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*N. V. Husieva, PhD (Geography), G. O. Kucheriava, PhD (Geography), Assistant Professor, O. S. Suptelo, PhD student, V. N. Karazin Kharkiv National University

CONCEPT OF WORLD CITIES: HUMAN-GEOGRAPHICAL APPROACH

Н. В. Гусєва, Г. О. Кучерява, О. С. Суптело. СТАНОВЛЕННЯ КОНЦЕПЦІЇ СВІТОВИХ МІСТ: СУСПІЛЬНО-ГЕОГРАФІЧНІ АСПЕКТИ. В статті проведено дослідження еволюції концепції світових міст, виявлено суспільногеографічні аспекти її формування і розвитку. Світові (глобальні) міста викликають значну зацікавленість та є об'єктом дослідження спеціалістів різних сфер. В сучасній науковій літературі зустрічається цілий ряд термінів, що описують феномен світових міст, зокрема «глобальне місто», «світовий центр», «світовий фінансовий центр», «космополіс», «інформаційне місто», «медійне місто», «медійне місто», «метрополіс», «екуменополіс», «глобальний міський регіон», «столиця капіталу», «міжнародне місто», «місто, що глобалізується», «мегамісто», «інтерактивне місто» тощо. Дефініції поняття «світові міста» спираються на такі аспекти як економічний розвиток, політичний вплив, соціальна значимість. Можна виділити декілька підходів в ідентифікації феномена світового міста, заснованих на різних принципах, — геоекономічний, геополітичний, соціокультурний, історико-географічний, геодемографічний, інформаційно-комунікаційний, сервісний, інноваційний. Важливим виглядає суспільно-географічний підхід, який поєднує всіх вищеперераховані та забезпечує максимально комплексне дослідження феномену світових міст.

Ключові слова: глобальне місто, світове місто, світовий центр, світовий фінансовий центр, космополіс, інформаційне місто, медійне місто, метрополіс, екуменополіс, глобальний міський регіон, столиця капіталу, міжнародне місто, що глобалізується, мегамісто, інтерактивне місто, концепція світових міст, суспільно-географічний підхід до концепції світових міст

Н. В. Гусева, А. А. Кучерявая, О. С. Суптело. СТАНОВЛЕНИЕ КОНЦЕПЦИИ МИРОВЫХ ГОРОДОВ: ОБЩЕСТ-ВЕННО-ГЕОГРАФИЧЕСКИЕ АСПЕКТЫ. В статье проведено исследование эволюции концепции мировых городов, выявлено общественно-географические аспекты ее формирования и развития. Мировые (глобальные) города вызывают большой интерес и являются объектом исследования специалистов разных сфер. В современной научной литературе встречается целый ряд терминов, описывающих феномен мировых городов, в частности «глобальный город», «мировой центр», «мировой финансовый центр», «космополис», «информационный город», «медийный город», «метрополис», «экуменополис», «глобальный город», «глобализирующийся город», «мегагород», «интерактивный город» и другие. Дефиниции понятия «мировой город» базируются на таких аспектах как экономическое развитие, политическое влияние, социальная значимость. Можно выделить несколько подходов в идентификации феномена мирового города, основанных на различных принципах, — геоэкономический, геополитический, социокультурный, историкогеографический, геодемографический, информационно-коммуникационный, сервисный, инновационный. Важным является общественно-географический подход, который объединяет всех вышеперечисленные и обеспечивает максимально комплексное исследование феномена мировых городов.

Ключевые слова: глобальный город, мировой город, мировой центр, мировой финансовый центр, космополис, информационный город, медийный город, метрополис, экуменополис, глобальный городской регион, столица капитала, международный город, глобализирующийся город, мегагород, интерактивный город, концепция мировых городов, общественногеографический подход к концепции мировых городов.

Formulation of the problem. The modern stage of society's development can rightly be called the time of large cities: agglomerations, conurbations,

megalopolises, alpha cities, megacities, metropolises, world (global) cities, etc., that have become the main players on the map of great politics,

business, culture, science [9]. According to the forecasts of the McKinsey Global Institute, in the period from 2000 to 2025, about one third of the world's economic growth rates will be in the largest cities. GDP of 600 metropolises of the world in the period of 2010–2025 will increase by 30 trillion dollars. According to experts, in the XXI century, a dominant position will be occupied not by countries, but by cities that will shape the world order of the future, attracting capital and talents from around the world [4].

The phenomenon of large cities, which are of global significance and clearly distinguished by their world political potential, role, functions in the background of other cities, is of considerable interest and is the subject of research for specialists from different spheres. Historical epochs and formations have changed, the territorial organization and the priorities of the economic development have transformed, but large cities always remained at the forefront of progress, and the interest in them never faded away. Recently, among all the diversity of types of large cities, the increased attention of the broad scientific circles is attracted to the formation of their special category – world or global cities [15]. The study of world cities at the present stage of society's development is complicated by a number of aspects, including:

- complex and dynamic development of geopolitical and geoeconomic world space, which are the reasons for the rapid transformation of cities;
- complexity of a statistical base formation for the study of world cities, which is expressed in a large amount of diverse information and limited access to it;
- lack of a holistic and unique methodology for studying world cities.

Analysis of previous research. The founder of the modern trend in the study of world cities is P. Geddes, the urbanist from Britain («Cities in Evolution», 1915), who introduced the category of «world city» for the first time into the scientific circle [27]. The author of the concept of «global city» is the professor of sociology at the University of Chicago S. Sassen («Global city: New-York, London, Tokyo», 1991) [31]. At one time, studies of world cities were carried out by C. Abbott, J. Allen, J. Beaverstock, F. Braudel, G. Wolff, P. Geddes, N. Glickman, B. Derudder, C. Doxiadis, E. Isin, Y. Cassis, M. Castells, R. Van Kempen, D. Clark, R. Kohen, L. Mumford, P. Marcuse, P. Knox, P. Alderson, H. Reed, S. Sassen, A. Scott, R. Smith, N. Thrift, D. Walker, R. Florida, J. Freidman, A. E. Tschoegl, S. Hymer, M. Hoyler, P. Hall, Y. Jao and other. To date, large-scale and solid research of world cities is conducted by P. Taylor and the group "Globalization and World Cities" (GaWC).

The results of studies on various aspects of the development of world cities are widely covered in the scientific works of Ukrainian and Russian scholars, in particular, O. V. Boyko-Boychuk, G. V. Chernova, E. G. Dovbish, O. L. Dronova, S. I. Ishchuk, O. V. Gladkey, Yu. V. Kasyanchuk, N. S. Nimchenko, L. G. Rudenko, D. A. Savkin, I. G. Savchuk, E. N. Samburova, I. V. Skavrovska, N. A. Sluka, I. M. Voronin, I. G. Zhivotovska and other scientists.

The purpose of the work is to study the human-geographical approach to the formation and development of the concept of world (global) cities in the XX–XXI centuries.

Results. At the beginning of the concept formation of world cities, this category was used to designate cities of special cultural and religious significance such as Rome or Paris, as well as for the capitals of former empires such as London, Paris, Vienna, Madrid [31]. Modern theory of world cities is primarily due to their particular participation in global socio-political processes and the world economy. Such centers are distinguished not by population or by the status of the capitals of the largest countries, but by the range of actions and the degree of political influence and economic power. They are a kind of command and control centers of the global economic system, occupying a dominant position in the city's hierarchy of the planet [23].

Use of a wide range of methods and means of studying world cities contributed to the emergence of a number of terms describing this phenomenon, in particular, including «world city», «global city», «world financial «world center», «cosmopolis», «information city», «media city», «metropolis», «ecumenopolis», «global city region», «capitals of capital», «international city», «globalizing city», «megacity», «interactive city», etc. (tabl. 1). The variety of terms is an indicator that reflects the ambiguity and complexity of this phenomenon in modern science, as well as the diversity of approaches in its study.

In modern scientific literature it is proposed to consider the world city not as a concrete term, but as a theoretical concept – universals, which implies a special role of the city in the development of human civilization. From these positions, the world city stands, firstly, as a phenomenon unique and singular; secondly, the scope of its influence clearly has a planetary or, ultimately, macro-regional coverage; thirdly, the world city represents a special force concentrator, whether in the field of ideology, religion, military force, innovation economy, etc.; fourthly, it acts as a hegemon, functions as a governing and controlling element within the framework of another, «subordinate» territorial-social system; fifthly, the spatial organization of such a system has a clearly pronounced center-peripheral character; sixthly, the

Table 1

Evolution of the concept of world (global) cities (compiled by the authors)

Author (Source)	Definition of the concept	Examples of world cities
P. Geddes «Cities in Evo- lution», 1915	World center – a city that plays a special role in world development [27]	The capitals of the leading European countries – Lon- don, Paris, Berlin, Vienna, as well as a number of ma- jor cities in the United States – New York, Boston, Chicago, Philadelphia
P. Hall «The World Cities», 1966; 1984	World city – a big city with an overproportional share of world politics, economy, culture and art; centers of the world with a high level of development in such areas as trade, finance, education, culture and technology; a relatively limited number of places where a significant part of the world's most important affairs takes place. They are the centers of, firstly, political power of the national and world level, as well as the location of government and various public organizations, trade unions, business federations, trade unions, etc.; secondly, national and international trade and communications systems; thirdly, banking, financial and insurance services; fourthly, powerful transport streams and communications. Such cities quickly turn into centers of concentration of all kinds of activities, centers for collecting and disseminating information, art, culture and entertainment, the largest centers of consumption [28]	London, Paris, Moscow, New York, Tokyo and such large urban areas as the Randstad and the Rhine- Ruhr
C. Doxiadis	Ecumenopolis – superglomeration or global agg-	At the time of the int-
«Ecumenopolis:	lomeration, forming a solid network of resettlement on	roduction of the notion of
Tomorrow's	the Earth's surface [24]	the cities that he met, did
City», 1968		not exist
H. Reed «The Preeminence of International Financial Centers», 1981; «Financial center hegemony, interest rates, and the global political economy», 1989	Capitals of capital – cities as international or supranational financial centers. The emergence of financial centers is due to the need to transform financial capital from savings in investment. Financial centers exist because of their ability to maintain a balance between savings and investments, and to act as an intermediary between investors and borrowers [30]	Global Centers: London, New York (first order); Amsterdam, Frankfurt am Main, Paris, Tokyo, Zurich (second order). International financial centers: Basel, Bombay, Brussels, Vienna, Hamburg, Hong Kong, Dusseldorf, Madrid, Melbourne, Mexico City, Rome, Rio de Janeiro, San Paulo, San Francisco, Sydney, Singapore, Toronto, Chicago (first order); Bahrain, Buenos Aires, Kobe, Los Angeles, Luxembourg, Milan, Montreal, Osaka, Panama, Seoul, Taipei (second order)
F. Braudel	Metropolises are big cities that perform international eco-	The overwhelming maj-
«Civilization and	nomic functions. They take part in a constant flow of inf-	ority of capitals of the dev-
Capitalism, 15th- 18th Century», 1984	ormation, goods, capital, people, etc. [15]	eloped countries of the world

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J. Friedmann, G. Wolff «World City formation: An Agenda for Research and Action», 1982; J. Friedmann «The World City Hypothesis», 1986; J. Friedmann «Where we stand: A decade of world city research», 1995	World cities – centers with obvious domination in the economy, first of all, the financial sector and the service sector. They are closely linked to the system of communications and financial transactions and together form a global system for controlling market expansion. These cities act as intermediaries, offering national counterparts access to global markets. A true global city should be distinguished by a number of features, among which: the presence of relatively large population; the city should be the place of concentration of the headquarters of the largest TNCs and international economic and geopolitical organizations; be the world's financial center, an important global manufacturing center, a major transport and communications hub of international importance, as well as a highly developed area of the business services. The position of the hypothesis of a world city: 1) the form and degree of integration of world cities into the world economy, their functions are crucial for any changes in the internal urban structures; 2) used by global capital as the «main units» of spatial organization of production and sales; 3) the functions of control and management of the world economy in them reflected in the structure and dynamics of the urban economy, employment of the population; 4) serve as the main centers of concentration and accumulation of international capital; 5) attract a large number of migrants; 6) act as carriers of the main contradictions of industrial capitalism, including the social and spatial polarization of the population; 7) their growth leads to an increase in social spending at rates exceeding the fiscal capacity of the state [25]	In the developed countries (countries of the Center): London, Paris, Rotterdam, Frankfurt am Main, Zurich, New York, Chicago, Los Angeles, Tokyo (primary centers); Brussels, Milan, Vienna, Madrid, Toronto, Miami, Houston, San Fra- ncisco, Sydney (secondary centers). In developing countries (Semi-peripheral countries): Sao Paulo, Sin- gapore (primary centers); Johannesburg, Buenos Air- es, Rio de Janeiro, Caracas, Mexico, Hong Kong, Tai- pei, Manila, Bangkok, Seoul (secondary centers)
Population Divi-	Megacities – cities with a population of more than	In the world there were
sion of the Department of Eco-	10 million people.	31 megacities in 2016 (Tokyo, Delhi, Shanghai,
nomic and Social		Mumbai, São Paulo, Bei-
Affairs of the		jing, Mexico City, Osaka,
United Nations		Cairo, New York-Newark,
«The World's Cit-		Dhaka, Karachi, Buenos
ies » (published since 1988)		Aires, Kolkata, Istanbul, Chongqing, Lagos, Manila,
Since 1700)		Guangzhou, Rio de Jan-
		eiro, Los Angeles-Long
		Beach-Santa Ana, Mos-
		cow, Kinshasa, Tianjin,
		Paris, Shenzhen, Jakarta,
		Bangalore, London, Chennai, Lima)
N. Thrift	International (world) financial centers – global cities	Global Centers: New York,
«The Geography	based on the headquarters of international banks, exc-	London, Tokyo. Zonal cen-
of International	hanges and transnational companies [32]	ters: Paris, Singapore,
Economic Dis-		Hong Kong, Los Angeles.
order», 1989		Regional Centers: Sydney,
		Chicago, Dallas, Miami, Honolulu, San Francisco
S. Sassen	Global cities are postindustrial centers occupying a str-	New York, London and
«The Global Cit-	ategic position in the global economy through the con-	Tokyo
y: New York,	centration of management and control functions, as well	
London, Tokyo»,	as specialized in the field of professional business ser-	

1991; 2001; «Cities in a World Economy», 1994\$ Sassen S. «The Global City: Introducing a Concept», 2005	vices, which are represented by major financial institutions, consulting and audit companies, bar associations, advertising agencies, etc.; cities with the most internationalized economy and social structure; cities that are maximally integrated into the world economy and are largely drawing resources and development opportunities through or as a result of interaction in global urban networks. In the center of this interaction is the capital that freely moves the world and generates revenue. It distinguishes four key groups of high-tech services in the global cities: financial and business services, management and control, creative activities, tourism. The sphere of high-tech branches (high-tech) is developing dynamically, and in it production services (sector FIRE – finance, insurance, real estate). Thus, global cities are centers of: concentration of efforts to manage the organization of the world economy; the concentration of finance and specialized companies that actualized the development of the manufacturing industry and transformed it into one of the leading sectors of the economy; production, including creation of innovations in the leading branches of the economy;	
	market trade in goods, services and innovations [31]	
M. Castells «The Inf- ormational City: Information Tec- hnology, Eco- nomic Res- tructuring, and the Urban Reg- ional Process», 1989; «The Rise of the Network Society: The Information Age. Economy, Society, and Cul- ture», 1996	Informational cities – great economic and financial centers as key elements of the global flow of information, innovation, capital, people, goods and symbols. The determinative feature of such cities is the concentration of administrative, managerial and production functions on a global scale. Cities form informational-power nodes, in which the most important decisions are made, transmitted to global economic networks. The new feature of the global city is its informational component: global cities play a crucial role in the development of the information society, creating the necessary network of decision-making variations at the highest level in different fields, significantly different from other cities on a global scale. Thus, the functions and capabilities of such a city go beyond the geographical scope, gaining a certain degree of independence from the political leadership of the country. The city is becoming a leader in the world political system along with the states [22]	The overwhelming majority of capitals of the developed countries of the world
C A1-1		T1
C. Abbott «The International City Hypothesis: An Approach to the Recent History of U.S. Cities», 1997	International city – very widely differentiated concept, in which the role of the city is not reduced to the implementation of economic functions. Cities must have a wide range of economic, political and social characteristics [15]	The overwhelming majority of capitals of developed countries of the world
Y. Jao «Hong Kong as an International Financial Centre, Evolution, Pro- spects and Poli- cies», 1997;	International financial centre (IFC) – a global city that, along with administrative, commercial, cultural, implements the function of financial intermediation and becomes an important platform for the global financial system for attracting and redistributing capital from around the world. Representative offices of transnational banks, stock exchanges, auditor and consulting companies, and	London, New York, Singapore, Hong Kong, Tokyo and others. The Global Financial Centers Index (GFCI) included 87 financial centers in 2016 that play an important

A. E. Tschoegl «International Banking Centers, Geography, and Foreign Banks», 2000; Y. Cassis «Capitals of Capital: The Rise and Fall of International Financial Centres 1780–2009», 2010	state regulators play an important role for the IFC. IFC provides interaction between financial market participants; the functioning of credit-financial and auditing and consulting organizations [4]. IFC is an important unifying element of global financial architecture, which is a collection of financial institutions, markets, organizations and professional communities [21]. In this regard, financial centers become places where simultaneous operations can be carried out on the accumulation, transfer, payment and exchange of financial capital or currency [33]. IFC – centers of concentration of banks and specialized financial and credit institutes [29]	role in the world financial system
P. Taylor and Globalization and World Cities (GaWC), University of Loughborough, UK (a complex of scientific works, from the mid- 1990s to this time)	World (global) cities – cities are closely interconnected centers of corporate services that take advantage of their geographical location and economic opportunities. The world city not only provides access to world markets, but also positively affects the quality of life and work of citizens [19; 35]	Leading global cities for P. Taylor: London, New York, Paris, Tokyo, Los Angeles, Milan, Singapore, Hong Kong, Chicago, Frankfurt am Main. Top 10 Global Cities GaWC Rankings: London, New York, Singapore, Hong Kong, Paris, Beijing, Tokyo, Dubai, Shanghai, Sydney. In total, the rating includes about 230 cities
D. Clark «Urban world, global city», 1996; «Urban Wor- ld/Global City», 2003	Global cities become command and control centers of the global economic system, with the focus of key individuals, institutions and organizations that manage, manipulate, dictate and define the formation and reproduction of capitalism all over the world [23]	New York, London, Tokyo and others
Allen J. Scott «Regions and the World Eco- nomy», 1997	Uses the notion of «global city region». Its definition is not limited to administrative boundaries. The center relies on the entire city region, which is drawn into the processes of globalization and serves as a spatial platform for them [15]	Cities with a population of more than 1 million people
P. Marcuse, R. Van Kempen «Globalizing Cit- ies: A New Spa- tial Order?» 2000	Globalizing cities is a city in the process of globalization. The world city is understood not as a normative concept, not as a status that can be achieved, but as a direction of development that cities around the world want in the process of globalization [15]	New York, London, Tokyo and others
E. Isin «Being Political: Genealogies of Citizenship», 2002	Cosmopolis – a city of world significance. Emphasizes the continuity of urban development, starting with the ancient polis. The development of the city receives a special economic direction in the conditions of globalization [15]	Cities of the future
B. L. Glazychev «Urbanistics», 2008	Global city is a strategic space in which global processes take place on the territory of the state, and global dynamics overcomes state institutional measures. In this sense, the global city model rejects the notion that global and national economies are mutually exclusive [2]	New York, London, Tokyo and others
I. M. Voronin «Formation of global cities as a	Global cities are the largest global centers, places of concentration of the most important economic, financial, and political functions occupying strategic positions in the	New York, London, Tokyo and others

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result of the imp- act of glo-	world economy. They tend to concentrate team functions and high-level service companies focused on global mar-	
balization and	kets [1]	
informatization		
processes on the		
resettlement sys-		
tem», 2009		
N. A. Sluka	Global cities are agglomerations with enormous financial,	The overwhelming maj-
«Evolution of the	managerial, information and political functions; the lar-	ority of capitals of dev-
Concept of World	gest aircrafts of the world; locations of headquarters of	eloped countries of the
Cities», 2005;	major transnational companies, transnational banks and	world
«The Global	specialized business services; centers of innovation gen-	
City: Theory and	eration; key players in virtually all world markets; are	
Reality», 2007;	formed as the most important nodes of world economic	
«Global urban	relations and international relations [3; 14; 15]	
regions as the		
main form of the		
territorial org-		
anization of the		
world system»,		
2011 S. McOviro	The clobal sity becomes a small a sity. It is a larger 1	Navy Vouls I and a T-1-
S. McQuire «The Media City:	The global city becomes a <i>media city</i> : digital networks of information space are beginning to form the social profile	New York, London, Tokyo and others
Media, Arc-	of the inhabitant of the global city, his views, and digital	and others
hitecture and	technologies «format» the idea of time and space, thereby	
Urban Space»,	developing competitive strategies of the global city amo-	
2014	ng other cities. The socio-economic competitive gap is	
2014	thus created within the global city through the maximum	
	use of media technologies in the information environment	
	[8]	
«Microturbanism.	An interactive city is a city that goes beyond its physical	New York, London, Tokyo
The city is in det-	boundaries through network quality [10]	and others
ail», 2014		
O. Y. Matveeva	The global city accumulates all socio-cultural processes	New York, London, Tokyo
«Global cities –	and determines the dynamics of socio-cultural dev-	and others
cities that change	elopment, the change of world space in the centripetal	
the socio-cultural	direction, as well as the nature of this dynamics, which	
space», 2015	increases from the periphery to the center. This kind of	
	change allows us to consolidate the notion of rappers in	
	world cities. Rapper is a landmark that sets the direction	
	of general development that changes the dynamics of the socio-cultural space [9]	
V. A. Dergachev	World (open) cities – the largest historical materialized	New York, London, Paris,
V. 11. Dergaenev	riorea (oper) cares and magost motorical materialized	
(Institute of Geo-		
(Institute of Geo-	poles in the multidimensional space of the Earth's space,	Hong Kong, Singapore,
politics of Pro-	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a par-	
	poles in the multidimensional space of the Earth's space,	Hong Kong, Singapore, Istanbul, Moscow and oth-
politics of Pro- fessor Dergachev:	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a par- ticular social time is manifested in the intersection of	Hong Kong, Singapore, Istanbul, Moscow and others.
politics of Pro- fessor Dergachev:	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a par- ticular social time is manifested in the intersection of material, cultural and information flows. The world's city	Hong Kong, Singapore, Istanbul, Moscow and others. Strategic capitals – Was-
politics of Pro- fessor Dergachev:	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a particular social time is manifested in the intersection of material, cultural and information flows. The world's city does not belong to the people, but a mass that denies tra-	Hong Kong, Singapore, Istanbul, Moscow and others. Strategic capitals – Washington, in the future –
politics of Pro- fessor Dergachev:	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a particular social time is manifested in the intersection of material, cultural and information flows. The world's city does not belong to the people, but a mass that denies traditions and culture. A resident of a world city – a man torn from tradition. World cities (interpolises, international metropolitan centers) act as leaders of a «glo-	Hong Kong, Singapore, Istanbul, Moscow and others. Strategic capitals – Washington, in the future – Beijing. World financial capitals – New York, Frankfurt am
politics of Pro- fessor Dergachev:	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a particular social time is manifested in the intersection of material, cultural and information flows. The world's city does not belong to the people, but a mass that denies traditions and culture. A resident of a world city – a man torn from tradition. World cities (interpolises, international metropolitan centers) act as leaders of a «global» economy and society, and thus more and more dis-	Hong Kong, Singapore, Istanbul, Moscow and others. Strategic capitals – Washington, in the future – Beijing. World financial capitals – New York, Frankfurt am Main, Tokyo, Shanghai,
politics of Pro- fessor Dergachev:	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a particular social time is manifested in the intersection of material, cultural and information flows. The world's city does not belong to the people, but a mass that denies traditions and culture. A resident of a world city – a man torn from tradition. World cities (interpolises, international metropolitan centers) act as leaders of a «global» economy and society, and thus more and more distant from the internal periphery. The world city is the cen-	Hong Kong, Singapore, Istanbul, Moscow and others. Strategic capitals – Washington, in the future – Beijing. World financial capitals – New York, Frankfurt am
politics of Pro- fessor Dergachev:	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a particular social time is manifested in the intersection of material, cultural and information flows. The world's city does not belong to the people, but a mass that denies traditions and culture. A resident of a world city – a man torn from tradition. World cities (interpolises, international metropolitan centers) act as leaders of a «global» economy and society, and thus more and more distant from the internal periphery. The world city is the center of inter-civilization dialogue, which has concentrated	Hong Kong, Singapore, Istanbul, Moscow and others. Strategic capitals – Washington, in the future – Beijing. World financial capitals – New York, Frankfurt am Main, Tokyo, Shanghai,
politics of Pro- fessor Dergachev:	poles in the multidimensional space of the Earth's space, the formation of which occurs when this place in a particular social time is manifested in the intersection of material, cultural and information flows. The world's city does not belong to the people, but a mass that denies traditions and culture. A resident of a world city – a man torn from tradition. World cities (interpolises, international metropolitan centers) act as leaders of a «global» economy and society, and thus more and more distant from the internal periphery. The world city is the cen-	Hong Kong, Singapore, Istanbul, Moscow and others. Strategic capitals – Washington, in the future – Beijing. World financial capitals – New York, Frankfurt am Main, Tokyo, Shanghai,

presence of the dominant one-, two-way links supporting the system [12].

Thus, several approaches to identifying the phenomenon of a world city based on different principles but closed within the framework of invariants combination of three main parameters of the international influence of the city: «space», «time» and «scale of force» [12]:

- 1) geoeconomic approach: the emergence and development of world cities is directly related to the growth of their economic power. Therefore, world cities act as centers of the world economy and finance, which concentrate financial and industrial and technical power and determine the main trends of business activity within the various spatiotemporal stages of world economic development; manage, manipulate, dictate and define the formation and reproduction of capitalism all over the world; are important global manufacturing centers, key players in virtually all world markets, command and control centers of the global economic system, locations of headquarters of major transnational companies, transnational banks, specialized business services, etc.;
- 2) socio-cultural approach: world cities socio-cultural accumulate in themselves all processes and determine the dynamics of sociocultural development of world society; act as the largest religious centers, forming for centuries the consciousness and culture of the vast human masses (Jerusalem, Mecca, etc.); develop as creative cities, the obligatory condition of functioning of which is the presence of the formed creative class and creative economy [17]; have an overproportional share of world culture, arts, entertainment, tourism, etc.;
- 3) geopolitical approach: world cities are endowed with enormous political functions; act as locations of headquarters of various international intergovernmental and non-governmental organizations; become leaders in the world political system along with the states; are the centers of political power of the national and world level, cities with an overproportional share of world politics, etc.:
- 4) historical-geographical approach: many centers of the Ancient World are included in the world's cities, empires and metropolises, whose sphere of influence covered enormous space, inhabited by numerous peoples (for example, Babylon, Rome, etc.);
- 5) geodemographic approach: world cities are concentration of large population; have enormous demographic potential; act as global agglomerations, forming a solid network of resettlement on the Earth's surface; are part of the supporting frame of

the urban settlement of the planet; are global centers for the exchange of human resources;

- 6) information and communication approach: world cities are endowed with enormous information functions; they play a crucial role in the development of the information society, creating the necessary network of decision-making variations at the highest level in different fields. They are key elements of the global system of information flows, go beyond their physical boundaries through network quality; are the centers of powerful transport streams and communications, etc.;
- 7) service approach: world cities specialize in professional business services, including accounting, auditing, legal services, advertising business, consulting, marketing, FIRE (finance, insurance, real estate), etc.;
- 8) innovative approach: world cities are developing as the largest educational and research centers, places for generating innovations, key elements of the global innovation system, the main players in the global market for the latest technological achievements, and so on.

Certainly, it is not expedient to confine ourselves to only one approach when studying world cities. In this context, the human-geographical approach, which combines all the above-mentioned and provides the most comprehensive study of the phenomenon of world cities, looks important.

In this context, one important detail on which N. A. Sluka («Evolution of the Concept of World Cities», 2005) has first exacerbated his viewpoint: the majority of the concepts of world cities are based primarily on geoeconomic approaches. From the standpoint of geographical science, the main disadvantage of these classical works is that the main emphasis in them is directed only at a simple measurement of the characteristics of global cities, while ignoring the spatial (in fact, geographic) aspect and such an important system component as socio-economic interrelations between individual elements of city networks. Although there is an assertion that globalization can lead to a loss of meaning in the concepts of «space» «geography», but rather we must speak of a constant re-evaluation and a change in the structure of spatial configurations in the process of intensifying transnational relationships [15].

The significance of the human-geographical approach to the study of world cities is compounded by the fact that these studies are now aimed primarily at deepening the study of the national specificity of the world cities development by individual countries. At the same time, the GaWC research network in new publications not only updates the data on new cities in the world, but also conducts detailed research of cities in their

individual regions in order to reveal certain peculiarities of the globalization process influence on their development [13].

Conclusions. The phenomenon of world (global) cities is of considerable interest and is the subject of research for the specialists from different spheres. The author of the concept «world city» is the P. Geddes, the urbanist from Britain (1915), the concept of «global city» - professor of sociology of the University of Chicago S. Sassen (1991). In modern scientific literature there are a number of terms that describe the phenomenon of world cities, in particular, including «global city», «world center», financial «world center», «cosmopolis», «information city», «media city», «metropolis», «ecumenopolis», «global city region», «capitals of

capital», «international city», «globalizing city» «megacity», «interactive city», etc. Definition of the concept of «world cities» is based on such aspects as economic development, political influence, social significance.

Several approaches to identifying phenomenon of a world city based on different principles can be singled out: geoeconomic, geopolitical, socio-cultural, historical-geographic, geodemographic, information and communication, service, innovation. An important geographical approach, which combines all of the above-mentioned and provides the most comprehensive study of the phenomenon of world cities.

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*О. В. Дєдов, к. с.-г. н., доцент, **В. І. Пасічняк, директор,

**M. І. Нагрибецький, начальник дослідної лабораторії,

*Вінницький державний педагогічний університет імені М. Коцюбинського, **Вінницька філія державної установи "Інститут охорони ґрунтів України"

ҐРУНТИ В УМОВАХ КЛІМАТИЧНИХ ЗМІН: АДАПТАЦІЯ, РЕАДАПТАЦІЯ, ПРЕАДАПТАЦІЯ?

Наведено дані про прогнозоване потепління клімату в Україні та його негативний вплив на грунти. Проаналізовано розроблені стратегії адаптації сільського господарства до кліматичних змін. Обгрунтовано злободенність покращення гумусованості грунтів як запоруки підвищення їх стійкості до посилення екстремальності клімату й забезпечення продуктивного використання тепер і в майбутньому. Доведено значущість застосування для цього замість стратегії адаптації (повільного пристосування до змін клімату) попереджувальної тактики — ре- (відновлення втрачених ними важливих складових і властивостей) та преадаптації (подальшим їх покращенням), необхідність припинення практики грунтовиснажливого землеробства зі збільшенням у сівозмінах посівів кукурудзи, соняшника, ріпаку (на Поділлі за період 2010-2015 рр. відповідно на 5,6, 1,2 та 0,4 % з часткою їх у них 16,9, 6,2 і 5,8 % при рекомендованих нормах для лісостепу 20, 5-9 та 3-5 %) і зменшенні грунтополіпшуючих трав (відповідно з 7,9 до 6,4 % при нормі більше 10 %) та впровадження грунтовідновних зерно-трав'яних сівозмін.

Ключові слова: потепління клімату, адаптація, реадаптація, преадаптація, гумус, сівозміни, трави.

А. В. Дедов, В. И. Пасичняк, М. И. Нагрибецкий. ПОЧВЫ В УСЛОВИЯХ КЛИМАТИЧЕСКИХ ИЗМЕНЕНИЙ: АДАПТАЦИЯ, РЕАДАПТАЦИЯ, ПРЕАДАПТАЦИЯ? Приведены данные о прогнозированном потеплении климата в Украине и его неблагопрятном влиянии на агроландшафты и почвы. Проанализированы разработанные стратегии адаптации сельского хозяйства к изменениям климата. Обосновано злободневность улучшения гумусированности почв — основы повышения их устойчивости к усилению экстремальности климата и обеспечения продуктивного использования в новых условиях среды. Доказана важность использования для этого вместо стратегии адаптации (медленного приспособления почв к изменениям климата) упреждающей тактики — ре- (восстановление потерянных ими важных полезных качеств) с последующей преадаптацией (их улучшением), необходимость прекращения почвоистощающего земледелия с увеличением в севооборотах посевов кукурузы, подсолнечника, рапса (на Подолье за период 2010-2015 гг. соответственно на 5,6, 1,2 и 0,4 % с долей их у структуре посевов 16,9, 6,2 и 5,8 % при нормах для лесостепи 20, 5-9 и 3-5 %) и уменьшении почвоулучшающих трав (соответственно с 7,9 до 6,4 % при норме более 10 %) и использования почвовосстанавливающих зерно-травяных севооборотов.

Ключевые слова: потепление климата, адаптация, реадаптация, преадаптация, гумус, севооборот, травы.

Актуальність. Планетарне підвищення температури повітря зі збільшенням частоти і сили екстремальних кліматичних явищ негативно вплинуло на досить залежні від клімату агроландшафти та важливі їх компоненти – грунти (ос-

новний засіб сільськогосподарського виробництва). Забезпечення відновного їх функціонування в сучасних складних екологічних умовах та погіршенні кліматичних в майбутньому на фоні зростання господарських, рекреаційних, естетичних