

THE MARINE COMPONENT OF HUMAN GEOGRAPHY STUDIES IN POST-SOVIET RUSSIA: KEY TRENDS AND DEVELOPMENT PRIORITIES

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Originated in the 1960s, the ‘marine branch’ of Soviet, and later Russian, economic and social geography contributed to the diversification of geographical science and expanded its scope. The new branch was a product of the rapid growth of the marine economy and the country’s military infrastructure and settlement system starting to gravitate towards the world ocean. This article uses bibliographical and scientometric materials to explore the factors, features and priorities of the development of Russian post-Soviet human geography of the world ocean. Special attention is paid to the path dependence in the evolution of this branch of geography (associated with the established professional community, the fundamental research themes and the basic concepts) and the emergence of new growth poles within the scope of marine human geography. Although this subdiscipline showed a high degree of resilience in the first years after the demise of the USSR, it became marginalised from the scientific mainstream. The interest in marine studies revived only in the early 2000s, gaining momentum after a decade of desolation. The renaissance was due to new transboundary marine research, analyses of the geopolitical and geoeconomic aspects of the marine economy and close attention given to coastal border areas (particularly the prospects and risks of their socio-economic development within the continent-ocean dichotomy). The marine focus of Russia’s geostrategy will generate steady demand for national human geography of the world ocean, including its inevitable humanities component. Another trend is the involvement of human social geography in cross-branch geographical synthesis. The study also identifies Russian research and publication centre of excellence in marine human geography.

Keywords:

human geography, marine studies, development of science, marine economy, research centres, Russia

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Introduction

Yulian Saushkin, a prominent theoretician of economic geography, wrote that the history of science is needed more than ever in the turbulent and critical times of its evolution [1, p. 7]. The radical transformation of what once seemed an almost immutable global world order [2; 3] and the revision of prominent research approaches, attitudes and paradigms, are inevitable in this situation. They are accompanied by the feeling of absconding [4, p. 7] typical of times of crises and tribulations; they require assiduous attention to the trends, logic and determinants of development in certain fields of scientific knowledge and their concrete areas. This holds true for Russian *human geography*, which has to respond to the steadily growing range of inherent fundamental and applied problems, one of which is the formation of new areas and subdisciplines.

From the late 1960s and early 1970s, the Soviet professional economic-geographical community paid attention to maritime problems explored within a special kind of institutionalised ***economic (socio-economic) geography of the world ocean***. Here, it is worth mentioning the works of Aleksandr Alkhimenko, Petr Baklanov, Vladimir Dergachev, Sergey Lavrov, Vadim Pokshishevsky, Sergey Salnikov and Solomon Slevich. This area of geography rapidly developed, growing ever more attractive and receiving recognition and support from leaders in science [5]. In the last three Soviet decades (undoubtedly the brightest and most productive ones in the evolution of Russian geographical thought), the USSR's economy, infrastructure and settlement system made a major 'turn' to the oceans, their resources, and communications [6]. At the same time, the perception of the country as a both 'continental' and 'maritime' power was becoming increasingly entrenched [7]. Our science was responding to the changes, analysing and mapping their trajectory.

The following post-Soviet period was largely transformational for the maritime component of the national socio-economic (human) geography. There were many trends at play: some were negative, some provided additional opportunities, while others brought new challenges and risks. A rediscovery of the water areas and coasts of the world ocean, much needed in the new conditions, has been emphasised in many regulatory documents: from the 1992 programme Russian Merchant Navy Revival 1993—2000 to the new edition of Strategy 2030 for the development of the Russian Federation approved in 2019. Since then, this process has inevitably required socio-geographical 'support', i.e. further development of the earlier established research area. The changing geopolitical and geoeconomic position of Russia in today's Eurasia [8] is adding urgency to the task. This article aims to identify (using bibliographic and sci-

entometric analysis) the main trends and achievements in post-Soviet Russian marine (and coastal) human-geographical studies, name leading experts and established centres in the field and describe the current and long-term theoretical and applied priorities.

‘Path dependency’ in the dynamics of Russian economic geography of the world ocean in the first post-Soviet years: concrete manifestations

In the post-Soviet period, the marine economic and geographical theme, while remaining an important component of human-geographical knowledge, was no longer mainstream having lost its strong appeal and elitism. Its trajectory in the 1990s-early 2000s was predetermined not so much by a direct ‘order from the public’ (the Soviet maritime heritage, including its scientific component, fell apart and was in systemic decline [9; 10]) as by the previously established structure of the science, the dual aquatic-terrestrial nature of the discipline [11, p. 500] embedded in its methodology and the momentum of previous years, i. e. by some sort of ‘path dependency’. Amid the adjustment of thematic and methodological priorities and the crisis that had hit the science [12], the latter made it possible to continue to explore and popularise ‘marine problems’ partially adapting them to the new Russian geographical and political-economic realities.

Post-Soviet human-geographical marine studies retained a pronounced ‘economic bias’, which had emerged in the 1970s and was consonant with the spirit of the time. In other words, most attention concentrated then on economic structures and processes. Running counter to the market metamorphoses, the term ‘marine economy complex’ (used by Aleksandr Alkhimenko, Galina Baturova, Georgy Gogoberidze, Vladislav Ivchenko, Anatoly Moshkov and others) circulated widely in the scientific discourse. The use of the term was perfectly justified considering the role that complex formation had in the marine economy. By tradition, industry-specific R&D prevailed focusing primarily on the port economy and maritime transport [13], as well as on the fishing industry in the world ocean [14–16]. In the first half of the 1990s, these industries were the first to experience post-crisis recovery, becoming ‘growth poles’ for the entire national marine economy and the economies of coastal regions. This was especially true of Russia’s major seaports.

In line with the basic methodological ideas about the close connection between the aquatic (maritime) and the terrestrial as an imperative for geographical analysis and an essential characteristic of spatial organisation in Russia

and abroad [11], coastal regionalism continued to develop [17], the concepts of coastal zones were proposed [18], and attention was focused on the shift of the economy towards coasts [19]. Many doctoral theses defended in the first post-Soviet years looked into related topics, such as coastal zones in Western Europe and the European part of Russia (Fadeev, 1998), the Sevastopol coastal region and its economic structure [39], zonation of the Russian Black Sea coast for rational nature management (Chukanova, 2004), the Petropavlovsk – Yelizovo agglomeration (Ilyushkina, 2004), the economic port zones of the Russian Azov region (Armageneyan, 2004), cities of the Azov and the Black Sea coasts of the Krasnodar region (Filobok, 2004) and the transport infrastructure of the Azov and the Black Sea coast of Russia (Shesternin, 2005).

The research space of maritime themes preserved, however, its *asymmetric polycentricity* characteristic of coastal cities. In the 1990s, St Petersburg (Leningrad), thanks to its historical path, was the absolute leader in all things marine. Themed collections of articles (including proceedings of congresses of the Russian Geographical Society [20]), monographs and booklets dedicated to marine economic geography were published in the city [21; 22]. Aquatic-terrestrial structures and processes also remained a major theme in the works of leading researchers of the Pacific Institute of Geography of the Far East Branch of the Russian Academy of Sciences (Vladivostok) [23].

In the early 2000s, however, the ‘path dependency’ effect of Soviet geography was wearing off, and the former leaders and adherents of marine research were passing away (Lavrov died in 2000, Slevich in 2006, and Alkhimenko in 2012). Against this background, in the mid-2000s, Russia’s economy and settlement system started to turn towards the world ocean [24], thereby stressing the growing need for greater activity in marine human geography.

A renaissance of Russian marine economic geography studies: factors and lines of research

Since the mid-2000s, the Russian Federation has seen a marked multidimensional surge in interest in maritime issues. New studies continued the established research tradition and adapted it to the new conditions and formats of activity (including spatial ones) in the world ocean and on the coasts fringing the country.

Essentially restorative and unvarying in its themes and tools, *the renaissance of Russian economic geography of the world ocean* in many respects predetermined subsequent scholarly developments through the ‘social relay’ mecha-

nism. The first decade of the XXI century saw this revival in several lines of research. One of them was summarizing factors and trends in the marine economy and its features in the post-Soviet period. A representative example of this was a themed collection of articles titled *The Marine Economic Complex of Russia*, edited by Alkhimenko and published in St. Petersburg in 2005. There also was an attempt to analyse systematically the current state and priorities of Russian human-geographical research made at Moscow State University's Faculty of Geography under the supervision of Nikolay Mironenko. Focused on the problems of the world ocean, the project was supported by the Russian Foundation for Basic Research [25]. Another landmark development was a theoretical justification for the continental-oceanic dichotomy rooted in Pyotr Savitsky's ideas of Eurasianism formulated in the 1920s. It was presented in the first (and so far the only) post-Soviet doctoral thesis on the 'sea factor' in spatial development. Defended in 2006 by Leonid Bezrukov [26], the work focused on externalities for the inner-continental territories of the country. Finally yet importantly, a new understanding of the world ocean zoning emerged. This new approach, which included terrestrial elements [27] was used by Gogoberidze.

The renaissance of the 'marine component' in public geography was linked to the reconceptualization of large Russian macroregions as aquatic-terrestrial structures or territories with vast, mostly coastal areas with sea-dependent settlement and marine economy subsystems (the Arctic and its 'marine façade' [30], Russian South, including its Black and Caspian coasts [31], and Russian Northwest [32]). For instance, Baklanov and his colleagues specialising in Far Eastern studies adopted this perspective when exploring the idea of 'Pacific Russia'. The aquatic-terrestrial approach laid the groundwork for further economic and geographical analysis of coastal zones and regions much needed in the face of growing spatial development disparities [33]. The analysis focused on different aspects of the geo-economically induced formation of transport and logistics corridors [34] and port-industrial complexes [35] in those areas.

Due to the overall situation in education and research, as well as the multidimensional revival of attention to the theoretical and methodological aspects, the 2000s saw a considerable number of marine-themed doctoral and postdoctoral theses (Table 1).

Table 1

**The number of abstracts of ‘marine-themed’ doctoral
and postdoctoral theses indexed in the electronic database
of the Russian State Library***

Dissertations	Period of thesis defence, years				Total 2003–2018
	2003–2007	2008–2012	2013–2017	2018–2019	
Total theses in human geography	310	262	142	33	747
Marine-themed theses	11	5	4	0	20
% of marine-themed theses	3.5	1.9	2.8	0	2.7

* Prepared by the author based on data from the Russian State Library as of November 2021 available at <https://sigla.rsl.ru>; when compiling the table, all theses on human geography defended in 2003–2019 and available in the database were analysed (the library does not index abstracts beyond this period); a thesis was classified as ‘marine-themed’ if its title contained a relevant term (marine area, coastal zone) or it had a focus pertaining to the topic (spatial organisation of marine economies, including coastal settlement systems).

Remarkably, when the legacy of Soviet economic geography of the world ocean was still in evidence, most doctoral and postdoctoral theses concentrated on industrial and economic-ecological aspects. This is partially due to the features of the first post-Soviet years. Amongst the topics researched were the oil-and-gas problems of the Caspian region (Zhulinsky, 2006), the comprehensive development of the Black Sea coastal zone (Sychev, 2006), industrial mariculture in the Russian Black Sea region (Eletsy, 2007), environmental management in the seaports of the Baltic region (Shelest, 2007) and the commercial fishing system of the Krasnodar region (Brussel, 2009). Yet, by the end of the 2000s, most theses in human geography, whose number had dwindled, were devoted to tourism and recreation: the role of the Temryuk district in the Azov-Black Sea recreational complex (Veselov, 2007), Gelendzhik in the recreational system of the Black Sea coast (Myslivka, 2011), recreational nature management on the Solovetsky Islands (Polikin, 2011), regional features of recreational development on the Black Sea coast (Fokin, 2012), the place of Sochi

in the recreational system of the Black Sea coast (Butt, 2012), recreational water use in Sevastopol (Lazitskaya, 2014), the tourism industry in Oceania (Gushchina, 2016). This structural change, partly a manifestation of a short-lived scientific trend, reflected the ‘sociologicalisation’ of the economic geography of the oceans and its transformation into a broad geographical-social subdiscipline (the trend developed 30 years after human geography had established itself). Against this background, opportunities arose for narrowing the conceptual gap between aquatic and terrestrial research in social geography originating in the post-Soviet period. There were instrumental innovations introduced and disseminated at a fast pace, and the ‘marine slant’ became more pronounced in the professional community.

New stimuli and trends in the marine component of human-geographical studies in modern Russia

From the mid-2010s, the ‘marine branch’ of Russian economic (and human) geography received a new impetus, and new facets emerged. Further growth of Russia’s marine economic activity and its increasingly visible and purposeful presence in the world ocean [36] provided grounds for the diversification of the sub-discipline; the expansion of its scope to the system of marine pipelines [37], shipbuilding [38], etc.; a shift of focus to the infrastructure supporting the maritime interests of Russia and its largest corporations [39]; clustering and complex formation [40; 41].

The nascent positive and productive convergence between marine studies and other areas of human-geographical knowledge encouraged the identification of maritime themes in such dynamic, propulsive areas of human geography as geopolitics and transboundary regional studies focusing on transboundary maritime areas such as the Baltic region [42]. Research on maritime geopolitics tracked global major geostrategic changes. Following the first pioneering works [42], Russian geopolitics continued to reveal its maritime angle [44–46].

The growing geopolitical importance for Russia of the world ocean and the sea areas surrounding the country has created prerequisites for maritime research at the ‘interface’ with limology, which has gained popularity in recent years. This has attracted attention to *coastal regional studies* (including inter-regional comparative studies [47]), the typology of coastal territories [48]) and the substantiation of the concept of *Russia’s maritime border* as a continuous and discrete socio-geographical feature, which has a special significance for the country’s geopolitics and geo-economic interests shaped by the hierarchical co-development of leading marine economy centres, or ‘strongholds’ [49].

The marked regionalisation of marine human-geographical research, characteristic of the last decade, led to the brisk development of Russian marine research centres in Kaliningrad, Krasnodar, Rostov-on-Don and Simferopol. New national circumstances gave an additional impetus to the socio-economic geography of the oceans. These were the incorporation of the Crimean Peninsula (now a key object of the country's maritime policy [50]); the 'post-Crimean' situation of the Kaliningrad region in the Baltic region (where the significantly increased risks [51] and resource barriers to development are paradoxically combined with the sustainable attractiveness of coastal areas to people [52]); the declared and partly achieved shift in national spatial development priorities towards the east and the Arctic. The latter aspect was explored in a series of pioneering works and analytical reviews [53–56].

Financial support from the Russian Science Foundation provided a strong stimulus for marine geographical research in the country. In 2015–2021, the Southern Federal University ran large interregional network projects: *Transboundary Clustering in the Dynamics of Economic and Residential Systems of Coastal Territories of European Russia* and *Eurasian Trajectories of Russian Marine Economic Activity: Regional Economic Projections*. The Russian Geographical Society also conducted research in the area; its efforts were supported by the grant *The Russian Baltic Sea: State, Problems, Prospects*, which also helped convene the first national research conference *Problems of Marine Spatial Planning* in St Petersburg in November 2017.

As the geostrategic importance of coastal territories and the sea areas gravitating towards them grew, there were various attempts made to describe the socio-geographical elements of coasts, including settlement patterns, migration, innovations, etc. [57–59]). At the same time, the sea factor in spatial development, the sea-orientation of society and its territorial structures, as well as the convergence of the aquatic and the terrestrial in the socio-geographical dynamics, were conceptualised [60].

When tracking the multidimensional manifestations of the development of Russia's human geography of the world ocean, it is essential to capture a combination of the positive trends characteristic of the subdiscipline, on the one hand, and the conservation of its status of a periphery, second-class area of scientific knowledge, which it has had since the Soviet times, on the other. Marine studies suffer from a shortage of experts. No more than 5% of all Russian human geographers concentrate on marine themes.¹ Another problem is the lack of reliable

¹ The value was calculated using the number of Russian professional geographical community members (established using the Register of the Association of Russian Social Geographers on the organisation's website <https://www.argorussia.ru/> and an earlier estimate by Treyvish), as well as an expert analysis of the number of Russian social geographers with publications focusing on socio-economic geography of the world ocean.

socio-economic and particularly economic information. The presence of marine studies in geographical periodicals is neither strong nor stable (see Table 2 for an annual breakdown).

Table 2

**Leading Russian scholarly periodicals
that published articles
on marine human geography in 2016–2020***

Scientific publication	Number of articles published					
	2016	2017	2018	2019	2020	Total 2016–2020
Baltic Region	5	4	3	3	2	17
Proceedings of the Russian Geographical Society	1	2	2	2	1	8
Bulletin of the Association of Russian Social Geographers	3	—	—	—	3	6
Proceedings of the Russian Academy of Sciences. Geography	1	1	1	1	1	5
Geographical Bulletin	—	2	—	—	3	5
Geography and Natural Resources	1	1	—	—	1	3
Regional Studies	1	1	0	1	0	3
Total across the seven journals	12	11	6	7	11	47

Source: * prepared by the authors based on data from <https://www.elibrary.ru>; when selecting the sample of periodicals (all of which are in an expert-authorised top ten of Russian geographical journals) and ranking them, the basic criterion of the number of marine-themed publication was used.

The slow development of Russian socio-economic geography of the world ocean (whose position was precarious from the start because of the decline in international and Russian science [61]), is due to the limited innovativeness and applicability. Another problem is the lack of compatibility between marine studies and other areas of human geography. This situation creates discord between the urgent need for marine studies and their practical implementation with the available tools and within the established thematic framework. This conflict has to be resolved.

Priority tasks and promising lines of research in Russian human geography of the world ocean

At the current stage of development of marine studies in Russia as regards social and socio-economic aspects, a systemic *qualitative breakthrough* is needed, just as it was fifty years ago. There is a pressing need for research on the world ocean and its coasts establishing itself as a relatively *independent sub-discipline*, equal to other areas of human geography. It should study extensive and intensive exploitation of the marine branch of geography through unlocking its potential for integration, interdisciplinary and international *cooperation*, and *drawing on* international experience in aquatic-terrestrial structures and processes.

Extensive development means, first of all, the completion of the lengthy transformation of *economic geography of the world ocean*, which was mainstream almost throughout the entire post-Soviet period, *into the 'marine component' of human geography*. It is crucial to further 'humanise' marine research, placing emphasis on the accelerated final formation of its geo-cultural component, which includes maritime culture, maritime identity, the image of sea areas, cross-cultural interaction in coastal zones, etc. And there is also a need to disseminate and embed marine themes beyond the subdiscipline, with a view of giving a *marine slant to human geography* so that all areas of human geography pay attention to marine spatial structures and processes. If successful, these efforts will provide grounds for solving a more general, urgent and basic task — the *marinisation of the geographical picture of the world* within the space of the Russian language and Russian culture.

The main trajectory of intensive development is creating tools for considering the marine and the inland in the light of their complex, multi-aspect and often contradictory interconnectedness. The groundwork has been laid by several publications on the hinterlands of large seaports, which like the ports of Novorossiysk, Ust-Luga, Nakhodka and others [62, 63] service most of the Russian space, including areas lying at large distances from the sea. Another significant area of research is studies into the role of global natural and technological changes in the sea factor and how they reflect on the spatial organisation of society, including multi-scale aquatic-territorial system formation. In today's Russia, the latter has to focus on the establishment of centre-periphery structure of 'marine' regions in the context of geopolitical and geo-economic processes.

Moreover, there is a need for the apparatus of Russian human geography of the world ocean to incorporate constantly improving state-of-the-art research technologies for communication, analysis and cognitive operations. Marine studies should benefit from the opportunities presented by AI, big data, etc.

In the 21st century, Russia's marine economy is developing as part of the global structure. Its main components are highly internationalised, and most of the country's coastal regions have been included into transboundary aquatic-terrestrial structures as a double or triple periphery. Embracing this circumstance and the imperative of nationalising and regionalising the positive effects of Russia's national and corporate presence in the world ocean should be a primary task in the context of the emergent *marine component of national spatial development regulation* and the integration of this component (described in the pioneering works on spatial planning [64]) into the federal, regional, municipal and corporate agenda.

Another urgent task is the *internationalisation of Russian marine research* in human geography, including raising awareness of Russia-oriented marine agenda and, equally important, creating linguistic, tools-related and informational conditions to raise the status and ensure the recognition of Russian marine findings: the perception and critical analysis of major trends, approaches and achievements visible in the global scientific space, as placed in the context of the Russian Federation.

Conclusion

The evolution of science in a national and geocultural format is inextricable from the fates and historical paths of corresponding nations, countries and civilisations. Having become an essential object of Soviet, and later Russian, human geography, problems of the world ocean receded into the background after the collapse of the USSR. Yet, since the mid-2000s, strengthened by the efforts of three generations of geographers, this research area has gained momentum and received new facets. The marine concerns and interests of today's Russia, as well as their clearly defined geostrategic prospects and priorities,² are shaping the need for further development of human geography of the world ocean in the country.

² Maritime Doctrine of the Russian Federation [e-version]. <https://docs.cntd.ru/document/555631869> (accessed 16.11.2021); Strategy for Maritime Development in the Russian Federation 2030 [e-version]. <http://government.ru/docs/37755/> (accessed 16.11.2021).

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