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Cognitive Developments, Geographical Models and Theories

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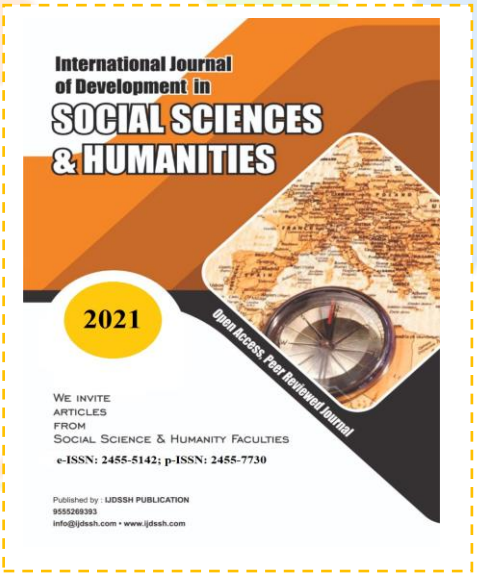


ABSTRACT

Theories and models in geography are an expression of a new conception or understanding of a phenomenon or process that geographers attempt to gain the attention of others by suggesting conceptual metaphors[2]. The theory can be understood simply as understanding something else that the researcher is trying to express in words that can have the closest meaning to his discoveries such as "the butterfly effect expressing an objective truth in the communication system". The theory of atmospheric phenomena must be considered an abstract concept of tangible things and in the realm of perception of the human mind and a question of nature the theories and models are always supported by a knowledge base so that the theory cannot exist and has been found to have no epistemological roots so when classifying geographical theories it appears from It is necessary to design cognitive systems first because the foundation of any theory is supported by the conceptual system of its cognitive system. Epistemology has seen both “scientific” and “spatial” and geography has recently seen the introduction of many theories into the cognitive system. The importance of theories lies more in the schemas that organize the researcher's belief and of course the researcher's belief in facts. They differ objectively scientifically Darwin, for example, derived from biology data for his mental schema and beliefs, called evolution proposed by biologist Bertlinvi, from the same data that Darwin studied, another mental schema and belief, called general systems theory. All these differences are due to the cognitive system that affects the researcher's knowledge or instinct, and in this system the researcher's beliefs and mental plans are formed.

Keywords: conceptual metaphor, mental schemas, scientific epistemology, spatial epistemology

INTRODUCTION

At first it may be necessary to pay attention to a few short points in order to be more consistent with the audience in explaining the principles of theory in geography. These points are: Although models and theories have a prominent role in shaping the type of visions of researchers and scholars and how they deal with geographical issues, many are less convinced of this importance and some focus on the aspects of applications, unaware that there is no practical method or suggestion that manifests without theoretical and epistemological support. Another important point neglected by the geographical community is the lack of

proper understanding and the inability to translate models and theories of other sciences into geographical language. Of course, it is normal for a theory to be introduced into the sciences (eg physics) and after a while other fields of knowledge (eg geography) will enter but geoscientists must be able to translate its metaphors into the geographical sciences. For example, oceanographer John Stone [1] (1989) for the first time, after extensive scientific study, attributed the entry of evolutionary thinking into geography to the efforts of geomorphologist William Morris Davis. He believed that Davis had translated Darwin's statement into a general model of geomorphology in a deductive manner. Davis' understanding and ability not to introduce Darwin's principles directly into geography but first to choose a new name for them within the framework of the theory of "geographic distance" and use Darwin's principles in geographical language in the form of conceptual metaphors such as "childhood", "maturity" and "consideration" were translated geographically and in In fact, environmental changes in geomorphology have been presented in an algebraic temporal model as the latest theory in the evolution of the Earth's crust, so few people can understand this adaptation of Darwin. For any geographer it should be clear that quoting and borrowing an idea or theory from other sciences is not a problem, but designing it without a geographical translator will distort the identity of geographical knowledge. Any theory or model that wants to enter geography from other sciences must accept some changes, it must choose the closest metaphor that can express this principle in geography as its name, and secondly, for new perceptions in language. It is therefore mentioned in this article that terms such as modernism, positivism, postmodernism, post-structuralism, etc. may not be seen and may seem odd with what are generally known as theoretical ideas in sociology, architecture, and other space sciences. The difference between these methods is that many of these words were first coined in other sciences such as sociology and philosophy and here we have tried to use geographical concepts to avoid imitating others and to protect the identity of geographical knowledge.

DISCUSSION

Every theory and model, regardless of the knowledge presented, belongs to a specific cognitive apparatus and conceptual system. The cognitive system can be compared to a computer operating system to approximate the mind. We can say that humans encounter four cognitive systems in the process of cognition.

These four devices are:

1- The device of interpretive knowledge (nihilism)
2- Scientific knowledge device
3- Organ of Knowledge (Spatial)
4- The apparatus of interpretive knowledge

Each of these devices has specific default settings on the basis of which they are distinguished from each other and it is common for the researcher to choose each of these devices by default. The device will look at the world around it. Usually each cognitive system has a specific composition. In this way, the researcher uses his literature without talking about his cognitive system, and his affiliation with his chosen knowledge system is determined. For example when a person uses concepts like output, input, feedback, inertia etc. in ordinary slang then it is clear that he belongs to the systematic system of epistemology. Apart from written and conversational literature, each cognitive system has its own way of studying phenomena and thus in such literary and methodological assumptions models and theories are formed. If we want to be satisfied with the history of geography in the modern era and ignore what was seen in the field of geographical thinking before this era, we have witnessed the emergence of many models and theories in geography. And models in human behavior and categorized decisions based on their cognitive system. It should not be overlooked that what comes here should not be considered a history of geography because it merely attempted to show the intellectual developments of the geographers and of course the primacy and chronological retardation of these developments are not considered here. The scientific knowledge system and its impact on the production of geographical models and theories.

The apparatus of scientific epistemology is inherited, and it is a remnant of Cartesian thought, which begins with some important assumptions, which are the separation between the subject and the object, the perception of the world in the world of energy and matter, and the dependence on tangible things and testability, which is referred to as the Charter of Scientific Thought. Every knowledge system can create destinations

Different view and later theories on his conceptual world. In the system of scientific epistemology, three perspectives or models can be considered, namely “evolutionary”, “stochastic” and “environmental” the fruit of this system in the field of geography. In these three perspectives many theories in geography have been addressed and have had important influences on the world's public space and geography (Fig. 1).

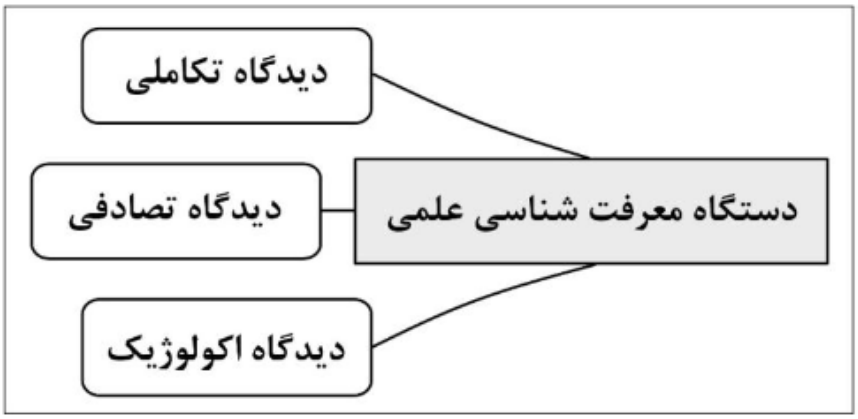


Figure 1: Three epistemological theories from the perspective of the scientific system in geography

Foucault refers to two evolutionary and stochastic models as paleontology and genealogy in the historical and social sciences. The evolutionary perspective of geography is a translation of Darwin's intellectual principles of geography and was first introduced to geography by Davis (1850-1934) a Harvard geographer according to Stoddart (1966). With Darwin's ideas on geomorphology he was able to tackle the theory of "geographical distance" and create Davis' geomorphology that had undisputed dominance in American geography for decades. From this point of view, many names have been mentioned in the geographical literature. The foundations of Davis' theory of "geographic distance" rest on the analysis of form in the context of time. In fact, the main focus of his analysis is to change the shape of the sample. The same principle was the basis of Darwin's method of analyzing the morphological changes of living organisms. That is why this group of researchers in geography emphasizes observation. Davis believed that the formal changes of the landscape occur in three successive algebraic frames of time in the form of "youth", "maturity" and "old age" and thus the first steps were taken to make geography scientific at the time. This view was extended to human geography through the work of Ratzel and Mackinder (Hartland), Huntington (Environmental Algebra) and Thomas Malthus (Malthus' Idea in Population Geography (Schowie, 2003: 87).

In Davis' era the methodology of geography also changed and became a method known as the historical method. In the historical method time is the main focus of analysis and every change is attributed to time. The course of development in this methodology has an algebraic and

predetermined direction and therefore the basis of this view is considered the main factor in the emergence of geographical algebra. In general, the impact of this viewpoint on geography can be summarized in several main axes, which are the geographical index of that era. In this era, issues such as determinism, apartheid, slavery, nationalism and the legitimacy of aggression were considered in geography. In this period, the "exploitation" of the environment was considered the most important strategic goal of man's relationship with the environment (Pabli Yazdi, 2003: 7) and overcoming nature, which was a hostile relationship, and the war between nature The human being is one of the human honors in this era (Al-Shatri 1391: 43). The important theories based on this view of geography can be summarized as follows:

Geographical distance theory, gradient theory, sub-theory, Ratzel's biospace theory, Hartland's theory, de Seversky's theory, Mahan's theory, environmental algebra theory, Malthus-sem theorem, ergodic theory (Fig. 2).

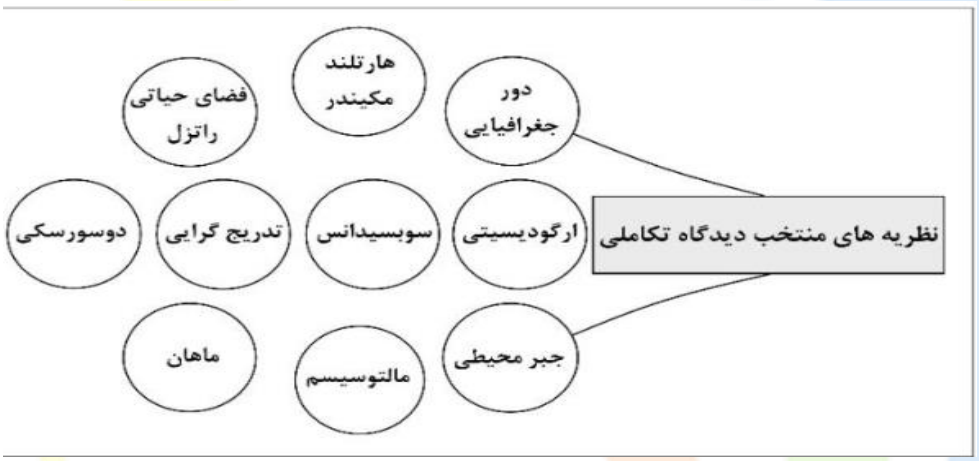


Figure 2: Selected Theories of Evolutionary Perspective in Geography

RANDOM PERSPECTIVE

The foundations of the stochastic view can be seen as a violation of the foundations of the evolutionary view by analyzing phenomena in a cyclical and random orbit and considering changes to be pointless and not a historical interpretation of man. In short, the sum of their views can be summed up in a few short phrases:

1- In this perspective, man is presented as an intelligent creature and a maker of machines.
2- The change in phenomena is random.
3- The frequency of change is the basis of historical studies. In other words, the stochastic view is a time-independent model that considers change as an alternation and repetition of

phenomena and the human being as an intelligent and active being.

They focus on empirical processes rather than observation. Disaster scientists relied on many documents to disprove evolutionary principles, but later discoveries in genetics have played an important role in discrediting and discrediting Darwin's evolutionary principles. Geneticists have found that what happened in nature, called "a change of animal and plant species, is not a change but what is ultimately a change is a feature archived in their genetic memory and has to do with the change." The random view of geography led to the emergence of many schools of thought in both physical and human geography. In general, the achievement of the dominance of this view in geography can be summarized as follows:

Possibility in the field of human geography Geomorphology of a process in physical geography Adaptation and coexistence with the environment in determining the human relationship with the environment Codification of civil rights, women, and minorities in the field of anthropology Regional rapprochement in the political sphere.

In the political sphere, regional convergences have replaced rivalries between nationalism and ethnicity and radically transformed Europe and other parts of the world. Random thinking led the European community to accept territorial unity, monetary union, parliamentarism, etc. instead of nationalism which only resulted in two world wars and the world underwent a fundamental transformation. The general result of the dominance of this view in human and natural geography was very diverse and appeared in various fields. The human relationship with the environment was defined as a business relationship with the slogan of winning and the basic tenet of the environment was changed to the concept of “enjoying” the environment. After these developments, how to take advantage of the environment became subject to the definition of standardization in the methods of exploitation and human industrial activities became limited to the use of the most advanced technological methods. So in this period great emphasis was placed on the development of technology and quantitative geography.

In fact, the technology central to geography was considered valuable. The important theories based on this view of geography can be summarized as follows. Geostorm theory, King's theory, interrupt theory of spatial change, Dostoevsky's theory, plutonian theory, pocket flower theory, regression theory and attachment theory, catastrophe theory (Fig. 3).

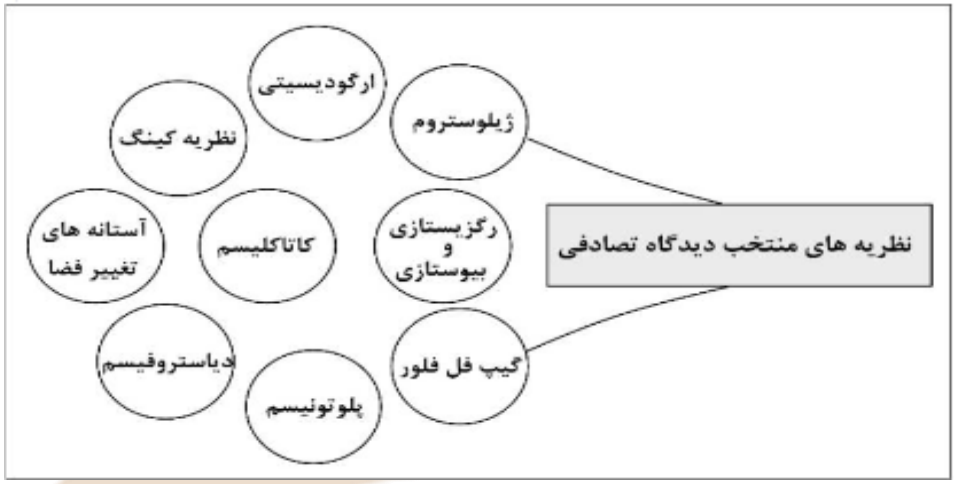


Figure 3: Selected Stochastic Perspective Theories in Geography

ENVIRONMENTAL PERSPECTIVE

With the change in the concept of human-to-human society in geography another view was born known as the ecological view. This change was mostly influenced by sociologists of geography, so Hallen defines the emergence of geography as “the science of human ecology” (Shockwee, 1996). In this view, the individual role of man in human society was realized. In geography, it must be considered a precursor to the emergence of geospatial. In this model not only the concept of man has changed but also the concept of environment and the relationship between man and the environment so that the environment has become a "reciprocal" relationship and a comprehensive methodological approach has been replaced by induction in studies. Vidal Delablach (1926) was able to create a "regional geography" during this period and brought about a major change in the geographers' community. The view of separation between physical and human geography is not followed as before as the concept of ecology has gradually replaced ecology and ecological capacity or ecological potential of the environment has been introduced followed by the strategy of “owning” and “protecting the environment” as the main tenet of regional geography. This view has been defined in many cases by technocrats and their engineering behaviour. I have objected and have not considered dealing with nature with reason merely as a tool. During this period environmental law, wildlife law, and river law were defined and concepts such as geoparks, protected areas, closed areas, national parks, and wetlands were developed. At the same time, environmental organizations, dozens of grassroots and demographic organizations have been formed, and many initiatives have been established in international forums such as

UNESCO or its affiliated organizations to protect natural resources. Other achievements of this period include the establishment of political parties such as the Green Party, the International Environmental Staff Awards and the Grassland and Forest Protection Organization. Important theories presented in geography based on this view have followed the general principles of the evolutionary model with little change but can be summarized as ecology theory (green ecology), central ecological theory, clergy theory, peripheral limb theory and genetic algebra theory is mentioned (Fig. 4).

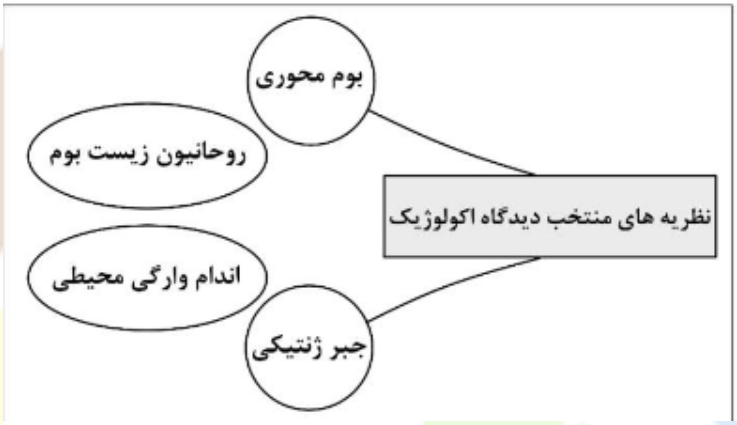


Figure 4: Selected Theories of Environmental Perspective in Geography

SPACE THEORY (SYSTEM)

Bertalinvi was one of the pioneering biologists who established systemic epistemology in 1936. Although he was not able to publish his ideas during his lifetime, he died in (1971) on the anniversary of his death his book General System Theory was revealed. He presented Systematic Knowledge System as a theory but the experts of the Scientific System were well aware of his trick because they saw that the principles of Systematic Epistemology clearly contradict those of the Scientific System (Fig. 5).

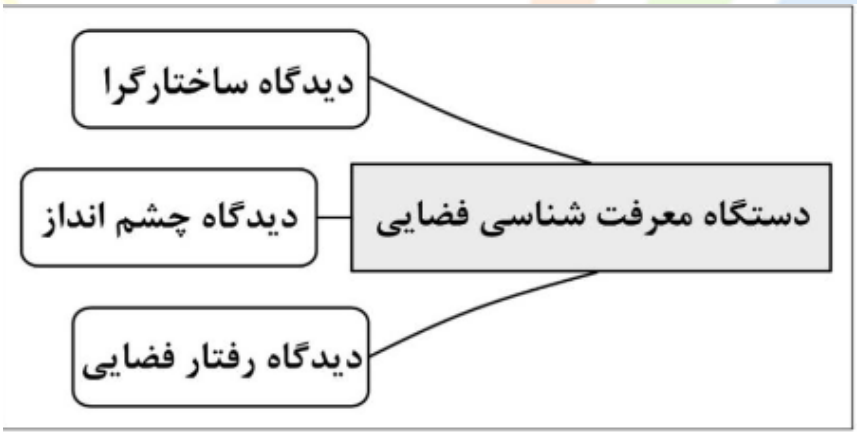


Figure 5: A system of three spatial cognitive viewpoints

The most important differences between the principles of systems knowledge theory and the principles and foundations of a scientific knowledge system are:

-Determination.

The universe is a mixture of energy, matter, and information.

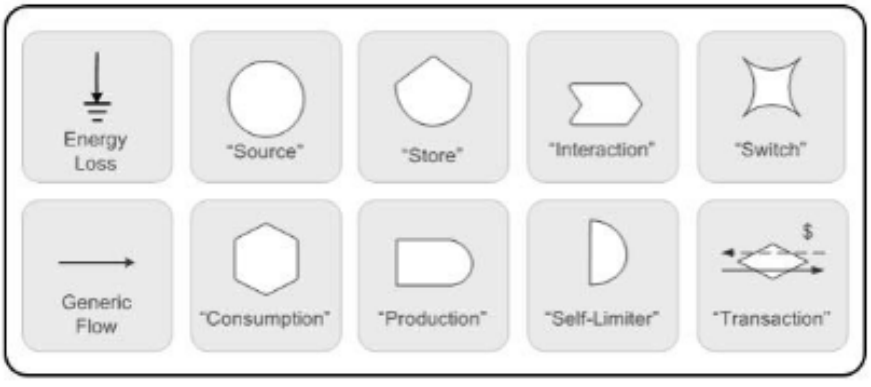
Knowledge is the discovery of the relationship between phenomena so that the relationships in this view are the basis of analysis.

Valuation of fuzzy logic in studies.

The design of this cognitive apparatus in geography should be attributed to Hartshorne's work and the theory of exceptionalism in geography. Richard Hartshorne (1939) sparked controversy with the publication of The Nature and the Geographer and the Extraordinary Plan in Geography. In his study, he reached the inefficiency of the "scientific apparatus" in expressing geographical facts, and by suggesting the exceptional nature of the geography method from other sciences, he expressed his understanding of the "exception theory" in geography. He believed that scientific principles and foundations can be used in all sciences but in geography this method is ineffective and knowledge of geography is excluded from all other sciences. He was unaware of systematic thinking but his practical experience in the field of geography taught him that the "scientific method" is not responsible for understanding geographical issues. Schaeffer (1953) later established that what Hartson proposed was a new epistemological system and that this was not limited to geography but any other knowledge presented in this conceptual and epistemological system would find such a problem with scientific epistemology. In other words, 'geospatial' could be called a translation of 'systematic perspective' in geography and this translation was appropriate. Because the term "system" is a conceptual metaphor in the field of biological knowledge. Simultaneously with the introduction of the spatial perspective in geography, the French expanded the same meaning (the spatial point of view in geography) under the name "chromatic geography". At the beginning of the twentieth century a major change occurred in the field of geospatial ideas in Europe. Paul Lowell published this development in his book The New Geography. Intelligent analysis and listing the limits of Scientific Epistemology and the capabilities of Geospatial. Also, the valuable work of 'presentation' in the introduction of 'Geospatial' which attempted to analyze the structures and forms of spatial communication cannot be overlooked (Fred, 1987: 101). Others, such as Ness have done valuable work in defining space and of course Peter Haggett's seminal work in the field of space geography. With the publication of the

famous book "The New Geographical Formation", he was able to identify and explain the principles of spatial thinking in geography. This book was translated in Iran by Godarzi Nejad (1375).

With the introduction of systems theory into geography the methods of geography also changed and causal relationships gave way to cyber relationships and the human relationship with the environment changed to “adaptation” and “environmental sustainability”. One of the most important concepts influencing the spatial method is the change in the definition of the system as a whole with identity. The method of working in this device rather than the inductive method was deductive-inductive. In geospatial methodology it is an attempt to dissect structural patterns, their similarities and differences and to understand how structures relate to the organization of the environment. The second concept in spatial methodology focuses on the relationship between the components of the system. Because in this view what creates the structure in the system is how the components relate to each other. That is why the nature of the mathematical models that have been developed to determine the relationship between the elements in this device is different from that of algebraic mathematics. Discussions of new mathematics such as correlations, sets, matrices, Markov chains, etc. including mathematics methods used in this device. The use of symbols is also common in system epistemology and a symbol is defined for each function of the system (Fig. 6).



In general, the design of 'space' and 'spatial perspective' in physical geography has also given rise to a new geomorphology known as 'systematic geomorphology' (Samer Field, 1998).

With the introduction of spatial thinking in geomorphology new concepts such as state theory, dynamic equilibrium, geometry, and static and dynamic systems were introduced. Human geography was not deprived of these developments and with the emergence of

geospatial multiculturalism was recognized and new human schemes were introduced and the cultural man became the pillar of human geography analysis. Meanwhile, human cultural identity played a prominent role in the knowledge of geography and the ethnographic method was widely promoted in geography, new concepts such as positive feedback, interruptions, coercive irregularities, entropy and the use of other concepts such as "dynamic equilibrium", "sustainable equilibrium" and "stable equilibrium" in The study of common geospatial. In the concept of time and space in geography there has been a wide semantic change that we have not seen before in geographical literature. Among them are terms such as “reaction time”, “inertia time”, “shock time” and “response time”. The concept of equilibrium in this system is very broad and is considered in relation to a particular relationship of how the components in the system are related and its various patterns such as “ Stable equilibrium, dynamic equilibrium, and sustainable equilibrium have been identified and achieved.

SPATIAL EPISTEMOLOGY MODELS IN GEOGRAPHY

Important models arising from space system in geography can be divided into three categories: structuralism, perspective (impression) and function and under each of these models consider case theories, geometry theory, butterfly effect, complexity, diffusion theory, dynamic equilibrium, etc. In human geography the most important and influential paradigm has been "structuralism" which is the main focus of many environmental studies. The Swedish "Haggrand Strand" theory has played a very important role not only in medicine but also in many other sciences related to geography, especially in the field of cultural geography and how to disseminate lifestyles. The paradigm of "functionalism" and "perspective" in space geography was able to attract the attention of many geographers. The landscape model acted as a catalyst for entering into another cognitive apparatus called the “Explanatory Epistemology Apparatus”. In the Physical Geography of Australia (1818-2002), Gurley (1927-2002) and Hack (1913-1991) were among the pioneers of systems thinking over the past few decades and had a profound influence on methodology, literature, concepts, and theorizing and had physical geography.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THE STRUCTURAL MODEL IN THE SPATIAL EPISTEMOLOGY APPARATUS

In many cases the architecture of the system is such that the overall performance of the system depends and the influence of which plays a major role in the way and pattern of behavior of the system. Those who acknowledge and believe in the fundamental and vital role of structure in the functioning of the system are called "structuralists".

LANDSCAPE MODEL IN SPATIAL KNOWLEDGE DEVICE

The landscape model has been more prominent in the field of human geography but it must be admitted that advanced explanations have been made in the field of explanatory geomorphology in this field. In the landscape school more emphasis is placed on the fact that systems and their behavior rather than following the characteristics and structures of the system is more than the function of the landscape in which they are placed.

SPATIAL BEHAVIOR MODEL IN SPATIAL EPISTEMOLOGY

The performance of systems is usually affected by the structure and content of the perspective in which they are placed. However, there are systems whose operation is independent of the structure and landscape in which they are located. These systems are formed more under the influence of the components of the mental image of the members of society from space and thus approach the perception. In other words, the researcher in the spatial behavior viewpoint focuses more on the mental image of the society to understand the understanding of the type of perception and people's understanding of the space in which they live because this view believes that the mental image of people from space has an effective factor in people's behavior, performance and decision. To understand these systems and their behavioral patterns. It is necessary to re-read their mental picture.

CONSEQUENCES OF SPATIAL MODELS IN GEOGRAPHY

The most important consequence of the "spatial outlook" rule was the end of the undisputed dominance of the "scientific epistemology apparatus" in the global academic community. The "methodological view" created a semantic system encompassing a variety of sciences including the humanities and even technology and soon became the main discourse of academics. Many activities have been carried out at the international level including the establishment and support of environmental disciplines and studies with a systematic approach and environmental planning by the United Nations. The Rio Conference was held and guidelines were developed. Environmental treaties such as Kyoto, Paris, etc. were signed and "climate change" was put on the agenda of researchers as an environmental problem.

Important theories based on this view of geography can be found in theories such as Case theory, complexity, dynamic equilibrium, more butterfly effect in physical geography, climatology and geomorphology), diffusion theories, Loch's theory, von Thunen's theory, Randelli's theory, whole city theory and Kristaller's theory summarized in Human geography (Fig. 7).

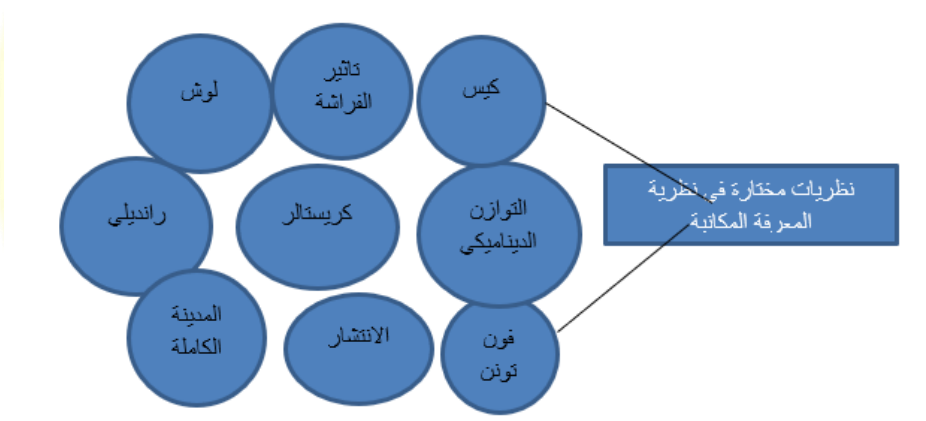

Figure 7: Selected theories in spatial epistemology

THE APPARATUS OF EXPLANATORY EPISTEMOLOGY

An exegetical cognitive system (sometimes referred to as a method) is distinguished from other cognitive systems (scientific and spatial) Cognitive geography can be considered an exemplary achievement of this system. What Descartes said about cognition as a subject and an object has been challenged in our time to question the foundations of Cartesian epistemology. The problem today is not to estimate sensory

perceptions over rational ones. The subject is another and this is the skepticism of the foundations of Cartesian epistemology. The fact that humans are the self and the world outside us is considered a being has called for a serious review today. Hence, in an interpretive cognitive system, anthropology develops into anthropology, linguistics into linguistics, and geography into geography.

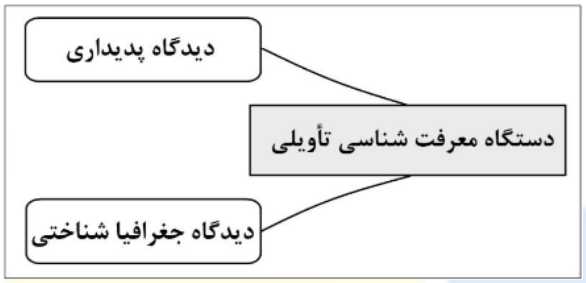

Figure 8: Explanatory epistemology apparatus

The concept of man in geography is an interpretation of the historical, ecological and cultural man in the scientific and spatial system, which is what Martin Heidegger calls. Environment in geography for living space The means and "relationship" in defining geography with "environment" in relation to "environment" in geography and the principle of this relationship have been changed from previous concepts such as "exploitation," "utility," "enjoyment," and "sustainability environment" to The 'productivity' which is itself a special self-limiting relationship is replaced (Fig.)

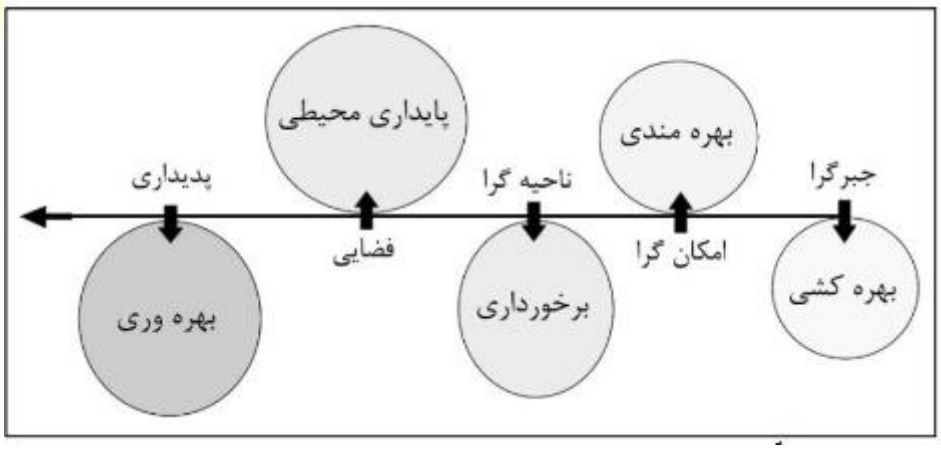

Figure (9): Replacing the concepts of the human relationship with the environment in different geographical models

In other words, interpretive geography does not define man's relationship to the environment but rather acknowledges man's relationship to the world. This issue is well reflected in the work of Iranian empiricists in this field even at the beginning of the books they wrote. The explanatory epistemology of tangible objects gives equal validity to occult and meta-object concepts and in this way the identity of human mental images are re-validated and analyzed (Pabli Yazdi Khaniki, 1980: 7 and Shkoui, 1384: 127). In this method, experience is the basis for cognition, but the concept of experience is fundamentally different. The human experience differs from that of other animals in this world. In this epistemological system the human experience is shaped into the geographical and cultural system and thus interpretation is generated rather than specific and dogmatic assumptions. Gilbert (1818-1918) was one of the first geographers to have serious and valuable work in the field of interpretive epistemology. Twentieth-century geographer Gilbert for the first time among geographers of this age uses terms such as antecedent and consequence to express such a concept in the famous Report (Henry, 1886). He formally abandons Cartesian dualism and the multiple hypothesis by substituting the positivist hypothesis with zero and one. Paul Claudel (1977) in his book, The New Geography, only mentions but never describes the phenomenon of phenomenological geography. Shkoye Nez in his book "Environmental Philosophy" which was quoted from John Wright, on page 127 of his book, discusses the subject of mental image geography as a result of psychologists and it is close from the perspective of phenomenological geography. The first book in the field of phenomenological geomorphology was published by Muhammadian (1399) and Zangeh Asadi and Muhammadian (1398) publishing the principles and foundations of phenomenological geomorphology in the field of physical geography.

Joan (2016) and Wathiq (1398) in Human Geography criticize and describe space in this field. Episodic geography in Iran was formally applied with the works of Tagari, Mahmoudi, and Nima Elahi, and entered the field of cognitive science with the works of Rahdan, Baba Jamali, Muhammadian, and Sepahvand. In Cognitive Geography in the Geographical Domain of Health, Sipahuand explained the mechanism of the effect of cognition on homelessness and nostalgia.

PHENOMENOLOGICAL PERSPECTIVE THEORIES IN GEOGRAPHY

STELLAR CLIMATE THEORY

Waiting for me introduced a new concept in her 2014 studies, which she articulated

under the "Astronomical Climate Theory". She believes that "spatial identity" is not the same everywhere and focuses on the historical memory of places. In other words, realize that in nature there is a hidden space that controls the function of terrestrial factors and components on a scale beyond objective environments. This space places more emphasis on the "historical memory" of the place. In simpler language it extends the same principles that apply to historical and social memory to history and the natural memory of places and is considered to apply to regional areas as well. She explains that the reason for choosing such a title for this theory focuses on a concept that transcends climate and its issues. "Choose" in this term denotes beyond the atmosphere, as "Fredded" which means beyond what is seen. The same argument was made in the interpretation and arrangement of the rural settlements of the Zagros by Nuguan (1396). He presents the phenomenon that is called in the positivist view of physical geography as merely a danger as a center of attraction for permanent residence in the tribal region (Zagros).

COGNITIVE ATTITUDE THEORY

This theory which was first introduced in psychology and its geographical translation asserts that the location of the points has a great influence on their regional identity. This theory also recognizes the fact that each place finds its identity and existential role based on its position in the surrounding space and that only the essential and essential elements of each place cannot be effective in creating the dignity and order for that point alone. For example, the concept of Iran is a spatial and context-oriented concept, and Iranian is the result of such a situation. That is, if we transfer Iran with all its population and territory to Africa or the United States, the concept of Iran will not appear in the present situation.

LANDSCAPE LANGUAGE THEORY

Weston Spirne published The Landscape Language Theory in 1947, in which he demonstrated that geographical landscapes have a structure similar to language and can therefore be interpreted as literary texts and that humans are able to read landscapes in dealing with landscapes. Blessed Elahi in 1393 to address This command in geography must use terms such as land text and land context to create five other aspects of geographical texts and name this group under the title transstext in physical geography.

MIRROR IDENTITY THEORY

Mahmoudi introduced this theory in 2014 and consolidated the relationship between the natural world and the human worlds in geography. The meaning of the mirror identity is a kind of inseparable whole, a complex group that attempts to explain and justify the reason for the historical unity and

territorial integrity of Iran by relying on the concept of spatial interconnectedness by relying on spatial identity. Most geographical and social thinkers have considered the existence of ethnic, religious, linguistic and other pluralism as a separating and challenging factor in the national convergence of territories. The Iranian mirror identity theory asserts that according to the principles that govern ecosystems, diversity is not only a cause of national differentiation and difference but this rule in the civilization of Iranian societies has been a factor in the stability, unity and cohesion of historical Iran. The mirror identity theory asserts that civil stability in Iran stems from its social diversity and pluralism and this statement derives from the first law of social ecosystems.

ENGINEERING THEORY

This theory defines the relationship between man and the environment as a relationship and not a relationship and a belief that these relationships cause phenomena such as (the ratio of two hydrogen molecules and one molecule of oxygen is what creates water and with a concept definition (such as the golden number that defines beauty) Mokhtari (2011) explain this concept In geography and tried to express the concept of ecological balance in these proportions.

SPATIAL IDENTITY THEORY

Spatial identity is a conceptual metaphor that includes several semantic points.

- Spatial identity expresses a special spatial feature that distinguishes places.
- Spatial identity reveals a special attraction to human perception and understanding in a way that mingles with him and establishes a relationship with him
- The identity of the place is a reminder of the historical memory that took place in that place.
- Spatial identity must be considered as semantic metaphors by which people consider themselves to belong to that place.
- Every place can have a place and order in space but spatial identity is the dignity and arrangement of a place in space that made it habitable.

In this definition the issue of housing is considered as the identity of the place, the dignity and arrangement of the place in space. Spatial identity theory was tacitly proposed in 2014 with the publication of the relationship between Iranian cities and lakes in the fourth period and later expanded by Baba Jamali on the relationship between cities and lakes in the fourth period (2001), Taziri (2014) and Mahmoudi (2016). The most important issue addressed in this theory is to explain why

there are biological patterns and habitats for human societies because in this theory an independent identity is given to biological patterns like city, village, tribe etc. The theory of human societies indicates that it is difficult.

HELLER SPACE PLANNING THEORY

The theory of "space planning" was founded in London by Heller Hanson (1984) and developed according to the definitions of space. In other words, the logic of space planning is derived from the conceptual load that is given to space and its formulation. Because many believe that planning in space follows certain unwritten rules and principles that have a special logic. Various methods of spatial analysis have been developed based on this idea such as analysis of the space plan, and the general idea in this theory is the possibility of deconstructing space into component elements and analyzing them in a network of geographical text that expresses the relationships and coherence of this space (Jamshidi, 2003: 20). One of the foundations of the space planning method is the existence of a two-way relationship between space patterns and socio-cultural patterns which this method seeks to discover by applying the concept of composition in residential spaces (Heller, 2007: 201). In this sense, the arrangement of settlements can be considered as an objective crystallization of the domains of natural history, i.e. spatial identity, social and cultural identity, and so on.

COGNITIVE GEOGRAPHY THEORIES

GEOGRAPHICAL SYSTEM THEORY

Rahdan published a study in 2016 explaining this theory. According to him, a geographical system is a system of concepts, words and terms that provide and support each other conceptually and create a semantic organization in the field of understanding, perception, experience and method of shaping the minds of its inhabitants, environment, linguistic differences and constitute cultural, behavioral and social organizations into a complete identity and unity. In other words, a geographical system is a system that shapes environmental, linguistic, cultural, behavioral, spatial and social differences and indicates how they are distributed and related to each other. The geographical device focuses the sensory and objective perceptions of societies on specific facts about the environment, and thus diversifies the understanding of the land dwellers from objective experiences. This is why place as a healer does not bring the same cultural values and results in different geographical systems and while preserving the value of the inputs, it presents different forms of it depending on the perception of the inhabitants of that land.

EARTH MEANING THEORY

The theory of the meaning of the Earth should be seen as an expansion of the geographical system on a planetary scale and more emphasizing that the bottom of any Earth can be read like a text. Reading and understanding this text is an experience that the inhabitants of that land learn and this reading does not require literacy in school but biological literacy is shaped by emotional wisdom in simple language the experience and understanding that each land teaches and shows to its inhabitants can be called based on social and cultural behaviour, i.e. land.

This theory was presented by Mohammadian in an article of the same name and by asking why only Iranians and some regions of the same age in Iran chose the solar date and why they celebrate Nowruz, Tirgah and the Welda festival, he deals with the fact that Iranians have understood these concepts from their homeland with their emotional wisdom because in this place the They clearly understand such natural events and thus Iranian society has its own understanding of the environment and the meaning of the earth. They show the structure to others by expressing cultural behavior and of course other nations may have defined other concepts for them. Therefore the inhabitants of this region by understanding this meaning express the collective behaviors that they exhibit and we call it culture. That is, they express their understanding of this meaning. So it should come as no surprise that they, like others who live at lower or higher latitudes, have not understood such precise concepts of the Earth's rotation as to base their cultural organization on it. The meaning of the Earth can put other aspects of semantics before us in the cycle of human understanding such as the discovery of meaning and the creation of Meaning and interpretation of meaning.

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