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# FORESIGHT INNOVATIONS IN EDUCATIONAL SYSTEMS IN THE BRICS COUNTRIES

**Abstract.** BRICS countries are in favor of creating a non-crisis, harmonious system of global governance, the trans-regional community of BRICS is in favor of integration, peaceful cooperation, a harmonious and flexible system of global development, in the basis of which will lie the laws of internal rights, the observance of the sovereignty of all cities, counting the majority of the world's population. Important works in the field of solving problems of cultural integration and the development of culture and education in the world at the level of intergovernmental cooperation have been created within the framework of the so-called concept of "concerts" and "concert diplomacy", including the use of advisory and mediation technologies and institutional diplomacy at the highest level in the field of culture and education, as well as in other areas. Integration creates additional dynamic capabilities for the development of enterprises in these countries, including educational organizations. The joint mutually beneficial use of which will give an integration effect, expressed in the additional economic benefits and advantages for integrating countries, the achievement of which is impossible (or less effective) without integration interaction. Differing greatly in their socio-economic and cultural-political development, the BRICS countries seriously differ from each other in their academic traditions, forms and trends (trends) in the further development of higher education. But they are united by a common main task of achieving a balance between the desire to achieve global recognition, to take a significant place in the global market of educational services and the need to preserve the national and regional culture of education.

**Keywords:** BRICS, concept of concerts, dynamic abilities, educational institutions, foresight education, national traditions, multi-polar world.

**Introduction**. The key principle of the implementation of integration processes is the acceleration of the cultural and economic development of the system as a whole and its individual components in particular through the realization of the integration potential (Arpentieva, Krasnoschechenko, Kirichkova, Zalavina, Stepanova, 2018; Arpentieva, Kirichkova, Kosov, Feshchenko, Golubeva, 2018; Bogomolova, Menshikov, Arpentieva, Gorelova, Zalavina, 2018, Kassymova, Arpentieva, Kosherbayeva, Triyono, Sangilbayev, Kenzhaliyev, 2019; Stepanova, Tashcheva, Stepanova, Kassymova, Tokar, Menshikov,. and Arpentieva, 2018). Integration potential is a combination of natural, industrial, labor, financial, intellectual and other resources of the countries participating in an integration association, the joint mutually beneficial use of which will give an integration effect, expressed in additional economic benefits and advantages for integrating countries whose achievement is impossible (or less effective) without integration interaction (Sidorova, 2016: 1112-113; Sidorova , 2018; Shaumyan, 2013; Brummer, 2012). In the BRICS countries, the problems of effectively forecasting the development of the economy and production, including the functioning and development of the educational market during the crisis period for society, its economy and politics, are closely related to the so-called dynamic abilities of enterprises, their skills to

restructure and diversify due to industry trends. Market, including due to the fact that the integration potential of BRICS opens up new prospects for cooperation and development to member countries. The development of enterprises is also associated with their ability to highlight both strong, obvious, and weak, subtle, but important trends, including threats and development prospects, the challenges of time and the challenges of regional markets in the BRICS countries (Astakhov, 2016; Konkin, 2017; Cooper, 2017; Mikhalchenkova, 2017; Sadovnichiy, Yakovets , Akayev, 2014; WIR, 2015).

**Problem statement.** BRICS countries (informal unification consisting of Brazil, Russia, India, China and South Africa) are in favor of creating a non-crisis, harmonious system of global governance, the trans-regional community of BRICS is in favor of integration, peaceful cooperation, a harmonious and flexible system of global development, in the basis of which will lie the laws of internal rights, the observance of the sovereignty of all cities, counting the majority of the world's population (Il'in, Leonova, Rozanov, 2013; Makoveev, 2016; Mikhailov, 2013; Busygina, Okuneva, 2015; Shaumyan, 2013; Brummer, 2012). "Creating integration associations in several countries allows them to confront modern challenges and threats," this is confirmed by researchers from various schools: functionalism (D. Mitrani), neofunctionalism (E. Haas, L. Lindberg, A. Etzoni), federalism (A Spinelli, C. Friedrich), neoliberalism (V. Röpke, A. Predol, M. Bije), "pluralistic school" (C. Deutsch), "interstate approach" (S. Hoffman, V. Wallace, E. Moravchik) with regard to BRICS - the work of B. A. Heifetz, S. P. Glinkina, O. V. Klimovets, G. D. Toloraya, I. S. Troekurova, M. Ye. Trigubenko, K.A. Pelevin, J. O'Neill, J. Kirton, K. Brummer, K. Bracht, J. Kirton, E. Cooper, F. Birman, C. Dingvert, F. Pattburgh, and other researchers, including the so-called concepts of "concerts" and "concert diplomacy" (Glinkina, 2014; O'Neill, 2012; Sidorova, 2016, p. 111; Dingwerth, Pattberg, 2006; Kirton, 1989; Pelevin, 2013; Gilbert, 2007; Carnoy, Loyalka, Dobryakova, et al., 2013). J. Kirton defines "concerts" as follows: (1) a constructive shock for the stability of the dominant order induces (2) an interdependent group of all great powers with their de facto equality and collective domination, (3) to develop supportive mediation advisory technologies and institutional high-level diplomacy (4) to ensure the stability of the system and to create the necessary intra-state and intergovernmental order (Kirton, 1989). J. Kirton writes that the G20 and other "concerts", including modern BRICS, "combine the minimum number of independent participants (only the great powers) with the aim of mobilizing maximum collective opportunities (of all the great powers). They do this not to dominate in the short term and express temporary interests, obtaining maximum individual benefits (as in the case of a minimal winning coalition within the framework of the balance of power theory), but to predominate for a long time in a system in which there are no unrelated interdependent great powers capable of causing damage or organizing resistance. The inclusion of all the additional great powers (that is, in addition to those necessary to form a minimum winning coalition) removes from the system political initiative and material opportunities for revisionism at the level of great powers, while reducing the possibility of gaining dominant capabilities by an individual state within this system " (Kirton, 1989, p. 3). BRICS countries, like other countries seeking to unite, do this, in many respects, for the sake of preserving national culture and education. In a globalized, unipolar world, education is standardized, simplified, and loses many of the approaches and technologies associated with the unique development experience of each people. The achievements of every nation and country could enrich the palette of approaches and technologies of education, however, in reality this does not happen: the modern globalization of capitalist communities pursues the most diverse goals, however, the priority of sociocultural and human values in capitalist communities has long been lost. It has been lost in almost all socialist communities, a significant part of which ended its existence at the end of the twentieth century. Only post-capitalist countries, including Scandinavia, have distinctive features in this respect. However, the movement towards and the level of culture of relationships, attitudes towards education and other significant areas of the existence and development of people and organizations is very difficult. The countries of the former USSR after the collapse of the country fell into the list of "transitional" countries, with extremely low indicators of the quality of life in general and education in particular. The countries of Asia, including India and China, in many respects are experiencing an ambiguous period of development: despite the rapid growth rates, the problems of national cultures and cultural relations are one of the most acute. China, although it appears in many respects as a mono-national state with an ancient history, is now at the forefront of the capitalist movement. The progress of unifying strategies of relations is extremely aggressive: as the first country in

The main problems of innovative development of the BRICS

| BRICS | The main problems of innovative development of the BRICS |
|---|---|
| Brazil | • low levels of productivity compared to developed countries;<br>• low and stagnant level of patent applications, overall low impact of patents and publications;<br>• regional imbalances within the country, imbalances in education and qualification of the workforce;<br>• dependence on commodities and resource-based industries;<br>• overall weak innovation performance and demand for innovation from business sector, compared to developed countries |
| Russia | • low levels of productivity compared to developed countries;<br>• overall low impact of patents and publications;<br>• regional imbalances within the country;<br>• dependence on commodities and resource-based industries;<br>• overall weak innovation performance and demand for innovation from business sector, compared to developed countries |
| India | • low levels of productivity compared to developed countries;<br>• overall low impact of patents and publications;<br>• regional imbalances within the country;<br>• imbalances in education and qualification of the workforce;<br>• overall weak innovation performance |
| China | • low levels of productivity compared to developed countries;<br>• overall low impact of patents and publications;<br>• environmental imbalances within the country;<br>• regional imbalances;<br>• prevalence of “secondary innovations” |
| South Africa | • low levels of productivity compared to developed countries;<br>• overall low impact of patents and publications;<br>• regional imbalances within the country;<br>• imbalances in education and qualification of the workforce;<br>• dependence on commodities and resource-based industries;<br>• overall weak innovation performance and demand for innovation from business sector, compared to developed countries |

(Souza, Baumann, et al., 2015: 152)

the world, China began to create an "electronic concentration camp" and develop methods of population management, inspired by the ideas of capitalism. The situation of Brazil and South Africa is no less ambiguous, the negative trends of the gradually evolving world education system affect the cultural potential of countries and the educational level of citizens of these countries (table).

**Research questions.** The cooperation of the BRIC countries is progressing slowly enough so that we can easily identify strong trends in its development. In general, we can say that so far we are talking about a sufficiently developed in time and space, affecting the interests of many other countries and peoples, unification, the leading points of which are not so much cultural and educational, as the economic and "geopolitical" interests of countries. It also reduces the possibilities of cooperation in the field of education, intensity and productivity, that is, the quality of the results of such cooperation. Differing greatly in their economic and political development, the BRICS countries are no less different in their academic traditions, realities, plans and scenarios for the further development of higher education. However, they are united by the common main problem of achieving a balance between the desire to achieve world recognition, take a significant place in the global market of educational services and the need to preserve the national and regional culture of education, the traditions that are an essential component of national identity. The creation of an effective system of cooperation and mutual support within the framework of the BRICS organization itself can help in this (Mikhalchenkova, 2017, p.166).

**Purpose of the study and research method.** The purpose of the study is to analyze the directions and opportunities for the development of international cooperation of the BRICS countries in the context of education; the analysis of foresight competencies as a component of dynamic abilities (competencies) of educational institutions in the BRICS countries.

Research method is the theoretical analysis of areas and opportunities for the development of international cooperation of the BRICS countries in the context of education. The methodological basis of the study is an integrative analysis of the dynamic abilities of enterprises in the BRICS countries in the context of foresight. Such integration can be very interesting both for practitioners and for theorists who work in the BRICS countries in each of these areas, but do not use the achievements of each other.

**Findings.** The BRICS countries, despite the differences, have similar problems and challenges. They are associated with the presence of the need for large-scale modernization of the economic and social spheres, reforming the collapsing world cultural situation, as well as the sharply asymmetric international financial and economic situation. These provisions no longer take into account the existing cultural and changing economic potential of emerging market countries. The BRICS countries, despite the differences, have similar problems and challenges. They are associated with the presence of the need for large-scale modernization of the economic and social spheres, reforming the collapsing world cultural situation, as well as the sharply asymmetric international financial and economic situation. These provisions no longer take into account the existing cultural and changing economic potential of emerging market countries (Carnoy, Loyalka, Dobryakova, et al., 2013; Fedchuk, 2015). The main prerequisite for sustainable and active cultural and economic development, enhancing the competitiveness of the BRICS member countries is the existence of a developed, efficient and productive educational system that forms mature and independent individuals, citizens of society and members of social groups, highly qualified specialists who are able to work successfully in changing conditions, in including in the conditions of complication of processes and results of cultural knowledge and socioeconomic hierarchization. The processes and results of democratization of culture and all spheres of social life are side by side with the processes of progressive restriction of the rights and freedoms of citizens, social stratification, which leads to an increase in the role of social stratification. A number of leading documents of the BRICS summits set strategic guidelines for joint cooperation in this area. The BRICS countries have repeatedly confirmed the intention of cooperation in the field of science and education, as well as in order to conduct basic research and development of advanced technologies. They intend to work by implementing cooperation programs within the framework of continuing the practice of holding symposia of BRICS research centers; research and solutions to the creation of a network of research centers of the BRICS countries, the BRICS Network University and the BRICS University League, the task of ensuring equal, inclusive and quality education for all and learning opportunities for all. States are working to explore the possibilities of mutual cooperation in the recognition of higher education documents and diplomas, explore the relationship between investment in education, human capital development and economic growth, emphasize the importance of vocational education as a tool for expanding employment opportunities and labor mobility of citizens of different age. Very important are the trends in the integration of educational systems of countries, along with the (re)formation of their own educational strategies of the BRICS countries, trends in informatization of educational systems and redefinition of value bases and principles of organizing information and other educational projects, humanizing information channels, including the Internet, enriching it with scientific and educational programs, materials on world and national cultural heritage. The goal is to create universal and world-class criteria for the quality of education, a single educational space-time, including international training and retraining programs. There are also trends in the separation of mass and elite educational institutions: the latter act as world-class research universities. It is also important to conduct comparative studies of the quality and effectiveness of educational productivity, including on the basis of national reports and expert reports of UNESCO and the UN, other international monitoring organizations, on education systems and their success / non-success (Sidorova, 2018; Fedchuk, 2015).

Modern strategic management in the field of education management in the BRICS countries is focused on systematic accounting of old and new sources of development and threats, restrictions and production prospects in accordance with the challenges of specific time and space. "Adaptation of all innovations implemented under the influence of globalization, internationalization, information revolution and other current development trends to the historically established features of each individual system is especially difficult in relatively young higher education systems that are forced to simultaneously

modernize in line with global trends and sometimes overcome the consequences long periods of unfavorable and contradictory development in extreme political conditions: ideological dictates, apartheid, insufficient financing, refusal to develop certain branches of knowledge and other restrictions (Arpentieva, Kassymova, Lavrinenko, Tyumaseva, Valeeva, Kenzhaliyev, M. B. Triyono, Kosov, Duvalina, 2019; Kassymova, Tyumaseva, Valeeva, Lavrinenko, Arpentieva, Kenzhaliyev, Kosherbayeva, Kosov, Duvalina, 2019; Kassymova, Tokar, Tashcheva, Slepukhina, Gridneva, Bazhenova, Shpakovskaya, and Arpentieva, 2019; Kassymova, Stepanova, Stepanova, Menshikov, Arpentieva, and Merezhnikov, Kunakovskaya, 2018; Stepanova, Tashcheva, Markova, Shpakovskaya, Arpentieva, Bazhenova, Tokar and Kirichkova, 2019; Stepanova, Gridneva, Menshikov, Kassymova, Tokar, Merezhnikov, and Arpentieva, 2018).

This is exactly the situation in the BRICS countries, which are a group of rapidly developing countries seeking to integrate efforts to improve their competitiveness in the world, including in the global market of educational services" (Mikhalchenkova, 2017, p. 167). The productivity and efficiency of educational institutions in the BRICS countries in crisis, unstable periods of socio-economic development can be expressed through an assessment of the system of parameters characterizing the ability of enterprises to change, or dynamic capabilities of enterprises. The object of evaluation in this case is the efficiency or productivity of the institution with one or another dynamic ability or the dynamic ability itself. At the same time, Brazil, China, India and South Africa are focused on the need for rapid expansion of young people's access to higher education, increasing the number of students in universities of these countries, while trying to create world-class research universities at the top of the university hierarchy to provide a rapidly developing economy with scientific research and highly frames. But Russia, having a developed system of higher education that quantitatively satisfies the needs of the economy, the state and society ... seeks to solve the problem of restructuring its research universities, while improving the quality of functioning of the entire higher education system in accordance with the imperatives of globalization (Mikhalchenkova, 2017, p. 169-170).

A general assessment of dynamic abilities in BRICS countries is carried out using methods based on a diagnostic study of an enterprise, industry, cluster or state, based on a system of scales, as well as generalizing indicators. Such indicators include private and integral indicators for evaluating the effectiveness and efficiency of a firm or group of institutions in the BRICS countries. Different approaches to assessing the efficiency and productivity of educational institutions in the BRICS countries are associated with different ideas about the development of enterprises and different strategies for such development, that is, one can say, different foresight models. The characteristics of various development strategies can be identified and assessed at the level of individual institutions, and at the industry level, and at the country level. In this regard, the role of such dynamic abilities of educational institutions in the BRICS countries is increasing, which make it possible to identify and predict the development of the industry and enterprises, to carry out long-term strategic planning, taking into account these forecasts, their conclusions about future more or less important and obvious changes, to manage these changes. In this context, the theory of dynamic abilities is closely intertwined with the theory of foresight, as well as a number of other theories based on the concept of complex systems, their fractal, and synergistic, self-developing and self-regulating nature. Unfortunately, there has been no comparative and integrative theoretical or empirical work in this area in the BRICS countries: our research is the first, initial attempt at a theoretical analysis of the problem (Arpentieva, 2017a; Arpentieva, 2017b).

Analysis of foresight competencies as a component of dynamic abilities of enterprises in the BRICS countries shows their leading role in the implementation of other dynamic capabilities, as well as the fact that foresight enterprises and industries have a transforming effect on their development as systems, helping to transform, not only predict, the development of the industry or institutions. Foresight competencies are closely related to the ability of an organization to recognize opportunities and development threats in the BRICS countries, explore and select opportunities for reconfiguration, and carry out the actual reconfiguration of resources. In addition, dynamic abilities allow you to influence both the markets themselves and the surrounding enterprise reality in the BRICS countries as a whole (Arpentieva, 2017b). At the same time, the foresight shifts the focus of attention to the search for change markers in the BRICS countries

and their strategic consideration, allowing not only to "prepare for future events, but also to influence these events, including" bypass "and" remove "them, affecting not only to central, strong, leading, but also peripheral, weak, "dependent" links of relations. It includes a multi-complex set of routines aimed at solving the problems of effective and productive strategic management of institutions in the BRICS countries. This problem deserves special attention because the integration of these concepts pushes the framework of ideas about management, as well as the study and (trans)formation of the dynamic abilities of educational institutions. The proposed study has a pronounced practical significance, which is associated with a number of prospects for further study and evaluation of functions, components of the dynamic abilities of educational institutions and the industry as a whole in the BRICS countries. Thus, in the direction we have chosen, it becomes possible to develop new, empirical methods for assessing these abilities, as well as new approaches to foresight. In addition, a very interesting direction is the study of the processes of formation and transformation of enterprise management routines related to the ability of an enterprise to recognize opportunities and threats for its development in the short, medium and long term in BRICS countries, as well as routines that allow an enterprise to transform their surrounding reality. The solution of this problem can be actively claimed both by the management of individual educational institutions and the Ministry of Education and Science of the regions and the country as a whole. It has important practical implications that can be used in the development of strategies for the development of educational institutions in the BRICS countries in the context of sustainable development and crisis management tasks, as well as the design and optimization of training and education in various types of educational institutions in BRICS countries (Arpentieva, 2017a).

As noted above, the creation of integration associations in several countries allows them to confront contemporary challenges and threats. Researchers from various schools: functionalism, neofunctionalism, federalism, neoliberalism, "pluralistic school", "interstate approach", etc., note the importance of integration associations in order to create a multipolar world, including cooperation in the field of culture and education. Important works in the field of solving problems of cultural integration and the development of culture and education in the world at the level of intergovernmental cooperation have been created within the framework of the so-called concept of "concerts" and "concert" diplomacy, including the use of consultative-mediation technologies and institutionalized diplomacy at the highest level in the field of culture and Education, as well as in other areas. Integration potential as a set of natural, industrial, labor, financial, intellectual and other resources participants of an integration association, creates additional dynamic capabilities for the development of enterprises in these countries, including educational organizations. The joint mutually beneficial use of which will give an integration effect, expressed in additional economic benefits and advantages for integrating countries, the achievement of which is impossible (or less effective) without integration interaction. Differing greatly in their socio-economic and cultural-political development, the BRICS countries seriously differ from each other in their academic traditions, forms and trends (trends) in the further development of higher education. But they are united by a common main task - the goal of achieving a balance between the desire to achieve global recognition, take a significant place in the global market of educational services and the need to preserve the national and regional culture of education, the traditions that are the leading component of civil-national identity.

**Conclusion.** Foresight of education and other areas of proposed and ongoing cooperation naturally takes into account these strategies of "concerts", the possibilities and benefits of advisory and coordination work in the field of educational reform and innovation in different countries, in the revival or introduction of traditions in education and culture in general, economic and legal transformations of the work of educational institutions as enterprises, in the field of commodification and commercialization of their activities, in the sphere of managerialization and bureaucracy management of education, as well as the introduction of education intersubjective management technology, etc. Joint analysis and joint efforts make it possible to effectively evaluate the productivity of innovations and traditional schemes of education and the work of educational institutions as economic and cultural enterprises, to form more viable foresight models for the development of education as an important part of the development of individual groups, nations, countries and all of humanity.

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## БРИКОҢА ЕЛДЕРІНДЕГІ БІЛІМ БЕРУ ЖҮЙЕЛЕРІНДЕГІ ФОРСАЙТТЫҚ ЖАҢАЛЫҚТАР

**Аннотация.** БРИКОҢА елдері дағдарыссыз, глобалды басқарудың үйлесімді жүйесін құруға мүдделі, БРИКОҢА-ның аймақаралық қауымдастығы интеграция, бейбіт ынтымақтастық, жаһандық дамудың үйлесімді жәнеикемді жүйесі, оның негізінде жатыр. Ішкі құқықтардың заңдары, бүкіл әлем халқының басым бөлігін есептейтін барлық қалалардың егемендігінің сақталуы болып табылады. «Концерт» және «концерт дипломатиясы» концепциясының шеңберінде мәдениет интеграциясының мәселелері мен мәдениет пен білім беруді әлемде үкіметаралық ынтымақтастық деңгейінде шешу саласындағы маңызды жұмыстар жасалды. Кеңес беру және медиация технологияларын және мәдениет және білім беру саласындағы, сондай-ақ басқа да салаларда жоғары деңгейде институционалдық дипломатияны пайдалануда. Интеграция осы елдердегі, соның ішінде білім беру ұйымдары кәсіпорындарын дамыту үшін қосымша динамикалық мүмкіндіктерді қалыптастырады. Ынтымақтастықтың бірлескен тиімділігі интеграциялық әсерін беретін қосымша экономикалық пайдалар мен артықшылықтар арқылы көрініс табатын интеграциялық өзара іс-қимылсыз қол жеткізуге болмайтын (немесе кем тиімді) елдерді интеграциялауға мүмкіндік береді. Әлеуметтік-экономикалық және мәдени-саяси дамуында ерекшелене отырып, БРИКОҢА елдері академиялық дәстүрлер, формалар мен жоғары білім беруді одан әрі дамытудың үрдістері (тенденциялары) бойынша бір-бірінен айтарлықтай ерекшеленеді. Бірақ олар жаһандық тануға ұмтылу, білім беру қызметтерінің жаһандық нарығында маңызды орынға ие болу және ұлттық және аймақтық білім беру мәдениетін сақтау қажеттілігі арасындағы теңгерімге қол жеткізудің жалпы негізгі міндеті болып табылады.

**Түйінді сөздер**: БРИКОҢА, концерттер концепциясы, динамикалық қабілеттер, білім беру мекемелері, форсайттық тәрбие, ұлттық дәстүрлер, көп полярлы әлем.

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## ФОРСАЙТ-ИННОВАЦИИ В ОБРАЗОВАТЕЛЬНЫХ СИСТЕМАХ СТРАН БРИКС

**Аннотация.** Страны БРИКС выступают за создание стабильной, гармоничной системы глобального управления. Трансрегиональное сообщество БРИКС выступает за интеграцию, мирное сотрудничество, гармоничную и гибкую систему глобального развития, в основе которой будут лежать законы внутренних прав, соблюдение суверенитета всех стран и регионов. Существенно различные по своему социально-экономическому и культурно-политическому развитию, страны БРИКС отличаются друг от друга своими академическими традициями, формами и тенденциями (тенденциями) в дальнейшем развитии высшего образования. Но их объединяет общая главная задача – достичь баланса между стремлением добиться глобального признания, занять значительное место на мировом рынке образовательных услуг и необходимостью сохранения национальной и региональной культуры образования. Важные разработки в области решения проблем культурной интеграции и развития культуры и образования в мире на уровне межгосударственного сотрудничества осуществляются в рамках так называемой концепции «концертов» и «концертной дипломатии». Она предполагает, с одной стороны, использование консультативных и посреднических технологий и институциональ-

ной дипломатии на самом высоком уровне в сфере культуры и образования, а также в других областях. С другой стороны, интеграция создает дополнительные динамические возможности для развития предприятий этих стран, в том числе образовательных организаций. Совместное взаимовыгодное использование технологий и моделей образования и развития образования создает интеграционный эффект, выражающийся в дополнительных культурных и экономических выгодах и преимуществах для интегрирующихся стран.

**Ключевые слова:** БРИКС, концепция концертов, динамические способности, образовательные учреждения, предвидение образования, национальные традиции, многополярный мир.

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