



Russian Academy of Architecture and  
Construction Science

# Biospherical compatibility - the way of reciprocal development of the Mankind and Nature

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# Introduction

The problem of biospherical compatibility of cities is being studied in Russian Academy of Architecture and Construction Science during the last decade. This problem is discussed in the paper from both civilizational and philosophical points of view.

Method of comparing the duration of survival of civilization , with its attitude towards the natural environment.

According to the investigations of Kuzik and Yakovetz about 25 civilizations existed during the last 5 thousand years, for example Ancient Egypt, Ancient Greece, Roma and many others. But only two of them are vivid up today at the same place with the same ethnos- they are India and China which are the symbols of Eastern civilizations.

# Relation to the nature and viability of the Eastern civilizations

China and India have passed this way without changing the ethnic group , territory , culture, and they have the largest population.

Other civilizations – died!

# China

In fact, China adopted a direct deification of Nature.

The highest title for a man of the earth - The Son of Heaven - they could be only one person - the all-powerful Emperor of China.

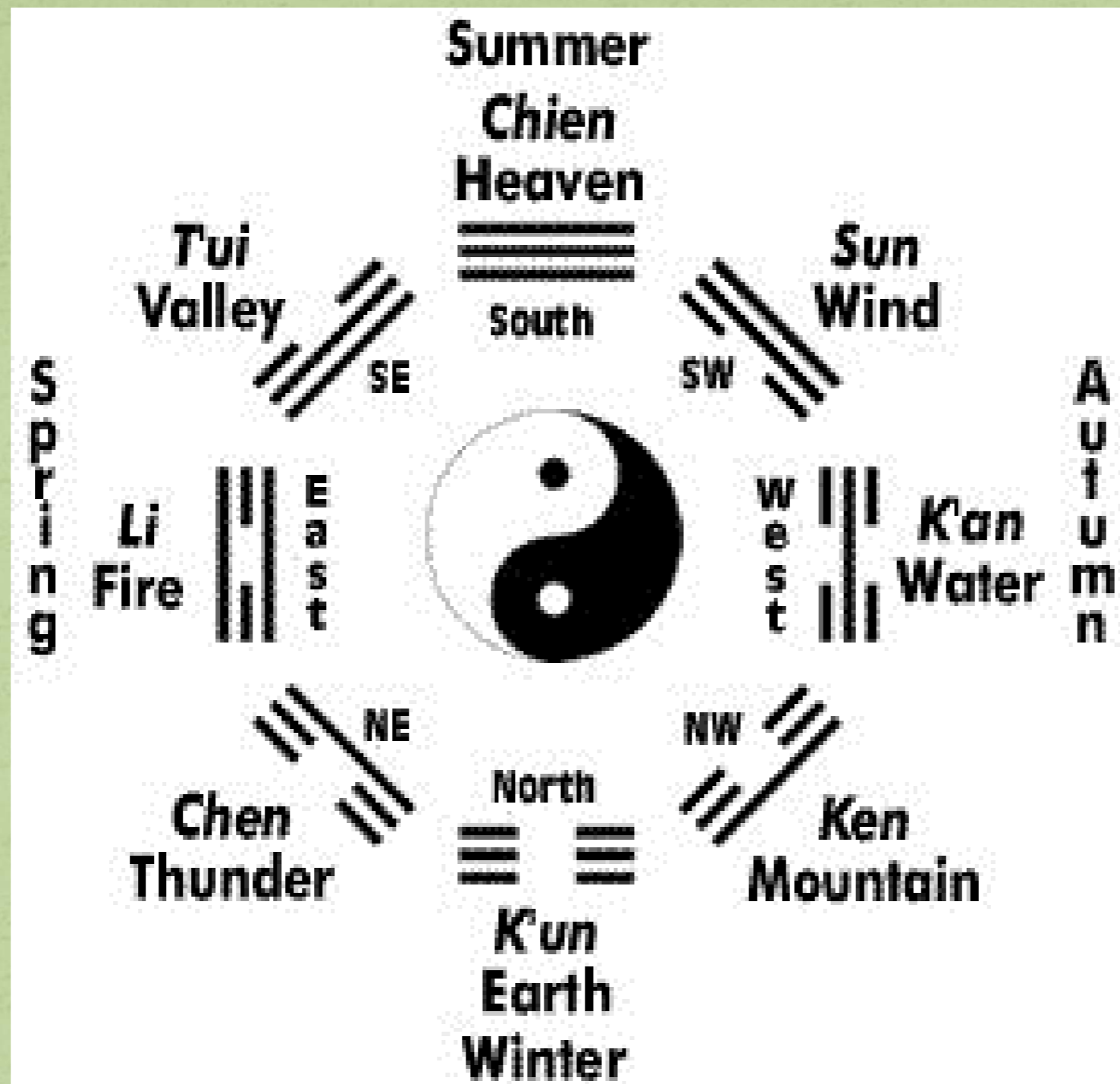
# Temple of Heaven in Beijing

Altar

Temple



# The Eight Trigrams



By the way, there is octal in the system of calculation in computers.

In China, the philosophical foundations of the superiority of Nature over man and the ways of government and the relationship between people are crystallized 2,500 years ago.



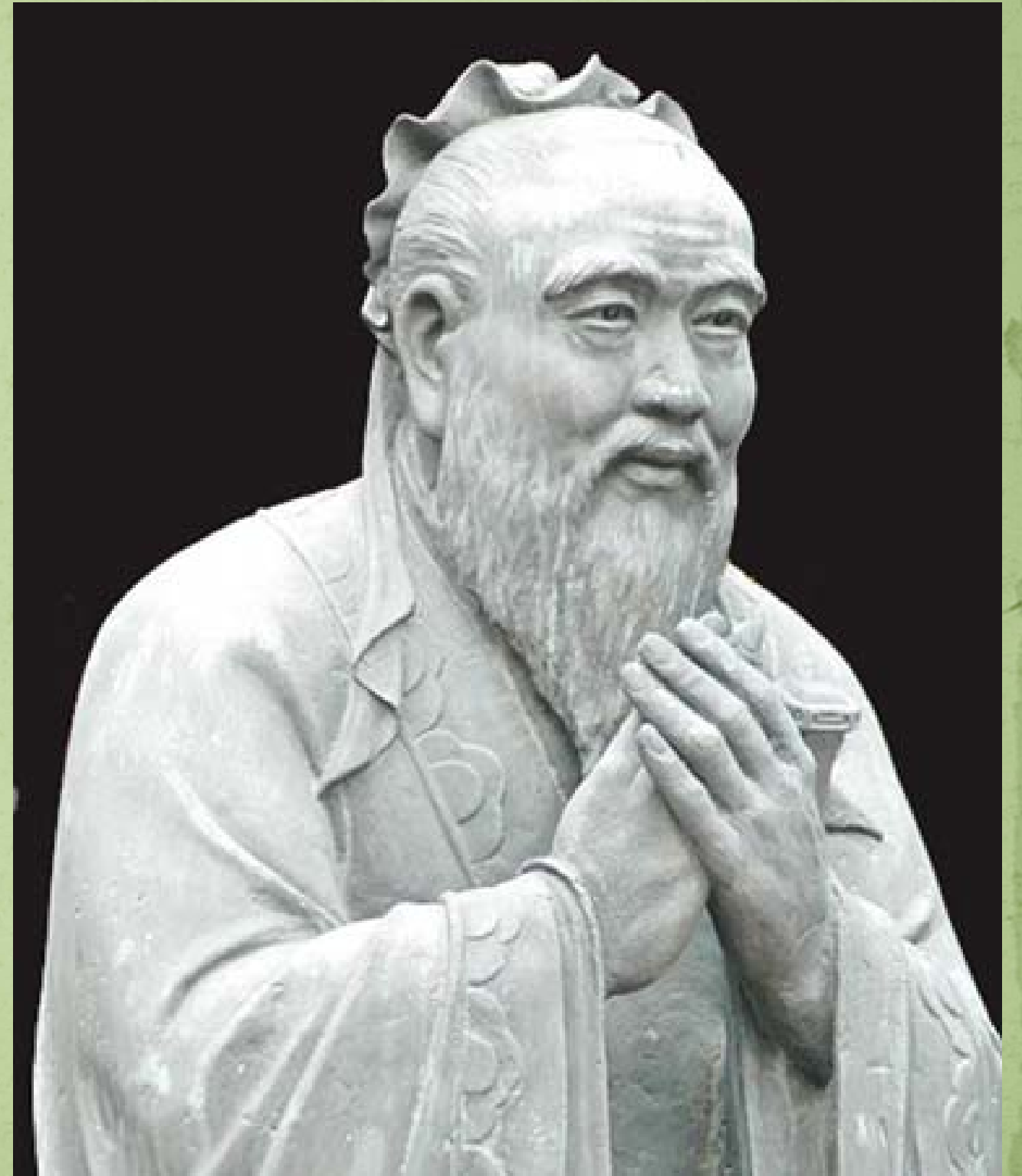
# Lao Tzu, his work " Tao Te Ching» VI-V century BC

- Man follows Earth. Earth follows Heaven . The Heaven follows Tao. Tao follows Nature.
- Nature is never in a hurry , but always be in time.
- Who takes - fills the palm, who gives - fills the heart.
- When laws and orders are multiplying, number of thieves and robbers are growing .



# Confucius ( 551-479 BC), to Emperor:

- If you cultivate yourself , is it difficult to manage the state? If you can not improve yourself , how you can improve other people?
- When the state is controlled according to the mind , shameful poverty and destitution, when the state is not managed according to the mind , the shameful wealth and honors.



Ideas like these are known and studied by more than one hundred (100) generations of Chinese!

# India.

In Hinduism people worship gods, pantheon of gods counts about two thousand. The Gods represent the forces of Nature, elements of the space from the local to the space and manage people. The main Gods are Vishnu , Shiva, Brahma.

# God Vishnu

Hindus worship Vishnu as «comprehensive god» ; as the pervasive nature ; as the unconscious past, present and future; creator and destroyer of the universe ; those who support life in the Universe and controls it; one of whom emanate all the material and spiritual elements.



# Shiva

Impersonation destructive beginning of the universe and transformation ( creative destruction ). Five of the divine role of Shiva : creation, maintenance , dissolution , concealment and grace talent.



# Brahma

God of creation creation in Hinduism . Brahma is the self-born , having no mother , born from the lotus flower . Brahma only occasionally interferences in the affairs of other Devas , and even less in the case of people.



# Sanskrit - the language of the Gods.

Age earliest monuments of Sanskrit comes to 3500 years .

The Russian language is related to Sanskrit and is sometimes seen as more simplified its dialect.

Words in Russian language inherited from the Vedic Sanskrit are possible to describe and to cover almost all of the huge scope of human mental functioning , and almost the entire area of man's relationship with nature - and this is important in the Spiritual culture.



So, people and authority of China and India consider priority of Nature before humankind, hence people should serve Nature.

# West

People in the West believe that they can use and reorganize Nature, because Nature is created for mankind's needs. People in the West are extraverted, they try first to understand the World and then, they try to comprehend themselves. People in the East are introverted and they try first to grasp themselves and then, they try to understand the world.

Both civilizations know all about the World and Humankind but their knowledge are quite different and theirs ways of learning are just opposite.

Last half of the century western scientists spoke more and more about ecological problems, sustainable development and so on.

We also started our investigation with the fact that the Nature created a human being, hence people are the element of Nature and they have to serve their Mother. Following to I. A. Malmigin we made the next step, we supposed that the Biosphere is a vivid creature, which mankind may have conversations with. This assumptions has no practical influence at the moment, but nevertheless it is very important for future.

# Results and Discussion

Combining modern knowledge and some ideas of both civilizations we worked out the paradigm of biospherical compatibility of cities which would develop people. The main principles are:

1. **Symbiosis of cities and the Nature, According of Consciousness;**
2. **Comparison of external (exploitation of resources, waste disposal) and internal (human potential) aspects of city life;**

3. **Humanitarian Balance of Biosphere**, i.e. threefold balances of population, places for satisfying the needs of the population, Life Potential of Biosphere;
4. **Legislature fixation of Humanitarian Balance of Biotechnosphere** or a phased transition towards this balance: earth, water, air, energy and social criteria;
5. **Knowledge as a basis for city management:** professionalism, intelligence, information, suggestions on development, elimination of factors, hindering development. Result: Program of transformation of pathology into resource of development;
6. **Progress.** Comparison of planned environmental factors and level of human development with the reality;

7. **Functions of a city** which satisfy human needs: livelihood, entertainment, authorities, charity, education, creation, connection with the Nature;
8. **Reliability “Constitution”** of the city and other laws, traditions of an ethnic groups, councils of elders, Social union, etc. Result, control, balance, efficiency;
9. **Cognition** as a basis for policy, power structures, interactions of all with all, the holidays, style of the city.

The result is a matrix with  $3 \times 3$  elements presented below.



# THE MATRIX

## OF CONVERSION OF THE CITIES TO BIOSPHERICALLY COMPATIBLE AND DEVELOPING OF HUMANS

<p><b>1</b> Symbiosis of cities and the Nature, Accord of Consciousness</p>	<p><b>4</b> Legislature fixation of Humanitarian Balance of Biotechnosphere or a phased transition towards this balance: earth, water, air, energy and social criteria</p>	<p><b>7</b> Functions of a city which satisfy human needs  livelihood, entertainment, authorities, beneficence, education, creativity, connection with the Nature</p>
<p><b>2</b> Comparison of external (exploitation of resources, waste disposal) and internal (human potential) aspects of city life</p>	<p><b>5</b> Knowledge as a basis for city management: professionalism, intelligence, information, suggestions on development, elimination of factors, hindering development. Result: Program of transformation of pathology into resource of development.</p>	<p><b>8</b> Reliability "Constitution" of the city and other laws, traditions of an ethnic groups, councils of elders, Social union, etc.  Result, control, balance, efficiency</p>
<p><b>3</b> Humanitarian Balance of Biotechnosphere, ie threefold balances of 1) population, 2) places for satisfying the needs of the population, 3) Life Potential of Biosphere</p>	<p><b>6</b> Progress  Comparison of planned environmental factors and level of human development with the reality</p>	<p><b>9</b> Cognition  as a basis for policy, power structures, interactions of all with all, the holidays, style of the city</p>

All elements are known, but here is the system, hierarchy of subjects and each element may be calculated in one or another way.

So, life of city may be presented numerically.

According to the author's opinion the main result of such approach is possibility to predict in volume what happened if one or other ruling decision to realize, reaching the global aim- biospherically compatible city, developing people. Compatible means preventing ecological disasters for centuries. Summarized results of calculations on several cities in Russia presented in the recently published book.

# Conclusions

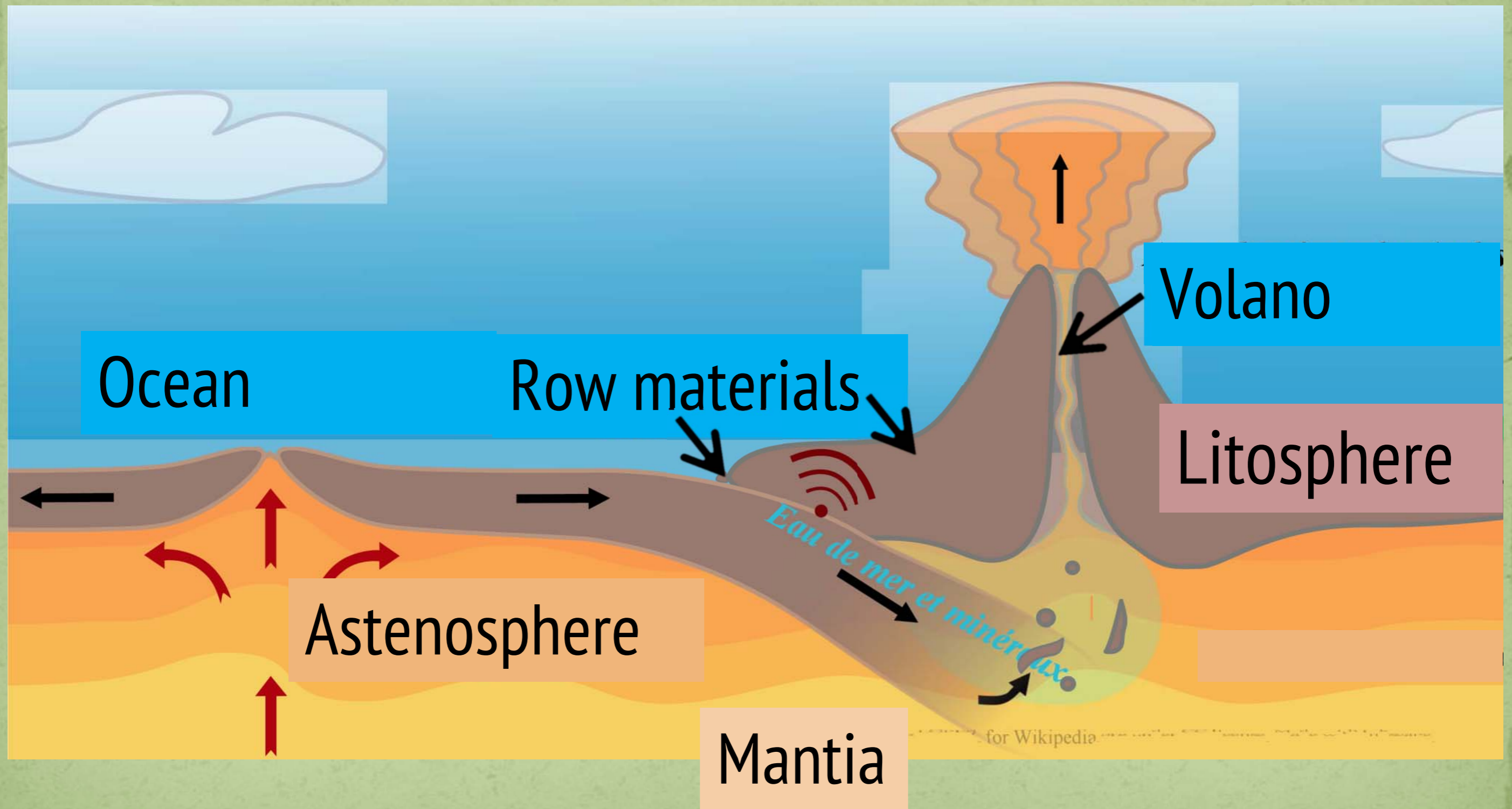
This approach may lead to many unusual consequences and for example there are some of them.

a) People can't produce water, sand, air, oil, etc. All these resources are produced by Earth, and Earth is owner of them. People should buy these raw materials from the producer and owner.

What is the price?

According to the theory of Adam Smith the price should be sufficient for the reproduction of this materials.

What energy? What duration?  
What price of «raw materials»?



b) To whom to pay? If we involve natural materials into economy of humanity as resources then it is necessary to recognize the Earth as a legal entity. The representative of it would be the Government of the country and Government will spend money for treatment of Nature.

Cost of created value by people less than cost of value natural materials. Most countries lose their national wealth according to price for their reproduction.

c) People want to have democracy. Above whom the democracy may rule? Answer – only above Nature. So, part rules whole, this leads to a disaster . To save humankind it is necessarily to establish Geocracy and governments have to be representatives of it.





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**Thank you for your attention!**