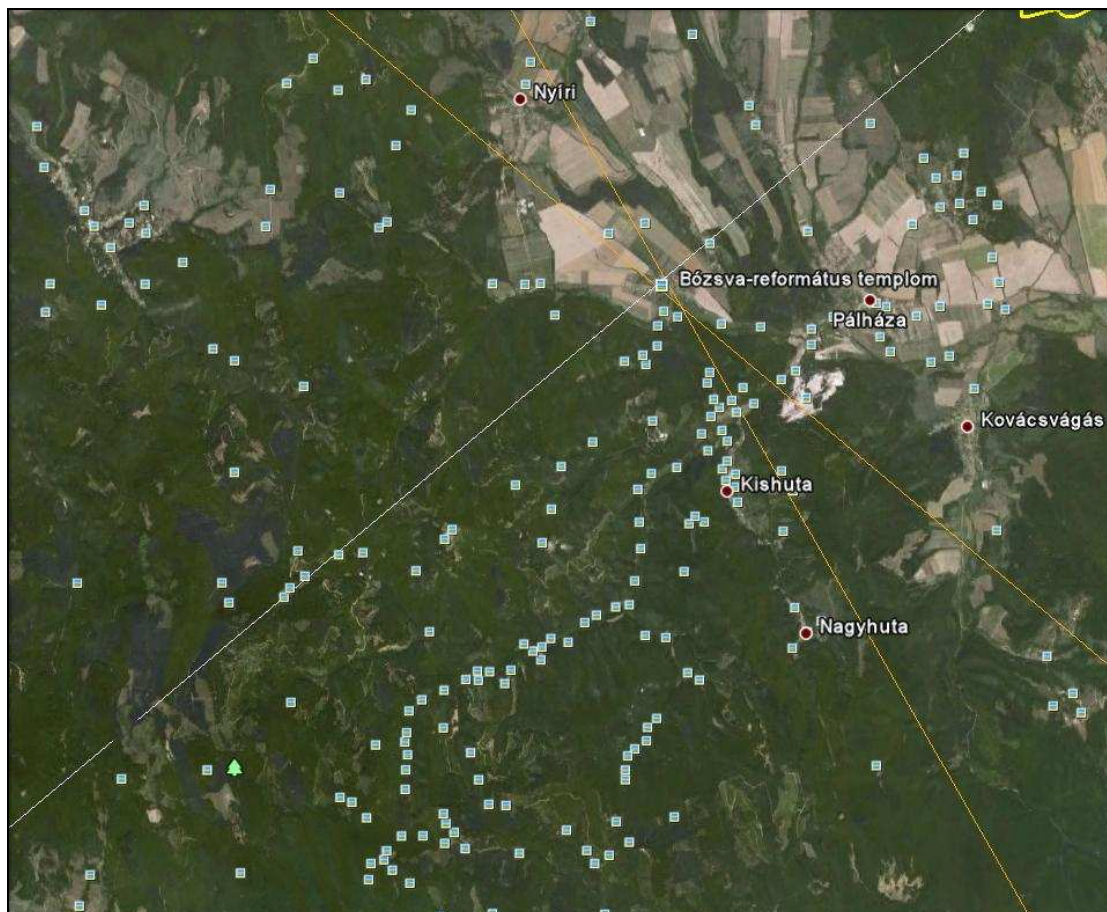


Fig. 4 Google Earth map of grid lines. A small vortex is in the village of Nagybozsva



Fig. 5 Volcanic tuff outcrops in the Bozsva area, Source: [www.monstone.hu](http://www.monstone.hu)



**Fig. 6** One of the 3 churches in Bozsva,  
**Source:** <http://www.panoramio.com/photo/20389937>

## MEASURING AND ASSESSING THE PHENOMENA

We would like to assume in our assessment, that such energies exist and that these vortices play a role in attracting tourism, since there is no evidence that this has ever been explored before. Nevertheless, the available data do not allow any statistical analysis to be made. This is because the concepts on the basis of which the place on the globe were given positive or negative valuation are still vague and rely mostly on enhanced human sensitivity and the theoretical models that were forwarded do not allow such investigations. (see e.g. Kahuda 1980). The valuation of E. Cayce is interesting because at the time he made his assessment, tourism as we know it today, was not developed yet. The work of Kitov (2009) presents

a mathematical model of such an energy grid system, so this may prove to be a usable model for assessing the information contents of Earth natural geoinformation system related to tourism..

Nevertheless, since the focus of this investigation is the flow of tourists and the hypothesis that it is linked with the energies of the Earth, we view this as an investigation of tourism demand. According to one of the major texts on tourism, there are three major measures of actual demand for a tourism product - visitor arrivals, visitor-days (or visitor-nights) and amount spent (Goeldner & Ritchie, 2008). Since these three interrelated indicators of tourism demand are crucial for governmental authorities in order to gauge the health of their tourism industry, data for these three major indicators are often freely available.

Thus, while the measurement of

expressed tourism demand is not very difficult to measure, the question of measuring the energies of the Earth – as mentioned above - is problematic. What must be done is to look for serious sources of information that have looked into the phenomena and determine how the various energies from the Earth can be measured and to what extent can they be measured. It may well be that quantifying the strength of the Earth's energies beyond nominal level may prove to be difficult. The small vortex in the Bozsva area (Fig.4) should enable a comparative study as indicated in

### METHODOLOGICAL PROBLEMS

There are some major methodological issues that should be mentioned before going forth. The major methodological problem of why people go to particular places more than others continues, because there is a (aesthetic, functional or other) pull from the built environment and possibly also a pull coming from an instinctive need to go to the vortex. For example, Easter Island is a major vortex on the Earth. Could the draw of tourists there be due to the energies radiated by the Earth or could it be because of the interesting and enigmatic statues on the island and marketing of them? With the issue of Ayres Rock in Australia (which is also a major vortex), the problem is noteworthy, because there is no major built environment around this presumed vortex, but the location is quite unique from an aesthetic and geological perspective- thus also from geotourist point of view. Does the draw to these locations, then, have to do with subtle Earth energies influencing behaviour or is it merely a function of the interesting statues or geology/geomorphology? Separating the Earth energy pull factor for tourism from other factors is, indeed, a major methodological issue in this research. In the mentioned Vastu Shastra, the ability to assess such energies lies in special training of Indian architects. As feeling is an

important element in such assessment, it is difficult to assess the correlation of feeling with other properties of a site. We expect that any set of assessments would have a great variance. It would be necessary to search for a correlation of the prevalent EEG patterns in persons doing the assessment and their feeling generated during site valuation that was outside our possibilities.

### CONCLUSION: EARTH ENERGIES, TOURISM, AND SUBCONSCIOUS CHOICES

The paper intended to correlate the ancient notions of “Ley lines” formed by earth energy patterns (often following geological features) with the effect such assumed energy properties they may have on the acceptance or rejection of the destination by tourists. One locality near the Slovak-Hungarian border (Bozsva) lies on a small vortex formed by 3 grid lines. Thus it offers a possibility to substantiate the hypothesis that lying on a vortex means a greater pull for tourists than the surrounding areas with similar man-built and natural environment.

### REFERENCES

- Becker, W., Hagens, B., 1983:** see at <http://www.crystalinks.com/grids.html>
- Black W.H. 1870:** Boundaries and landmarks, presentation at the British Archeological Association, Hereford
- Cowan, D., Arnold, C., and Chidress, D.H., 2003:** Ley Lines and Earth Energies: An Extraordinary Journey into the Earth's Natural Energy System. Adventures Unlimited Press.
- Dannelley, R., 2001:** Sedona Vortex. Vortex Society.
- Goeldner, C & Ritchie, J.R.B., 2008:** Tourism: Principles, Practices, Philosophies, 11th edition. Wiley.
- Goncharov N., Morozov, V. and Makarov, V., 1973:** Is the Earth a large crystal? Khimia I zhizn
- Goncharov, N., Morozov, V. and Makarov, V., 1981:** In The Earth's Crystal Rays, Khimia I zhizn
- Kahuda, F., 1980:** Fundamentální záření hmot

(Fundamental radiation of matter), Research Report, ČVUT, Prague

**Kitov, A.D., 2009:** Structure of the Earth natural geoinformation system, Math. Model. Nat. Phenom., vol.4, No.5, pp. 37-52

**Múdry, P. et al., 2006:** Program hospodárskeho, sociálneho, environmentálneho rozvoja mesta Banská Štiavnica (Programme of economic, social and environmental development of the city of Banská Štiavnica), I. časť, EKOTRUST, B. Štiavnica, 178pp, 2006

**Sanders, P., A., 1992:** Scientific Vortex Information: How to Easily Understand, Find & Tap Vortex Energy in Sedona & Wherever You Travel. Publisher: Free Soul.

**Sanderson, I., 1972:** article in. "The Twelve Devil's Graveyards Around the World"; Saga magazine Found at <http://www.deepinfo.com/WorldGrid.htm>

**Watkins, A., 1921, 1994:** The Old Straight Track, c/o Amazon.co.uk

**Internet:**

**Google earth vortex map:**

<http://www.vortexmaps.com/hagens-grid-google.php>

**Grid maps:**

<http://www.crystalinks.com/grids.html>

[http://ceska.psychotronika.cz/index.php?page=oldrich-valek\\_psychoenergetika](http://ceska.psychotronika.cz/index.php?page=oldrich-valek_psychoenergetika)

<http://divinecosmos.com/index.php/contact-us/privacy-policy/68-the-shift-of-the-ages-chapter-12-becker-hagens-the-global-grid-solution>

[http://www.missionignition.net/bethe/planetgrid\\_chrisbird1975.php](http://www.missionignition.net/bethe/planetgrid_chrisbird1975.php)

[http://www.religioustolerance.org/chr\\_jcpa3.htm](http://www.religioustolerance.org/chr_jcpa3.htm)

<http://www.spiritofmaat.com/archive/nov2/thegrids.htm>

<http://www.ofspiritandsoul.com/earth%20vortices/vortices.html>

**Other:**

<http://monstone.hu/Kirandulas/Kepek/Zemplen/zemplengal.html>