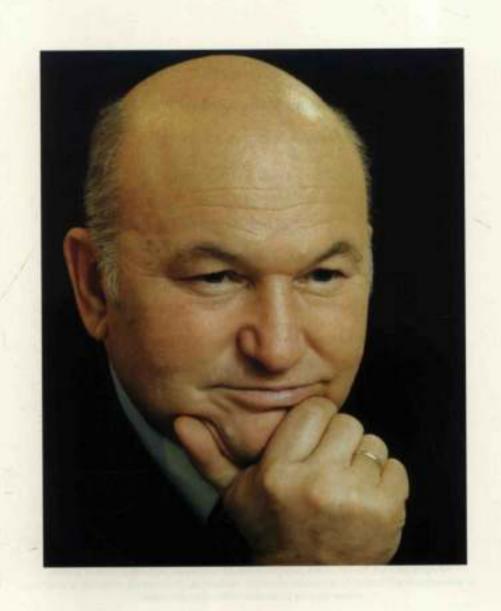


Challenges in the Modern World

Yuri M Luzhkov





Challenges in the Modern World

Translated by Richard C Samuel CMG CVO

First Published in Russian in 2007 This edition © Yari M Luzhkov 2008 Translation © Stacey International 2008

> STACEY INTERNATIONAL 128 Kensington Church Street London W8 4BH

Tel: +44 (0)20 7221 7166; Fax: +44 (0)20 7792 9288 Email: info@stacey-international.co.uk www.stacey-international.co.uk

ISBN: 978-1-905299-65-2

CIP Data: A catalogue record for his book is available from the British Library

1357908642

Printed in China

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owners.

Contents

I	Russia Regains its Strength	1
H	Russia and the West	7
Ш	Centuries of Misunderstanding	9
IV	Different Rules for a Different Game	15
V	The Secrets of the West	21
VI	Living in a Brand New World	27
VII	A Cold World and a Cold Wave	29
VIII	Global Sovereignty in the Hydrocarbon Age	35
IX	The State Since the Treaty of Westphalia	41
X	Russia Within a Global Framework	47
XI	Energy and Development	49
XII	The Economy of Human Resources	55
XIII	Eurasian Union	63
XIV	Russia's Path to the World of the Future	69

... Beneath this surface lies a strong, firm core which cannot be ground down, broken to pieces or dissolved, and which in consequence cannot be assimilated. . . It posesses the strength and the will to maintain its own independent and self-contained existence. Nikolai Danilevski Make in yourselves the changes that you wish to bring about. Mahatma Gandhi

I

Russia Regains its Strength

A narticle of mine under the title of 'We and the West' was published in June 2006, on the eve of a political event of real historical importance. That was the G8 summit of world leaders in June 2006, which for the first time was taking place in Russia, with our own country in the chair.

Russia's chairmanship naturally focused attention on the nature of our relationship with the West and with the rest of the world, and on our foreign policy priorities. At the same time, however, we had to confront what looked at first sight like a rather strange outpouring of frenetic accusations, conjectures and suspicions. These burst out in the statements of Western politicians, swelled up into elemental proportions in the speeches of a great variety of public figures, and swirled and seethed across the screens and pages of the western mass media.

It may be worth making the point here that on the principle that it is the 'last straw which breaks the camel's back' it was the reaction to my ban on the sexual minorities parade in Moscow which drove me to embark on my article 'We and the West'. Many western commentators seem to have concluded that my decision was anti-democratic, a denial of human rights, and that our traditions, ways of thinking and moral principles were irrelevant. Calling on Russia to return to the 'path of progress and democracy' by proceeding with gay parades in the centre of Moscow could be dismissed as simply insulting and unpleasant. But for one 'but'. And that is that something more significant lies behind the accusations of 'energy blackmail' or the agitation about Russia not developing democracy of the sort they have in Iraq. It is as if we are dealing not just with a failure to understand us, but a sometimes quite evident desire not to comprehend or to appreciate the sense and logic which underlie the processes of state building, economic development and democratic transformation which are happening in our country. To put it another way, the waving of orange flags and the imprecations directed against Russia really disguise an unwillingness in the West to take account of an emerging new reality. The crux of the matter is that western societies and perhaps many people elsewhere in the world find it difficult to accept that Russia has put behind it revolutionary upheavals and its period of national weakness. Indeed, Russia has recovered its strength after a painful absence from the world stage and the traumas that accompanied the collapse of the Soviet Union. Russia is now returning as a powerful player with a crucial political and economic role.

This is what it happening, neither more nor less. There is no longer what the West used to revile as the Soviet 'Evil Empire', no authoritarian monster. What there is now is a Russia which is once again fully aware of its national interests, and is ready to defend them. No better, and no worse, than the United States, the European powers, or other countries in the world. Some people may have difficulty accepting this, but if they want to be realistic, to appreciate the true situation and to build a normal partnership with our country, they will have to.

There is also another side to Russia's revival which is particularly important to us as Russians. Once we are back in play, internationally speaking, we should not let success go to our heads; we must also be prepared to cope with unsportsmanlike behaviour, with foul play and with the sort of conditions teams tend to encounter at away matches. More important still, we must not permit the re-establishment of our world position in politics and economic relations to illustrate the old Russian saying that when you're strong enough, you don't need to use your head.

We cannot count on succeeding in the global competition we face if we fail to appreciate the strategic perspectives which shape development in the contemporary world. Such appreciation was grievously lacking in the 1990s and even in the early years of the new century. At that time we looked to both the past and the present to provide the magical formulae for development which would allow us to catch up quickly. But what we really need to look at is the future, both of Russia and the rest of the world. The important thing to realise here is that it is external, global factors and circumstances which increasingly condition our internal development. These in various ways limit and define the priorities and essential decisions on which modernising our economy and social conditions depend.

It is clear that our situation is changing. In recent years Russia has come to understand much better the nature of its own internal and external circumstances, and is successfully dealing with the challenges it faces. There are two aspects to this. First, we can see that the country is acquiring real strength internationally: it is re-establishing its ability to exploit to the full its institutional capacities, its natural resources, and the geopolitical and diplomatic tools it needs to secure its national interests and security. It is modernising its strategic assets and supporting the global strategies pursued by Russian businesses.

Secondly, Russia has managed in recent years to stabilise its internal social and economic policies, and these are now beginning to show signs of real transformation and development. Urgent national and demographic programmes are taking shape. Initiatives designed to modernise our economic structures are being drawn up which will guarantee innovation and technological advancement.

However, a further step is essential. In present day circumstances the boundary between internal policies and their international dimension is being blurred to vanishing point. This demands an unprecedentedly close degree of integration between domestic plans for social and economic development and their external counterparts.

The present book is a continuation of the theme I broached in a previous work The Development of Capitalism in Russia: 100 Years On, and carried forward in a study Agrarian Capitalism in Russia: The Clash with the Future. Many of the questions posed in these first two books have proved to have clear and substantial implications for the policy and management of our national social and economic conditions, as viewed in the global context.

A typical example is the management and exploitation of Russian natural resources and raw materials, not just oil and gas, but also land, forest and water. Hence the controversies over the advisability of Russia's accession to the World Trade Organisation and the protection of our overall security in food supplies and other economic essentials.

This discussion gains added resonance from the requirement that national reserves and the income from raw material exports should be devoted to the demands of post-industrial modernisation, the introduction of new types of economic structures and advanced technology centres which can lead the way in developing infrastructure for transport, energy supplies, housing, information technology and national security and administration. This all has an important bearing on how we should approach modernisation in the sciences, social structures and social services such as education, health and the arts.

Equally relevant are aspects of demographic and migration policy, including that relating to Russian communities beyond our borders. The same may be said of the challenges of de-urbanisation, the return of people to the Russian countryside and the creation of new small towns.

Such factors also call for more intensive consideration of approaches to better management of the national territory as a whole, including what might be described as internal 'colonisation'. Associated with this is the understanding that preserving and developing a federal approach has been and will remain one of the key competitive advantages we have speeding up the challenges of economic growth, social modernisation and consolidating Russian assets in a global context.

Finally, it is becoming ever more apparent that the planning horizons of our national development must be significantly expanded. That means that they should not just be really long term in extent, looking forward to a time scale of 10 to 15 years as a minimum, but that we need to contemplate our development in terms of 'rule from the future'.

By this, I mean that the actions we take linking our internal and external policies must be subordinated, in the first place, to the wider objective of ensuring that Russia should find itself in an optimal position when dealing with the future development of mankind as a whole. Secondly, our actions should be designed to ensure so far as possible that

the changes now being planned in the course of this development should accord with our own national interests.

To achieve this it is essential that we understand what kind of world we are in and where it is going. To be more precise, to be clear where Russia actually stands now and where it aims to stand as the world develops politically and economically over the coming decades. Then to ensure that our long term social and economic policies correspond appropriately, and to learn how best to influence global policies and the trends of its current development. Once we have strengthened our international standing, to convert the results of these efforts into new gains from which our national economy and all our citizens can benefit in the future.

Our ability to create a clear and precise 'algorithm for the future' from which Russia will benefit is the key to devising effective strategies for our external relations and corresponding policies for our social and economic life. It is on this above all that Russia's competitive abilities depend in the present world and will also depend in the future now taking shape; we must grasp what this will require of us now.

П

Russia and the West

Relations between Russia and the West can be summed up at the present time in a single word: bewilderment. The bewilderment is mutual. Its origins can be found in the agitation, confusion and disquiet which are so apparent in the way western countries have reacted recently to events in our country. It is quite clear that they do not like what is happening inside Russia or in their relations with it. But this feeling conceals something that goes much deeper, a fundamental disquiet about what fate holds in store for the West itself.

The causes of this situation demand an explanation, since one thing is clear from what has just been said. Russia's relationship with the West is the inevitable starting point for any analysis of the processes at work in the world and the place our country occupies in it.

The West has a jealously guarded secret, which like the magic needle in the storybook egg, is the key to its very life and death. The existence of the secret is yet another great secret. And in its turn, it conceals another one, hidden away, wrapped up, coded and camouflaged in a plethora of talk about democracy, universal values and global threats.

That is why we have to ask the question: what do we mean by 'The West'? What lies behind the concept? Indeed is it possible to speak of the

West existing as an entity with genuine political substance in the present day world? Finally, what do we mean by the present attitude of the West towards Russia: why is one justified in concluding that the West regards Russia as one of the key resources, and not just in the sense of a raw materials provider, with which it may be able to secure its own future?

It is only after doing this that we can provide a reasoned answer to the question of the relationship with the West that Russia really does need, and what substance can there be to these relations, apart from a simple association with the West as an economic donor. And also, in a wider sense, how should Russia seek to conduct itself and to develop in the contemporary world.

ш

Centuries of Misunderstanding

Whistory behind it. Russia may have been counted amongst the nations of Europe, it may have been a constant participant in the development of European history and culture, but Europe, as the 'mother' of present-day western civilisation, has traditionally viewed our country with a mixture of attraction and fear. Both these sentiments have been adopted by all other countries of what is now called the 'West', from the United States and Japan to the newly assimilated countries of Eastern Europe and the Baltic littoral. In the latter case, incidentally, their feelings about Russia carry the burden of resentment at our country's somewhat hostile attitude towards them in the post-Soviet period, feelings with which these new Europeans keep trying, to some effect, to infect the rest of Europe.

Apart from this, Europeans' mixed emotions stem from their proximity, up close or more distantly, to the intriguing neighbour inhabiting the vast and forbidding territories that constitute the Russian landmass. This awareness of its vastness also gives rise to a more or less clearly defined sense that 'we are alongside one another, but we not the same'.

A little under 150 years ago the eminent philosopher and historian Nikolai Danilevski conveyed the nature of this problem with great clarity. Contemplating Russia, he said, Europe has an instinctive feeling that 'beneath this surface lies a strong, firm core which cannot be ground down, broken to pieces or dissolved, and which in consequence cannot be assimilated, or turned into one's own flesh and blood, and which possesses the strength and the will to maintain its own independent and selfcontained existence'.

The West just cannot reconcile itself to this strength and determination to be independent and self-contained, nor to the impossibility of breaking down and dissolving Russian sovereignty. That is why, according to Danilevski, Russia cannot escape constant accusations that it is an imperial, 'warlike state' and represents a 'dark power, hostile to progress and freedom'.

Little has changed since Danilevski's day. As before, Western suspicions of the 'danger' posed by the forces at work in our country still persist. Analyses of Russian policies continue to be rooted in the same ancient stereotypes of a Russia characterised by authoritarianism and the instinct for imperial expansion.

As before 'we hear groaning on every side'. Once more we find western observers reflecting gloomily on their crisis-ridden relations with Russia. Diplomats agonise about Russia's plans to develop and strengthen its own economy. There are calls to defend the world from the expansion of Russia's energy resources and the threat this poses to neighbouring countries. There is gloom and doom about the 'Russian bear's' ignorance and oppression of democracy, and emotional wailing about its notorious imperial ambitions, from which the West can be defended only by some cordon sanitaire or some new sort of iron curtain.

It is understandable that this outpouring of passions and imaginings should in turn provoke bewilderment on our side. The least Russia would want to do is to deal with mutual issues and common problems through discussion, without evasion, cover-ups or double standards. Nor would we want the moth-balled stereotypes and dinosaur politicians of the Fulton Speech and its Vilnius period.

The fact is that the West found it extremely difficult to rid itself of its complexes about Russia and is still far from having done so completely.

Attitudes towards our country continue to oscillate wildly between fear and admiration. Thus fear of the Bolsheviks, the Soviet Union and world revolution was replaced by admiration of 'reconstruction to the point of destruction' at the end of the 1980s, followed by the anarchy that accompanied the period of stagnation and Russia's readiness to curry favour with 'world opinion' in the 1990s. The admiration was only deepened by the virtually free access the West gained to our national resources when Russia was in a state of chaos.

It is not surprising that the euphoria of this period should have come to a painful end as soon as Russia began to recover its strength and its place in the world. Hence also the return to combat of the almost pensioned off Soviet experts, with their nostalgia for the fears their societies used to have of the slumbering giant, their speculations about the resurrection of the Soviet Frankenstein, and the imminence of the 'end of time', which would supposedly appear as soon as the Russian state regained some of its former strength.

The West never seems to experience a lack of terrifying prophecies. These see-sawing emotions also never seem to come to rest somewhere in the middle, where there is firm ground underfoot and where Russia can finally be viewed calmly and realistically.

Ultimately an understanding of what is actually going on in Russia depends on the West's willingness to approach the task in a spirit of good will. An objective evaluation of Russia's development requires the glass to be seen as half full rather than as half empty. False suspicions of Russia's objectives and interests can only result in the water splashing into the glass without it being filled. And here much depends on the ability to look at what is happening from a new and up-to-date perspective.

Over the past fifteen years Russia has experienced revolutionary transformations and the emergence of a completely new reality. Our revolution has run its course and a new Russia has emerged. There can be no doubt about the democratic nature of the path it is taking. There are no grounds for believing that the strengthening of our state carries dangers within it.

Finally we should address the following question: why is the West not even trying to demand that China's transformation should conform to European or American requirements? They do so the whole time with Russia, and the reason is that both the West and indeed we ourselves consider Russia to be a European country. Which it is. But where the West is mistaken is in both

wishing and trying to force standard European structures on to our country without taking account of our history, our overall extent and our traditions.

And this mistake does arise by chance, since it is not from the Western perspective a mistake, but an inherent urge to swallow Russia up and subordinate its resources to its own its own objectives and increase its strength and potentialities accordingly.

Given its historical traditions and past experience the West cannot envisage any relationship with Russia other than in terms either of full and unconditional adherence to western civilisation or of opposition and competition in a polarised world.

It they want to avoid falling into such an oversimplified and dangerous predicament, Russia and the West must do their utmost to give their relationship a greater degree of complexity. By that I mean that it should have a greater variety of values and dimensions, which can only be achieved by abandoning the legacy of its previous history, including the age-long fears and worn-out stereotypes of the cold war. We shall have to put historical resentments and suspicions behind us, unfounded fixations on 'dark forces' and superficial preconceptions about the principles which underlie 'progress'.

The keynote to an understanding of how relations between Russia and the West should develop must be a realisation that long-lasting stability in our cooperation and partnership cannot entail converting the former into the latter, whether we are looking at the global and strategic aspects or the management of current issues with individual western countries on a bilateral basis. There can be no question of Russia being fully integrated into the institutional structures on which western unity is built, such as NATO or the European Union. Nor should Russia be involved in the almost conspiratorial structures by means of which the West attempts to achieve global dominance through, for example, many activities of an organisation such as the World Trade Organisation (WTO). Nor, finally, should Russia be obliged to accept unconditionally supposedly universal standards of political organisation and democratic accountability through which the West seeks in practice to limit and control the national interests of other countries.

It was Confucius who formulated the principles by which such incomprehension can be overcome: 'If things are given the wrong names,

words themselves lack foundation. If words lack foundation, nothing practical can be achieved...' At the present time what Russia and the West really need is to give things their right names, so that they can understand the true meaning of words and events and the underlying logic of their relationships.

IV

Different Rules for a Different Game

A good example of this is the word 'democracy'. It has only to be mentioned in the hearing of the sovietological fraternity for them respond, like an old horse in an artillery regiment, with a beating of hooves at the sound of the trumpet, and declare that democracy in Russia is dead and buried. Actually the situation is quite different. The way democracy is developing in Russia is quite specific to our historical conditions, in that what has happened over the past fifteen years has practically never occurred before. Everything new we have attempted has proved difficult to achieve, and has been burdened by mistakes and by the need to put them right.

This latter process is what Russia is now concentrating on. In the 1990s we drifted along without direction, over a period of some ten years, but we have now come to understand the need for a more considered approach, what might be termed intelligent conservatism, and prudence in attempting further transformations. In Russia we need to harness our traditional values, on which the cohesion of our society depends, to democracy, without which society itself cannot develop. This is the policy we are now pursuing. One might ask where it is not being pursued: is there going to be someone who will state in all seriousness that there must be one copy-book

standard of democracy and a delivery system to convey it to all parts of the globe? It may of course be the case that there is someone around who would like just that.

Most countries seek some optimal blending of their historical values and culture with the mechanisms needed to establish democracy. Similarly, there is not one single make of car suitable for all purposes, since people want one which best suits their needs and convenience, from economy models to four by fours, as different from each other as Toyotas, Mercedes, or Fords.

In a similar way, Russia is evolving its own national type of democracy which is closely linked to our national political traditions, our political culture and our spiritual values. It is only such a model of democratic development which could flourish in our conditions. It must be clear that the form democracy takes is to a significant extent the product of a particular culture and that the different forms it takes are conditioned by developments and variations within each social and cultural milieu. This means that the requirements for it can only be formed within that society. The export and imposition of one single type of democracy is impossible. We can see that happening today, when the western world is striving for international acceptance of its aims and values and has found itself obliged to accept responsibility for quite a number of countries and populations which have been forced by political or even military pressure to give up their traditional political practices and have lost their stability and grasp of their own affairs. They have found themselves powerless not just in the face of globalised aspirations for 'civilized mankind' but also the diabolic forces of the 'shadow' globalised world.

On the other hand, we are in no position to say how the exercise of state power will be organised in future, even in the West. The early years of the twenty-first century have seen the emergence in western countries of a new right wing whose demands have to be distinguished from those of neo-conservatives in the early 1980s; these relate to economic as well as social and cultural values and display a degree of authoritarianism which favours some limitations on democracy itself.

The threatened erosion of western societies from within, which had previously seemed to be more theoretical than real, or at least strictly local in character, has now extended outside the framework of the alien cultural enclaves which gradually established themselves in their countries over the course of recent decades. These ethnic and religious minorities, which have now put down deep roots in their adoptive countries and have significantly increased in size, have now moved on to a policy of more active involvement, to the point of seeking to shape their host societies to the demands of their own interests and values; the Danish cartoons scandal and the riots in the French inner cities are a case in point.

This has led not only to democratic breakdowns but has also led to quite widespread demands that minority rights should be limited in those societies where patriarchal traditions and values have hitherto been powerful. We can now see national political processes being affected by this in many European countries, to the point where there is a danger of European integration itself being halted or even put into reverse.

This is true even for the United States, for so long the melting pot which represents the model of a particular kind of society. Here, though all the component nations, nationalities, different ethnicities, cultures and religions flowed together into a single great 'American nation' it no longer seems possible to maintain the right temperature in the blast furnace of social stability.

The West has also seen the emergence of another definite tendency in response to the challenges and threats posed by international terrorism and what might be termed the 'global underground'. This embraces not just shadowy networks but also specific persons like Osama bin Laden, who lay claim to a status which transcends individual nation states, even on the territory of Western countries themselves. In this they seek to establish the attributes of a state organisation with a monopoly on the use of force legitimised by faith and wielded in the name of justice.

This unprecedented growth in degrees of 'destructive liberation' enumerated earlier cannot be accepted without limit in present day democratic regimes, nor can it fail to provoke commensurate responses within traditional states and societies. Limitations on democratic freedoms imposed in western societies in the name of national security may be intended to be a temporary response to *force majeure*, but this does not rule out the possibility of them becoming part of the system in times to come.

Finally we must not forget that contemporary science establishes a close interconnection between political institutions, systems of state administration and the capacity for economic growth. The question here is not whether decentralised administrative systems working within a democratic framework are more effective, but what kind of tasks are they more effective for dealing with.

Thus it may be that authoritarian systems may be better at tackling problems connected with industrial development, or with the transitional stages of such development. So it may turn out that global conditions in the future may create a more favourable economic climate for regimes with authoritarian instruments at their disposal. At least the example of China, with its current drive to modernise its economy and bring it up to global standards, seems to be a case in point.

To look at it another way, a country's degree of democratisation does not in itself guarantee anything. Even a fully functioning democratic society may find that it is not achieving economic development of real substance, but rather conserving and then consuming its existing social and economic resources. This generally seems to happen in case of economies which are heavily dependent on indigenous natural resources. Such economies can lose the impulse towards development and concentrate on simply drawing income from their existing assets. Indeed democratic inertia within a political system can even make the situation worse, while the existence of authoritarian tendencies may at times serve to pull a society out of stagnation, and raise the quality of bureaucratic administration and of legislation, to the benefit of its developmental priorities.

It is also worth observing that until recently our experience in Russia was that the processes of political development went hand in hand with the weakening and partial collapse of state institutions, to the extent that they opened the door to theft, manipulation and cynical intrigue by particular groups and even individuals. At all events the existence of such oligarchic tendencies within a democracy can only weaken it: if indeed the term democracy is applicable at all to a situation dominated by the banking cabale, media terrorism and criminal embezzlement.

What we have in Russia at present is a process of what might be called 'correction' which it seems difficult to distinguish from the oligarchic anarchy of a 'defective democracy'. This is a process which however actually strengthens our democracy, in the sense that however complicated, it develops democratic institutions within our society and

speeds up their assimilation. It may take time, and be a painful process. Without it, it will not be possible to complete the period of transition, to bring about systematic economic and social modernisation and overcome the dangers of economic dependence only on our raw material resources. But this without doubt is the only way that a strong democratic state can be built up, one which can and should be a worthy and equal member of a world community of sovereign democracies. Outmoded anxieties in the ranks of the numerous neo-sovietologists can be seen to an even greater degree in their existing anxieties about Russia's 'imperial aspirations'. Sometimes it seems that the West is still caught up in its old mental categories of the stand-off between the Soviet Union and the United States. The cold war may be over, but for many politicians and experts the fixation with what is viewed as a boxing match is not. It is as if the first round is still to be followed by a long exchange of blows. Actually, though, the boxing match has finished, and we are already in the middle of another game. Perhaps that game is chess, in which case we need to remind our opponents that the best players do not try to twist the board around and don't try to swap round the pieces without being noticed. Perhaps what we should be doing in the present stage of our history is to play together in the same football team. In that case what we need most is an awareness of what our partner wants, and the ability to understand what is only half-stated.

However the boxing stereotypes persist, and we hear talk of imperial ambitions and confrontation when we should be speaking of national interests and cooperation. And once again we find someone sounding the cold war alarm as soon as Russia improves its defensive capabilities. It ought to obvious that Russia has every right to stand firm against foreign policies from any quarter which pose a threat to its interests or its citizens, its national sovereignty, or its stability and territorial integrity. Indeed Russia understands better than many countries the dangers of extremism, terrorism and separatism in the present day world and is an active participant in the international antiterrorist coalition.

Improving our defensive capabilities is an absolutely normal demonstration to all other forces in the world, including the shadowy networks and the terrorist organisations, that Russia will not provide an open door to would-be hungry marauders. It also shows that Russia is ready to cooperate with other countries to ensure the stability of the international order. That is exactly what

other countries do throughout the world, unless they are preparing to commit suicide.

When it comes to economics, let us put to one side the fact that having been a diligent student of market disciplines for the past fifteen years, we now face disapproval for having been too good at it. The main point is that, objectively speaking, Russia's energy resources now provide its main competitive advantage. Russia is ready to cooperate in this area and to dedicate its resources to securing the energy needs, and more widely the economic security of the whole world. But in doing this our country counts on receiving equal and fair opportunities which will enable it to take a cooperative part in other economic activities on a global scale. If there is any doubt about this, the realities of the situation do not change. If the West is frightened of such cooperation, or turns away from it, it will only serve to reorientate our economic priorities towards the East.

V

The Secrets of the West

S tubborn efforts by the West to force our country on to the 'true path' and to establish the principles on which we could be transformed into a likeness of itself derive from other fundamental causes, which can only be understood in terms of the nature of the West itself and the strategies it is pursuing in the contemporary world.

There is no suggestion here that the West is a single monolithic entity. But we should not be too hasty in rejecting the whole concept as a relic of the cold war, though the system of international relationships which emerged after the second world war, the cold war itself and the West's confrontation with the then USSR did give rise to present day attitudes and to the way the western world is now structured.

Today we have good grounds for viewing the West as a fairly unified politico-military, value-based and in part geo-economic reality. Even when western countries have objective geopolitical and economic differences and riyalries, in particular circumstances these can prove to be considerably less significant than European or transatlantic solidarity. We can see this in the nature of the dialogue on energy questions between Russia and Europe as a whole, or between Russia and individual European countries.

The reason for this is that behind the concept of 'the West', there lies a very specific interplay of values and institutional arrangements. These define the political and social structures which underpin the way the most advanced industrialised countries function, and which have made possible their continuing leadership role.

Their conviction, furthermore, that they represent the best that the contemporary world has to offer, with forms of political and economic organisation which allow them keep ahead of everyone else, is a fundamental factor in maintaining the West's political cohesion. The institutions they have established to promote integration and mutual security are primarily intended to support and preserve the feeling, if not the substance, of political and economic leadership on a global scale.

Finally there can be little question that in recent decades a considerable number of other countries have come to look at the management of their internal systems in terms of joining, or striving to join, the western world itself. This may involve seeking integration into particular international organisations and institutions such as NATO, and/or the European Union, and the acceptance of other institutional standards in the way they organise details of their political, economic and social life. That many countries do so is a reflection of their desire to associate themselves with global leaders, even if they do so in a rather humble capacity.

Historical and politico-military circumstances long since brought such countries as Japan and Australia into the western world. While the position of Turkey is rather more complicated, its membership of NATO was to some extent predetermined by the legacy of the Cold War, as well as by the peculiarities of Turkey's statehood and its special position within the so-called Islamic world. As against that, the long and tortuous negotiations between Turkey and the European Union demonstrate that for the latter their cultural values are of great importance in any integration process, though they may be open to flexible interpretation, depending on circumstances and political expediency.

All this goes to show that the very concept of 'the West', or of other geographical demarcations like those of the 'North' opposed to the 'South' are not strictly speaking purely geographical. They do of course in part represent territorial distinctions, but when it comes down to it there is an important element which reflects a different kind of reality. What I mean by this is that there is a global coalition designed to maintain a position of leadership in the world, based on common values and security considerations. This coalition has for historical reasons formed round a core represented by the Atlantic partnership between Europe and North America.

This being the case, it becomes easier to understand in what direction the West is evolving, what challenges it has to confront and how its attitude to Russia is to be defined.

The break-up of the Soviet Union and the consequent destruction of the balance of forces in two competing world systems which had defined the way the world developed for much of the twentieth century gave rise in the West to a fateful sense that the evolution of world civilisation had reached a conclusion which had allowed it achieve historical and geopolitical supremacy.

The purpose of declaring the 'End of History' was to assert that the West, its values, economic structures and its overall political framework represented the highest point that civilisation could reach. Other countries and systems involved in various ways in the processes of globalisation would be drawn into a race to follow behind and catch up with the West. The future of mankind would then be converted into a mechanical process of refashioning countries, peoples and cultures: the more successful would aspire to the yawning heights occupied by contemporary western societies, though they would also be entitled to compete among themselves for one single right: to be numbered with the simultaneously desired and detested 'golden billion', the prosperous one-sixth of the planet's total population. This 'Unbearable Lightness of Being' allowed the west to ignore the rest of the world and brought about what I would call a 'Global Egoism' - the right to interfere in any situation in any part of the earth on the basis of 'humanitarian' ideas and values inherent in their own ideas of progress.

The consequence of this has been the spectacle over the past decade and a half of the striking and at the same time depressing efforts by western countries, with the United States in the lead, to bring about the forcible democratisation of individual states and even entire regions, while proclaiming their mission of promoting democracy world wide. Indeed in its time the Soviet Union did exactly the same, their mission being to drag

various countries out of feudalism and even tribalism straight into communism, and thus to make a socialist transition into a bright future.

However the burden of imposing internal control on states and national groups while trying to do away with the concept of national sovereignty can turn out to be unsustainable. It must be remembered that in today's world there are political forces capable of employing forcible and unthinking processes of global democratisation which go in a diametrically opposite direction. By proclaiming the will of the strongest to decide who is right and who is to be blamed, the West falls into a trap. This is that there is nothing to prevent the representatives of the worldwide terrorist underground from also deciding that their will is also superior to others', and that this entitles them to deal as they wish with the lives of others, and with the fate of the rest of us.

By now it must be evident that the attempt to close down historical discussion was illusory, and for another reason. From the way the world is now developing, we can see that the idea of a globalisation process involving complete western dominance is historically speaking no more than a product of current circumstances; it can in no way be guaranteed to persist in the longer term. Of course we can see how the West could have moved far ahead of the rest of the world at a particular point in time when it had been carried forward on the crest of the industrial revolution, benefitting from rapid capitalist development and in the vanguard of the industrial, scientific and technological revolutions fostered by the facilities provided by democratic institutions.

Now however the growth, in the global context, of non-'Western' Asia clearly defines the limits to this tendency. The West's possibilities for leadership are being undermined by the challenges of the so called clash of civilisations, which not only threatens its security, but also, as we have seen, puts powerful obstacles in the path of ensuring democratic development of western countries' internal policies. Western development is furthermore increasingly subject to problems arising from limitations on its access to natural resources. Finally the proportion of the world's population made up by the 'golden billion' is shrinking in relation to that of the rest of the world, and western societies are consequently facing all too apparent social and economic problems because of raw material shortages, ecological pressures and aging populations.

Russia's return to the world in political and economic terms and growing strength in general is viewed in the west as more of a threat than anything else. At the same time it has a strong interest in drawing Russia closer in such a way as to preserve the West's own leadership role: the old mixture of attraction and apprehension.

As I have already pointed out, both the West and Russia understand that 'we are side by side and together, but we are not one and the same'. So from a strategic point of view the West's objective in dealing with Russia is not to seek integration, where the ensuing problems would be far greater than in the case of Turkey, but rather to secure control of Russia for its natural resources and as a shield from a variety of global threats. In such a situation Russia's renewed, and from the western standpoint, excessive strength, as well as its self-sufficiency, is an obstacle. Unlike the situation in the 1990s, when any ideas about taking advantage of Russia had to be abandoned and our country was kindly called one of the hopes for global democracy, we are now having to put up with all too obvious political pressure, and indeed psychological assault.

In dealing with Russia the West needs to understand one major point. Russia's historical, geopolitical and cultural peculiarities being what they are, there can be no question of our country being integrated into the weakening global coalition which is known as 'The West'. Nor, given the nature of our national interests and our understanding of our global strategy, could such integration be of interest to us. We have no desire to be an appendage for the supply of raw materials and other resources to the West, nor can a relationship of master and pupil be a basis for cooperation between us.

Russia is a country with a majestic history, one thousand years of statehood and the intellectual and leadership traditions to support it, and a long cultural tradition. Russia cannot be other than itself, and it cannot base its relationship with the West on a status akin to that of the Red Indians who gave up their natural wealth to others and exist now in reservations imposed upon them from outside.

Russia is the pre-eminent power on the Euro-Asiatic landmass. As such it is in a position to exercise global influence, deriving in the first instance from its nuclear and institutional assets. Russia's potential also allows it to become one of the poles in the world economy. Our unique position is due

to the enormous energy and other resources at our disposal, which is a characteristic feature of countries belonging to the 'South' in global terms, in combination with our potential in the humanitarian, industrial and strategic fields. To this can be added above all our cultural and historical experience, which forms part of Western civilisation as a whole. Given all of this, Russia is not just a key player in the world order we can see emerging at the start of the twenty-first century; we are also capable, if circumstances should require it, of playing the role of moderator on the global stage.

Russia is already emerging as a connecting link between the old leaders in the Group of Eight and the new growing powers of the Shanghai Group, Brazil, Russia, India and China. Russia can fulfil a role as intermediary and organiser in the dialogue between the two halves of the present day world, enhancing it own status and international influence in the process. For this reason Russia's growing participation in the management of global political processes can become a key element in global stability.

VI

Living in a Brand New World

In very recent years, which from the historical perspective amount to only a moment in time, the world has undergone significant changes, of which many have been quite apparent. Others, though much less obvious and discernible only in outline, will have considerable resonance and practical consequences in the near future.

The values and various approaches to life that have emerged in the course of world history are now being universally subjected to fundamental reassessment. Our everyday reality is becoming more and more competitive. Ever since September 11, 2001, a new kind of history has emerged for that part of humanity which is usually described as civilised. Any illusions there might have been at the end of the 1980s that evolution throughout the world could reach a successful conclusion after the defeat of the communist system has been finally shattered.

The history of mankind has ceased to be the history of western civilisation and the so-called 'North'. At the turn of the year 2006 the world's population exceeded a figure of 6.5 billion, and over 80 per cent of the increase is occurring in Asia and Africa. The West is becoming a dwindling minority in the world population not just in terms of numbers, but also in terms of its political and economic significance. China has

already emerged in fourth place in the size of its economy, overtaking France and Great Britain, and for the time finds itself behind only the United States, Japan and Germany. No less significant is the constant and accelerating ascent in the world economic hierarchy of India, Brazil and Indonesia.

When speaking of future prospects, there is frequent talk of a century of chaos, ill-defined and unpredictable. This is partly true in the sense that the question of whether global development is manageable has become the key issue. The world we see defining its own development in current conditions may come to an end quite quickly. If this is the case, and a crystallisation of a new world order becomes a vital necessity, it will be all the more important to assess which tendencies will be most significant for the future structure of international relations.

VII

A Cold World and a Cold Wave

A particular feature of our current situation is that after the collapse of the USSR and rivalry between the Soviet and western blocs the destruction of the political foundations laid down at Yalta and Potsdam did not lead to break-down in the institutional and legal basis of the old system. The world of today has inherited from that period a considerable part of the international mechanisms and norms we now see, in particular those which form the basis of the United Nations.

We are not simply talking here of the fact that both new and traditional practices exist in the management of international relations. Events have shown that there has been a transition to another form of world order which is quite new. This transition from one system to another is taking place peacefully, unlike all previous ones, to bring about the removal of the contradictions which exist within societies, and this without the global conflict which we saw, for example, in the First and Second World Wars.

It is true that our present situation arose after a war of sorts, but it was of the cold variety, which was crucial, given the possession by both sides of nuclear weapons. Furthermore the absence of full scale combat and of equally drastic capitulations and arrangements for pacification thereafter make the transition from one system to another much less contentious, while avoiding discriminatory action against any particular countries.

That is not to say, however, that there have been no cases either at present or in previous years of attempts to carry out such discrimination or to divide the world into victors and the vanquished. In the last decade of the last century and early years of the present one there was a so-called unipolar period in which global domination by the United States led to attempts to establish a universal order. This made the world neither more stable nor more secure. The Iraq War demonstrated that the idea of any one country being able to administer and control the rest of the world was completely illusory.

At the same time the world became ever less predictable: one has only to see how the nuclear non-proliferation regime came apart at the seams in the last decade. The situation is not helped by the pretensions of the United States to global hegemony, to act as referee in all political encounters world wide and generally to play the international gendarme. The effect of this has been to slow down the development of the international system, as can be seen with past and present US interference in the modernisation of international institutions to reflect new political realities, as has happened particularly in the case of the United Nations.

For this, the world community would be fully entitled to present the United States with a bill for compensation. Dizzying efforts to create a global 'super-empire' have not materialised, but they have certainly slowed down the formation of a new world order for the twenty-first century and made the process less effective than mankind as a whole could and should expect.

What we now have is a 'cold peace', which has already persisted for quite some time, and has two distinguishing features. One is that up to now we have remained in a period of transition. The world we have today is a new one in the making, with the outlines of a new structure already becoming visible. But it will take time for a new and sufficiently stable political edifice to form, and the process will not be quick.

In the meantime a cold wind is blowing over the present system of international relations, since the US and the West's global coalition have not ceased to nurture their ambitions for a tough post-war order created on their conditions and in their interests. Such plans contradict present day realities, but there are those in the West who still think 'so much the worse for reality'. What is more, what we see is not confined to thoughts alone, since it has spilled over into actual warlike actions such as the development of new armaments, the construction of new rocket bases and other unthinking actions; and the 'cold wave', which flows out from these, threatens to inundate and destroy the entire system of international security.

All this is quite unacceptable, since it is not just bringing a new spirit of 'cold war' into existence, but achieving something worse: the prospect of the world being deprived of a historic opportunity to create a new world order based on principles of justice and non-discrimination, with no division between victors and the vanquished, no enforced coexistence and limited compromises, and with underlying principles which would bring about a future of equal rights for everyone.

It ought to be a basic and urgent task for international institutions, especially the United Nations, to embark on a search for such appropriate mutually advantageous agreements and mechanisms. These ought also to include the reform of the UN itself. It is particularly important that the UN should take the lead in coordinating global economic development. A more powerful and effective UN could address itself anew to the concept of exercising effective control over global economic and financial systems. This could perhaps make it possible to overcome the crises afflicting the world trading system which are apparent today within World Trade Organisation (WTO), once again because of attempts to use the WTO as an instrument of superiority and expansion.

When we talk of reforming the United Nations, and particularly the Security Council, we naturally need first and foremost to consider the consequences for Russia. But there is another issue of principle which has to be borne in mind. The decline of the role the UN plays on a global scale has for some considerable time had a knock-on effect on the effectiveness of one of Russia's most important institutional resources which it inherited from a previous system of international relations, that is to say our status as a permanent member of the UN Security Council. It would be better to share some of our exclusive rights in the Security Council and raise the level of benefit obtained from these rights and privileges than to wait until they can be secured along with the role played by the Organisation overall.

This example well illustrates how important it is for us, in present day circumstances, to approach the use of our resources and capabilities with wisdom and circumspection.

The emergence of new power centres, the increasing complexity of international structures and the imperceptible growth of 'multipolarity' could be noted earlier, when the world was overshadowed by the confrontation between the United States and the Soviet Union. In practice it has now become impossible for any one country or group of countries to dominate all the others in this way. Multipolarity is now a fact of life. The question does arise, however, of the nature of that multipolarity: we need to understand its structure and essential features, and thus the mechanisms by which affairs can be managed in a multipolar system.

Multipolar relationships in the future will be different from those in the past in this respect: they will not involve mutually hostile groupings, armed confrontations and nuclear parity. The new world order will be established in such a way as to exclude any new superpowers, any one single unyielding bloc and, even more, no question of any one major power dominating others, whether it be the United States today or China tomorrow.

The situation will be, and to some extent already is, more complicated than before, in that there will be a multiplicity of layers, geometries and sectors, superimposed one on the other. Each sector, whether devoted to economic issues, finance, technology, military affairs, technical innovation, resources, institutional matters and the like will have its own leadership, either of individuals or countries who have a significant role to play compared to other participants.

In consequence we shall find ourselves in a world with an undefined and changing number of polarities which move and change over time. This has been defined by a number of researchers in the field as a world with 'variable geometry'. Sometimes one cannot confidently say how many poles there may be, what they represent, how they are organised, or define their qualities, durability and objectives. It will not be an aim of individual countries to attach themselves permanently to any one particular economic or politico-military grouping. On the country, one would envisage states diversifying their interests through participation in a very varied range of international associations and forms of cooperation.

The multipolar model is likely to become more and more fluid, with quite rapid changes occurring in its configuration and characteristics. This will be a consequence of an increasing tendency for countries to define their roles in the world and in relation to one another in terms of alliances for particular purposes. They will come together not just for long or semi permanent periods, but also in more limited associations designed to resolve specific international questions.

It would also be natural for countries which have joined forces to tackle one particular international issue to join in various other coalitions to deal with others. The campaign against international terrorism brought together under one flag the leading European countries, the United States, China and Russia, though they found themselves on different sides of the barricades at the time of the Iraq crisis, while disagreements about Iran's nuclear programme drew the dividing lines quite differently.

In a system of this kind no country, including Russia, needs to find itself in a position where it must make a tough, unequivocal choice which will always have been predetermined; it will always be able to ally itself with one power centre or another if it chooses, say to work with the Americans and their allies or against them. There is room for manoeuvre, which is the main consideration for us so long as the modernisation of our internal, social and economic structures remains incomplete.

Creating an international community with such characteristics is clearly going to be a complex task. It will certainly require an important role for expert international regulators and agreed rules of the game, which would prevent a constant merry-go-round of global competitors turning at some point into internecine warfare.

The sort of global society I have been speaking of would at the same time give its participants a broad spectrum of choice in which they could enhance their global and regional influence. They would not be relying on force to oppose all comers but rather on forms of free competition in which their strength would be deployed on the principle of what in English is termed 'soft power'. That is to say that they would not rely on strictly economic or military muscle but rather on their ability to influence others to their advantage. That is why soft power can also be called 'intelligent' power.

With its enormous expanses and variety of historical, cultural and ethnic resources Russia has been guaranteed the ability to participate in the work

RUSSIA 2050

of the most varied international organisations with many different fields of activity and geographical remit. Thus Russia can, at the same time, work with others to strengthen security arrangements in Central Asia and the Far East and with members of the European Union to create a single economic space. Equally it can seek to play a key role in promoting economic integration in the post-Soviet space, while becoming an equal partner in economic cooperation with countries of the Pacific Basin.

These activities are clearly not mutually exclusive. In a world which operates on the principles I have outlined the challenge facing Russia would be to maintain the capacities and ability to create, control and deploy to best advantage a portfolio of strategic alliances which would attract as great a number as possible of countries and facilitate the greatest possible potential for global influence. The success of such a strategy would also make Russia a superpower in the world of the near future.

VIII

Global Sovereignty in the Hydrocarbon Age

The more we look into the current limitations on economic development on a global scale, the clearer it becomes that they are all connected in one way or another with problems arising from exploitation of the whole of the earth's surface and the gradual exhaustion of the benefits gained from previous scientific and technical revolutions, especially those in industry and information technology. From this we can see the emergence of new types of what one might term dependent development.

The global economy can be viewed as a hierarchy in which some sectors are advanced while others lag behind, and all are connected to specific countries in the world or to coalitions of particular states. For example the United States and the West as a whole have a controlling hand – at least for the time being – in a range of sectors connected with financial services, infrastructure and advanced technology, which might be defined as post-industrial in character. The Asian-Pacific region is becoming a factory for the whole world and a new focus of industrial activity. On the lower levels we find the producers of raw materials, amongst which Russia must so far, unfortunately, be numbered.

It follows logically that global development depends on the competition between individual states, regions, corporations and financial entrepreneurs for the most important and profitable levels of the pyramid. And it is by controlling the advanced sectors that the West retains its most basic resource in maintaining its grip on global development. What I called 'dependent development' comes about because the leaders of the post-industrial sectors of the global economy are in a position to grant individual countries access by which they can catch up or cooperate, or else to deny it to them. This in turn facilitates their agreement to export technologies and to secure investment. These levers of influence on the development of other countries are far more significant for them than direct control.

Even when they can gain access to the benefits of western technology or scientific knowledge, countries on the lower levels still do not possess the technological and intellectual capabilities which would allow them to reproduce them. To this should be added the consequences of the notorious 'brain drain' which is a fundamental problem for many countries, including Russia, since it represents the loss of new productive potential.

Any change in the present situation will only come about from a new scientific and technological revolution, which can be expected to succeed the information revolution which is taking place at present. A development of this sort could provide openings for new countries to tackle the frontiers of development or for some of the current leaders to fall by the wayside. Much will depend on what the principal characteristics of the next new revolution prove to be, whether in biotechnology, nanotechnology or quantum technologies, amongst others. There is no simple answer to this question at the present time, as different countries concentrate on various sectors which may prove to be the most rewarding.

It is also becoming more apparent that the characteristics of the new technology may prove to be totally different from what had been expected, and the first problem to be dealt with may prove to be the limitations to the use of traditional natural resources.

The basis of the globalisation process at the moment is linked to efforts to move away from extensive exploitation of the world's resources and expansion of those areas which are already civilised to intensive exploitation, where the possibilities for resolving problems with the help of new so far unexploited territories and resources turn out to be exhausted.

The concept of a limit to development is no more than a particular case of accepting that the world itself has limits, that is to say the physical limitations of the globe we live on and its natural resources. Thus it may come about that the exhaustion of the present post-industrial world may give rise in the near future to a new global economic depression.

There can be little doubt that the world of the future will be the scene of increasingly bitter struggles for un-renewable natural resources. Such confrontations may be dressed up as economic competition, the clash of civilisations, or even international terrorism, but the essence of the problem will be no different for that reason. We are now entering a period not simply of high prices for energy products, but what might be called a hydrocarbon era in geopolitics and the entire system of international relations.

We can now see that efforts to control the extraction, transport and consumption of oil and gas have become the guiding principle in global politics. More and more countries are now competing in the race for development and this in turn requires more and more resources. The demand for oil and gas and energy prices are rising constantly, above all because of the requirements of the Asian market. The economy in the post-industrial period has given society enormous benefits, but now it has to satisfy much greater demands, expanding like huge soap bubbles, for one new product after another. To satisfy the turnover of such goods, which are often quite inessential, more and more un-renewable resources must be used up, making the energy and ecological crises worse than they already were.

This makes it all the more urgent that we find solutions within the framework of the new technological revolution to resolve the global energy problem, along with the means to do so through a fundamental refashioning of the world economy. Pending such an outcome, it becomes equally pressing to establish soundly based administration and control over the existing raw material and energy resources of the global economy in the 'oil and gas' era. As one of the major energy-rich countries Russia is intensely aware of the implications of this as it draws up its own energy

strategies to deal with contemporary challenges, under growing international pressure on its energy interests.

Other limitations on the use of energy resources must also be faced up to. It will not be enough to find ways of replacing oil and gas with some new form of energy to assuage the wide-spread anxieties felt throughout the world about dwindling reserves; the need to preserve the natural world will impose even stronger demands. As the new century wears on it will be come even more urgent to take account of ecological and biological pressures if mankind is to survive.

Alongside the demand for energy-related raw materials there will also therefore be a constantly increasing struggle for water, fertile soil, clean air and living space. For Russia this is especially important, since we have a central role to play by virtue of our abundant resources, not just in energy, but also in the extent of our national territory, available land and the world's largest supplies of fresh water and forest reserves.

Russia's unique situation derives from the fact that while we are not in the top rank in terms of our share of the world economy as a whole, and carry still less weight in the post-industrial field, our country is at the same time in a key position politically and economically because from the global point of view our resource base is critically important.

The struggle for resources may of course turn out to take different forms, employing various means and involving a variety of protagonists, whether states, organisations or other international players. But an effort must be made to settle on the most likely scenario in which the battle for resources will be played out, and the likelihood is some form of unified global decision making. This in turn would pose considerable problems for Russia.

It seems quite likely that the logic of global development would require that considerations of national sovereignty should not extend to the management of natural resources which are important for the planet as a whole.

Significantly, the former United States Secretary of State Madeleine Albright recently remarked that it was an injustice of global dimensions that Siberia's unparalleled wealth of natural resources should belong exclusively to Russia.

Statements like this are symptomatic of a mood which seems likely to grow over the coming decades, and perhaps sooner. We may well see a growing consensus in the international community that the management of unrenewable natural resources should be shifted from sovereign states, to be managed, controlled and distributed on a global basis.

Rather too many countries may indeed simultaneously prove interested in such an approach, including the United States, the European Union and China. In such a case Russia and its natural resources may be prove to the focus for the world's first strategic alliance for cooperation between such different political forces.

Russia faces another challenge connected with the possibility of globalisation in the management of un-renewable resources, which concerns vital aspects of our domestic policy. It is one thing to speak of an international legal regime for control of natural resources which might seek authority beyond national borders, bypassing national sovereignty. It is quite another if Russia has to face up to the problem of maintaining control over the territories east of the Ural Mountains. And this does not necessarily have to do with attempts to expand into the area from outside.

The greater part of our natural riches are concentrated in regions of Siberia and the Russian Far East where the population, already relatively sparse, is gradually shrinking. If international interest in establishing control over global resources intensifies, the task of holding on to Siberia and the Far East will become all the complex.

We have to be frank here: what are the new generations of Siberians and Far Easterners going to think when see that European Russia and the huge corporations located there are itching to gain control of their resources and sell on the international markets Siberian oil, diamonds, rare metals and forest resources, without doing anything in return to develop their territories, help them to become competitive and improve their standard of living? Sooner or later they are going to wonder what good it is doing them to remain part of such a country when they could have for themselves practically the whole of Mendeleyev's periodic table, powerful rivers, immense lakes and the unending expanses of the Siberian taiga. They will recall how the North American colonies broke away from Great Britain and became the United States, which now dominates the whole world. This is no reason for alarm, but we do need to take account of these possibilities, to evaluate them, and prepare ourselves to deal with them. What it amounts to is an understanding of how events might work out and be ready to defend ourselves against he

RUSSIA 2050

possibility of our natural wealth turning into our weakest spot. There is no doubt that Russia possesses the strength and capacity to cope with such global challenges. We should not allow any playing of a 'Russian card': our country and its destiny cannot be traded or made the object of some consensus amongst other countries in the name of a new world order.

Besides this, it is also vital, as we have seen, that the pursuit of our own global objectives should go hand in hand with careful analysis of our internal priorities. This means, in particular, our conduct of regional policy, greater attention to the effectiveness of the way we handle federal issues, our strategies for demographic development, and the social and economic development of each strategically important region of our country.

IX

The State Since the Treaty of Westphalia

A nother important issue relates to the standing of the nation state as the forces of globalisation act upon it. Some time ago there was concern in academic circles that the system established under the Treaty of Westphalia for the management of international relations, with its emphasis on the stability and sovereignty of the nation state, had reached a crisis point.

There was much talk of the growing influence of the transnational corporations, non-governmental and inter-governmental organisations, as globalisation took hold, and the way this was eroding state sovereignty, to the point where the old system of international relations was in retreat and in the longer run could be expected to disappear altogether. The more radical advocates of this view, whom we might describe as ideologists of world networking, are now actively seeking to prove that national states can no longer even in principle guarantee effective administration, for which their preoccupation with territorial interests is to blame.

Consequently they believe that the present system of administration should be replaced by one which works on the networking principle by means of international organisations set up for that purpose. On this view, the state with its attributes of sovereignty is doomed to die out gradually: physical space is losing its fundamental role, while political processes do their work primarily within a framework of virtual space with its streams of information, financial operations, executive decisions and 'symbolic' resources and knowledge. They would claim that in this sense many present-day states do not control even their own national territory, much less their ability to exert influence on global affairs.

It must be conceded that the traditional political map of the world and the system of national institutions are to some extent being eroded. All the things which formerly protected and defined political order and organisation in specific states and societies, such as national borders, legal systems, language, political institutions, methods of communication, time and distance, no longer have the power to fence them off from global influences. Political players in a given country may be both national leaders and representatives of other states, peoples, religious organisations, international capital, and various social movements. Some of them may not even possess legal status, as representatives of 'shadow' political groupings or the criminal fratemity. The appearance of such new elements adds new, at times obscure, and sometimes very dangerous dimensions to society. Crises brought about by such elements, and the inability of international institutions to control them, only strengthen the power of unaccountable forces and technologies operating within the global political process.

On the other hand, the contention that by enhancing the role of non-state players in international affairs globalisation is also obliterating the institutions of the state is at the very least superficial. The principles established in the Treaty of Westphalia remain fundamental to the system of international relations: leadership, independence and the primacy of state power in its own territory, independent conduct of external relations, and the guarantee of territorial integrity and inviolability.

Their complete stability cannot of course be guaranteed, unfortunately. The principles of sovereignty are under threat and the dangers are growing. But the danger does not come primarily from the networks, but rather from certain 'cold wave states' and from politico-military blocs and coalitions like NATO, which, though outmoded, are still in search of justification for their continued existence. It is they, and not the networking organisations, who give rise to concepts like 'failed states' 'limited sovereignty' 'state rule from outside' and 'humanitarian

intervention'. It is the logical continuation of these ideas which could give rise in the future to the hypothetical model we have already discussed, of state sovereignty over natural resources becoming effectively globalised.

Put another way, the dangers posed by the 'network world', international terrorism and the global underground may be real, but it is the ambitions and political interests of nation states themselves which play the decisive role in undermining the survival of state institutions. Theoretical justifications for eroding, limiting or diluting state sovereignty are too often used in support of inter-state competition, or as a means of interfering in the internal affairs of other countries.

So what globalisation really demands is a significant strengthening of the state as an institution: states which are effective, law-based, competent, responsive to the needs of their people, to other countries and to the wider world. This kind of responsibility involves states themselves and their elites indulging less in discrediting the concept of state sovereignty, a less negligent attitude in interpreting the development of national states' basic role in the promotion of international relations, and less foolishness from the sort of people who saw off the branch of the tree that they are sitting on.

Unless they do this, it will be impossible to adapt the state as an institution to the demands of today's world, to strengthen and modernise it in accordance with the new realities, to enable individual states and the whole system of international and interstate relations to deal with the combination of challenges and threats posed by globalisation. The importance of this is all too obvious. The essence of the problems states have to face is really that they are being involved, beyond what anyone would wish, in a new matrix of political, economic and social relationships. States are experiencing, to an increasing extent, the strains and burdens brought about by contacts with approaches to globalisation which come from groups or individuals whose activities transcend state boundaries.

One example would be that from the religious perspective. Islam today represents one of the most powerful trends with implications for globalisation, since it blurs the demarcations between individual states. Indeed we hear more and more reference to contemporary Islam as representing a break with civilisation as represented in the rest of the world. The situation is complicated by the fact that the great majority of the population in Islamic states lives in poverty, or worse, and feels keenly that the present state of affairs in the world

is unjust; what is more, the gulf between the most highly developed industrial countries and the greater part of the other populations in the level and quality of their lives, and their technological and cultural development, grows wider by the day.

Furthermore, there are members of the political and business elites in the Muslim world who would like to channel the social unrest which builds up in the streets into hostility towards external enemies, represented by representatives of other faiths. Their aim is to preserve without change traditional and frequently very archaic forms of rule within their societies. The combination of these two tendencies provides fertile soil for fundamentalism, religious extremism and terrorism.

The problems that have arisen between parts of the Muslim world and what are mainly the peoples of the developed industrial states are, however, probably transitory. Islamic cultures have to cope with the challenges of internal modernisation, and adaptation of basic religious principles to the realities of the modern age, such as freedom of the individual, equal rights for women and political and cultural tolerance. In the course of human history other religions have also had to bring their doctrines into line with changes in society.

In this instance Russia could become a world leader. We have our own substantial experience of how Islam can develop in a peaceable, open and tolerant direction in Tatarstan, for example, where Muslims live and work side by with representatives of other faiths to the benefit of the Russian society of which they are all members. This must be the future to which we must all look, one in which Islam takes constructive forms which are open to dialogue with people of other religions. Islam is certainly capable, if it draws on such experience, to modernise and adapt itself to the realities of the world of today. However, if others rush to impose alien institutions, values and modes of behaviour on Muslim countries they will do nothing but encourage extremists.

The structural crisis facing the state of the future is also connected with the challenges of economic globalisation and the incomplete correspondence, in the structure and functioning of traditional states of the classical type, with the requirements of national development in the new era.

This has two aspects. First, in trying to conform to the logic of globalisation with its primarily economic character, the state takes on an

RUSSIA 2050

increasingly economic profile which turns it into a 'corporation state' in competition with other large corporations, and as an agent of states which already form part of the globalised economy.

But secondly, to the extent that the new age is post-industrial in character, and hence is knowledge based and dependent on its human capital, state policy is naturally directed towards the concept of the 'social state', in which the objective is to ensure the social welfare of all its citizens. This approach is in many respects at loggerheads with neo-liberal economic doctrines, which advocate reduction of state expenditure, of tax burdens and provision of social services, in order to increase economic efficiency in accordance with standard business practice.

The ability of the state authorities and the national elite to strike the best possible balance between these conflicting requirements is the test by which their efficiency will be judged. It will also provide an answer to the question whether the state has a future at all.

So the challenge of state building that we now face can be articulated as follows: Russia will have to refashion its state structures and improve their performance with all due speed, including the distribution of power and its administration; and it will have to do this through the effectiveness of its policies in a global context, and the competitiveness this produces. It will also have to increase and strengthen the part the state plays in the regulation and development of global political and economic activity. So far as Russia's internal social and economic policies are concerned, the emphasis must be on a more extensive and better-provisioned social policy, fit for a post-industrial society. This follows from an understanding that fostering and developing human capital is the state's prime function in the new global economy.

X

Russia Within a Global Framework

If the our state and society are to meet their developmental aims they will have to accept that a precise understanding of the tasks they face must be put into a global context, and have defined and up to date coordinates to guide them through the currents of political and economic life.

Russia's development depends on our ability to act, as well as to think globally. Over the coming decades Russia will have to create its own future, not just on its home territory, but within the framework of the wider world. The success of its social and economic policies will depend on how successful we are in this broader context.

There is something else that we have to grasp fully. Our place in the world of the future depends on our preparedness for truly far-reaching transformation and modernisation. Developing our national economy and social system must be firmly pointed towards ensuring that Russia's competitiveness measures up to what is needed not just for today, but for the world of future decades, say in 2050.

For the last 200 years the world's civilisation has been dominated by capitalism. The world leaders of today are those countries which had the greatest success in building up their national economies and state structures on capitalist principles. We have also seen during recent decades the tendency for countries to compete for 'global projects for the future' and to integrate their efforts around them. This competition culminated in the victory of capitalist world over the socialist camp headed by the Soviet Union, and at the same time the collapse of the traditional empires coincided with the emergence of the 'Third World', which in part simply looked on as the two protagonists slugged it out in the ring, but in part also provided the place for them to act out their opposing social and economic development programmes.

We now have an era in which new geo-economic and geo-political 'continents', all capitalist in nature, are forming as part of the globalisation process. We have inherited from the past two principles of competitiveness, though their content has markedly changed. Above all, the triumph of capitalism over socialism demonstrated that the key to success is the ability of the system to adapt most quickly to changing circumstances and, above all, to likely changes still to come. Another decisive advantage is provided by the ability of leaders to offer the most compelling programme for the future, combined with success in amassing the greatest quantity of resources, other assets and adherents to their cause.

Tomorrow's global leaders will be those who most successfully gained the initiative in modernising their national economies and social structures to meet the demands of the forthcoming scientific and technological revolution. Our own country has only recently returned to the path of capitalist development. We have inherited from the Soviet period a considerable accumulation of social structures which could be a great deal worse, but suffer nevertheless from numerous defects. In consequence we are confronted by a serious imbalance between natural and social resources which are a brake on our future progress. We are a long way from creating a stable new system for our political institutions. What is more, the issues all have to be addressed at the same time, just as we are trying to find our place in the world of global capitalism. However if we fail to do this, the outcome will be entirely predictable. Our country could not simply find itself confined to the sidelines, but fail to join the world of the future at all, and lose itself on a highway to nothing.

XI

Energy and Development

Which its extremely rich resource base and developed industrial capacity, Russia remains one of the leading economic powers in the world, on the threshold of the group of post-industrial countries. But we have maintained an economy which depends on raw material exports, and their growth in recent years is a factor in our growing backwardness.

Economists and historians have been right to assert that possession of natural wealth and raw materials often proves to be a curse as much as a blessing. The mad rush for exportable hydrocarbons not only makes people's eyes glaze over, but also creates a paradoxical headache for the government: there is nowhere to put the money they bring in, apart from 'sterilizing' it, so that it is as if it did not exist. This does not make for effective use of resources, and does not allow time even to consider how best to put the exploitation of mineral resources to the best possible use. The issue is how to preserve a substantial part of them for succeeding generations, while at the same time disposing of the means to speed up the development of sectors of the national economy needed to secure a dominant place in world markets.

It may boil down to the fact that those who lack raw materials have heads and hands free to think of other things than the extraction of oil and the means to export it. It is some time since Russia was included in the group of countries with fast-growing economies, the so-called BRIC countries (Brazil, Russia, India and China). In 2005 the combined GDP of these countries amounted to 25 per cent of the world's, while that of the US and the European Union amounted to 20 per cent each.

The prospects for this group are impressive, even though it is still informal and so far without any institutional structure. However we should not delude ourselves: Russia's share of the BRIC's total economic capacity is not the largest. Furthermore there is another factor to be noted, namely that unlike the other members of the group Russia's demographic situation is negative, because our population is actually shrinking.

Russia's position is also less than ideal in the matter of development strategies. China is at present undergoing a complex transition to an intensive new kind of development, with the emphasis on conservation of resources and of growth which takes account of ecological factors. Another crucial component of their strategy is the development of advanced technologies. In the period from 2003 to 2007, China devoted around 240 million dollars to research into nanostructures and nanotechnology. While this is considerably behind the 3.7 billion dollars spent by the United States, China already comes third in the world after the United States and Japan in the production of nanotechnology patents.

Both Brazil and India are pursuing complex modernisation policies and science-based industrial programmes, and the latter is rapidly becoming a computer superpower. In 2006 Indian exports of computer-related exports were in the order of 31 billion dollars. By 2010 these exports, combined with the activities of contact centres and business support operations are expected to expand further to 60 billion dollars.

By comparison, Gazprom's total exports in 2006 amounted to 37 billion dollars, while oil exports have currently reached 80 to 100 billion dollars, albeit at a time of peak prices. The figures are sometimes comparable, but in some cases alarmingly unvarying. The vital point is, however, that what we are selling is our un-renewable natural resources.

Against that background our present conception of Russia's total assets and wealth of energy resources begins to look much less impressive, to put it mildly. If we do not want our successors to curse us for our profligacy, we shall have to change. Maintaining control of our resources is not just a matter of managing their extraction and export properly. Rather it involves conserving them, ensuring their future availability, and controlling their increase in value. Unfortunately neither our government nor the managers of Russian oil and gas companies set much store by these considerations, and indeed remain in the rut of the raw materials model which the West has foisted on Russia during the past fifteen years. By merely playing the role of supplier of oil and gas to the foreign consumer Russia could, and already has, gained quite a fearsome reputation; but we cannot force people to respect us or be treated as an equal partner by overlooking a general evaluation of the role we play in the contemporary world.

When we try to frighten the West with unreal threats of 'turning off the taps' we provoke an all too real response. Its only effect is to provoke the West into speeding up their work on technologies designed to reduce dependence on energy raw materials, such as energy-saving technologies and the manufacture of alternative fuel and energy supplies. Alternatively, the very conception of an energy superpower is enough to increase international pressure on Russia through attempts by transnational corporations and governments to obtain partnerships in Russian companies, which will allow them to insert themselves into the process of exploiting the biggest untouched oil reserves, and by acquiring share holdings in Russian companies to obtain licenses and influence over the internal economic and trade policies of our country.

When an energy superpower concentrates its efforts on the supply of raw materials it limits its own capabilities, in that this directly affects the government's social and economic policies. It is now generally admitted that the Stabilisation Fund, which was originally intended to finance development and to provide a financial cushion, is now mainly a source of 'sterilisation' for the financial mass. It is already clear that this mechanism is not working as it should and will demand more and more self-sacrifice.

The drive towards sterilisation remains all-consuming. The unrestrained accumulation of oil and gas income serves only to strengthen a conscious refusal to devote the profits from raw material sales to modernising the economy, when what we need is industrial diversification, escape from oil sales dependency, the battle against poverty and the formation of social capital by investing in the human needs of the workforce.

Up to now the requirements of sterilisation and accumulation have pushed into the background the need for our country to create a more favourable balance in the management of our raw material resources, by moving away from emphasis purely on exports to developing production by developing our own high technology industries. There has been talk about restoring a more favourable investment regime for private investors, but it remains just talk. There is still no disposition to expand private and state investment in industry and infrastructure. The rate at which budgetary expenditure on investment and the state investment fund are expanding is incompatible with the growth of the Stabilisation Fund and the country's gold and currency reserves.

Russia has of course been – and for the foreseeable future will remain – one of the world's principal providers of raw materials. Even so we have to ensure that our development is productive. The only way to guarantee our global competitiveness and a high level of economic efficiency is to move away from counting on cheap resources because of the competitive advantages we now possess. On the contrary, we should be seeking such advantages by increasing capitalisation in the country's resources, improving the uses we put them to and adding value, and by putting the resource potential into the creation of new technologies. We should review our conceptions of national development in terms of Russia as an energy superpower in favour of producing and exporting not raw materials as such, but the energy resources we can derive from them and from energy-based technologies.

Russia possesses a unique potential to become a global leader in the manufacture of oil-based products and oil technology. Amongst world leaders in terms of the crude oil reserves it possesses, Russia has an exceptional potential in its scientific and technical resources for oil extraction and processing, and in its capacity for oil-related chemical production. In other words, Russia's assets in this area put it well ahead of developed countries of the West, in the sense that, with the exception of Norway, none of their oil processing technologies are underpinned by their own oil reserves. Still less well placed are Latin American and African oil exporters, who lack the potential to become independent players in the global oil markets.

If Russia wishes to become a world leader in oil processing and hydrocarbon technology, we must research the new technologies which will allow us to make full use of our potential in developing non-renewable natural resources. We must tackle the longer term problems of increasing both the ecological and productive aspects of extracting and processing useful minerals and developing the technologies to make use of nontraditional resources, that is to say those which are not yet used for the production of energy, or the so-called 'dirty oil and gas resources', and the development of technologies to produce energy from biological and organic types of fuel.

One more very important resource is to acquire a position of genuine World leadership in the production of electrical energy. At the moment, Russia is exporting domestically generated energy despite the fact that we are suffering from a demonstrable lack of it in our own country. Up to now our generation operations have been extremely wasteful and irrational, considering how vital it is to make the best possible use of our natural fuel resources.

For this reason, in addition to reviewing questions related to oil exports, we should be embarking on a strategic reorganisation of the whole energy generation industry. The starting point should be a transition to comprehensive use of renewable resources for energy production by developing hydroelectric generation, the introduction of alternative fuels, along with improved techniques for their distribution and use, and the reestablishment of the nuclear power industry. In this way we could move away from directly exporting these vital natural fuel resources (oil and gas) towards exporting electrical energy from other sources, and put the emphasis on global exports of innovative energy technologies. The current reorganisation of the electrical generation sector is doing too little to take this need into account.

In building up our internal resources in support of Russia's position as an energy power we must ensure the consistent application of energy saving policies at all levels, beginning with state programmes in the economic and industrial fields, and ending with the needs of the individual Russian consumer. As a counterweight to the current indiscriminate sale of irreplaceable resources, the state should be encouraging the business community and society in general to adopt an ecologically orientated and

RUSSIA 2050

rational culture in relation to the use of resources. Unless we do this to counter the present levels of profligacy in the Russian economy it will be impossible to maintain any kind of stability in our national fuel balance; any kind of modernisation and diversification in our economy will also be out of the question.

XII

The Economy of Human Resources

A s long ago as 1761 the great Russian scientist and encyclopaedist Mikhail Vasilievich Lomonosov wrote a treatise on 'The preservation and increase of the Russian people'. He observed that the main direction the authorities should take was to 'preserve and increase the numbers of the Russian people, since this represents the greatness, the power and the wealth of the entire state, and not the extent of its territory, which means little without inhabitants'.

This precept enshrines an absolute priority also for today's circumstances. An honest and frank appraisal of the situation we face shows that in the medium term our country faces an alarming challenge: the final demographic degradation and extinction of the country's population. It is a real possibility that our existence as a people may come to an end within the borders and in the form that we have known ourselves, and honoured our native land, over the course of the past centuries.

The problem is that even the most favourable forecasts of a sharp increase in the birth-rate and a simultaneous rise in average life expectancy may lead to a much greater burden on our society because of the increase also in the number of people incapable of work. And an increase in the demographic burden could make efforts to modernise our economy much more complicated.

At the beginning of the twenty-first century, this demographic burden in Russia is illustrated by the fact that there were in the order of 700 persons not capable of work to every thousand who were in employment. Because of the particular nature of the Russian age pyramid, the number has fallen to almost its lowest level in the past fifty years. This is a significant factor affecting the stabilisation of the Russian economy, though even in these circumstances our pension system is in deficit and inefficient. Further ahead the situation will only get worse. The window of 'demographic wellbeing' will close, the number of people capable of employment will begin to decline, and this will be accompanied by an increase in the older population and a reduction in the number of children as a whole. This in itself represents a most unfavourable demographic model, both in current circumstances and from a strategic perspective: the demographic burden will be such that for one person in work there will be more than one who is not, and that the proportion of pensioners in the population will be higher than the number of children.

In these circumstances the most important factors affecing our demographic security are not only a rise in the birth rate, but first and foremost an understanding of the value that should be placed on life in our society. The Russian nation will not survive unless we realise that the state and all our citizens will have to work together to preserve each human life in our society.

The following figures will illustrate how important this is. In Russia there are 22 murders per year for every 100,000 people, compared to 12 for every 100,000 in the rest of Europe; 24 deaths for every 100,000 people from traffic accidents compared to an average of 9 elsewhere in Europe. The annual report of the United Nations published in 2006 reported that in Russia the chances of dying young amounted to 31.6 per cent of the population, compared to 11.8 per cent in the United States and in Norway 8.4 per cent, or four times less than in Russia. Russia's life expectancy is 15 to 17 per cent lower than western countries and Japan, and is on a level with that of Mongolia, Morocco and Guatemala.

If Russia is to escape from the nightmare represented by these figures and trends, we shall first of all have to tackle the high mortality rates amongst the working population, including young workers. These derive, in particular, from the low standards in our provision of preventative medicine, the neglect throughout our society of due care for our own health, the incidence of anti-social behaviour, as is apparent in our levels of criminality, drug addition, drunkenness, heavy smoking, the spread of AIDS, and so forth, not to mention the lack of due concern by the state authorities to ensure the protection of each individual member of our society.

In the same way we must re-assess the amounts we expend on poor quality infrastructure and low standards of everyday life, which are totally inadequate for the future well-being of our country. A typical example which demonstrates the complexity of any such issue is the enormous number of deaths on the roads. This is caused by the poor state of the road network, the poor condition of our domestic vehicles and the popularity of old foreign models, and our neglect of the rules of the road, whether it involves wearing seat-belts or driving while drunk. All of this results from a general lack of civic responsibility, disdain for the value of other people's lives and everyday corruption at the government and individual level.

Another crucial but little appreciated aspect of demographic policy is the distribution of the population across the whole territory of our country. The population is not just shrinking, but is becoming more and more concentrated, to the point where particular regions are losing almost all their inhabitants. Parts of Russian territory have been up to now occupied only by pioneers, with no settled living conditions, from which people are keen to get away. So, for example, negative natural growth and the exodus of migrants from the Taimyr, Chukotsk and Nenets autonomous regions is likely to reduce the population to 35 per cent of the current figure by the year 2015. What this means is that in practice physical control of these territories may simply be lost. The extent of just these regions amounts to around two million square kilometres, which is more or less equal to that of Mexico, the fourteenth largest country in the world.

When we talk about state policy in Russia towards such expanses of our territory we tend to have in mind our ability to settle and absorb them, in effect to colonise them and bring them the benefits of culture and overall development. If we do not do this ourselves, then others will. Preserving the integrity of one's country means the ability of a society to assimilate its territory and to make informed and effective use of its resources. Otherwise other countries, cultures or peoples will sooner or later begin to not simply to penetrate unexploited and effectively abandoned territories, but to colonise and assimilate them.

There is another issue which is less discussed but extremely important: the growing urbanisation of Russia, the concentration of population in the largest cities. Experience elsewhere shows what enormous problems this creates: demographic and national security is better served by a programme of de-urbanisation which reduces towns in size, encourages suburbs and the facilities attached to them, and encourages the return of the population to the countryside.

Here it will be of interest to look at the example of the United States, the only developed country with a positive demographic situation, that is to say where the population is continuing to increase. Amongst other factors which have influenced this situation is the fact that in the United States the proportion of the population which lives in the suburbs has grown to the point where it constitutes 50 per cent of the whole. This amounts to a process of de-urbanisation, in which part of the population leaves the town centres for the suburbs, or the countryside. Given the possibilities available in a post-industrial society this leads to an improvement in the quality of life, longer life-spans, a rise in the birth rate, improvements in public health and an escape from the strains and stresses of urban living.

Another priority area is that of migration. In recent times we have heard more and more support for the view that Russia should open its doors to substantial immigration, so as to offset the fall in the indigenous population. It is suggested that the regular inflow of migrants over the past few years has mitigated the worst of Russia's demographic crisis. However this is a very tricky area. Most current migrants have come to work for relatively short periods of time. In doing so they benefit the economy, but do nothing to resolve the demographic problem. What is more, they tend to exacerbate the social and cultural burden on the rest of society: the number of guests in the home increases, but the home has no fewer problems than before.

Two key measures will have to be taken to regulate the influx of migrants effectively. The first is to admit unskilled workers from abroad to carry out specific tasks in specific regions of the country, but to arrange for them to return home afterwards; very few of them would be given the opportunity of acquiring naturalisation. Secondly, a certain number of others would be given this opportunity, and thus supplement the existing population of Russian citizens on an equal basis, provided that they could bring in a new high quality resource because of their cultural, linguistic and educational qualifications, or because of their age profile. In this latter case there is a further consideration to which attention is often, and in my view rightly, drawn. This is the possibility of programmes to attract the return of Russians living abroad, who would provide an extra quality to the migrant inflow. Here too, however, one would need to move cautiously. There is a danger that if there were a massive influx, and one must remember that the Russian diaspora is one of the largest in the world, we could lose substantial influence on the affairs of neighbouring states. This view may not, however, be entirely justified, if we consider the need to encourage future integration in the post-Soviet space.

Finally, it may be that current demographic and immigration policy in Russia does not take into account the most important resource which we might use to speed up and strengthen our country's potential. In addition to modernising our economy, modifying our energy strategy and developing our post-industrial sector, we should invest in the formation of new social groups which could make their own special contribution to the development of our society.

However, some authorities believe that the direct annual loss to our economy from the 'brain drain' amounts to no less than three billion dollars, and that the total, including loss of income foregone, may reach fifty to sixty billion dollars. Various estimates put the number of Russians who have moved abroad at no less than 100,000. A further 30,000 or so are working in Western institutions on temporary contracts. Our country has been losing thousands of highly qualified specialists every year, many of whom have been educated at state expense, and the bulk of them are working in physics, biotechnology and information sciences. These are the very professions which underpin global leadership and the present and future stages of the scientific and technological revolution.

No less substantial is the extent of what might be called the internal 'brain drain'. Examples of this are the people who are overqualified for the jobs they take in business, politics or administration, or the loss of scientific schools because they are insufficiently profitable or their staff feel socially marginalised. It is estimated that for every scientist who emigrates there are ten in Russia who leave the scientific profession. In the 1990s some 577,000 people left for various reasons out of a total of 992,000, which amounts to a reduction of 58 per cent. The average age of scientific specialists is 48, of senior specialists 53, and of doctors of science 60 years.

During the past fifteen years the state seemed to lose interest in the sciences and the business world certainly did not want to take its place, preoccupied as it has been with raw materials export, financial transactions, or in the best case with using up old scientific and technological resources. So what was bound to happen, actually did. Fundamental science is not something which can be funded in part unless one wants incomplete results. When science gets only half of the funding it needs, the return may be no more than 1 per cent.

Furthermore chronic under-financing by the State, and the peculiarities of the period in which businesses have been building up their starting capital, have also intensified the difficulties of getting scientific products on to the market. The fact is that unless both sides are closely integrated it is impossible to bring innovation into the development of the economy, and fundamental research can be neither successful nor efficient. In consequence Russian science can at the best give society access to the front line results of the 1980s, and it is completely inadequate when it comes to our requirements, and those of the world, for future development.

According to the 'National Report on the development of Russia's human potential for the year 2004', Russia has less than 1 per cent of world science-based production, while the United States has 40 per cent. Meanwhile, our scientific emigrants living in the US account for 25 per cent of this figure, which amounts to 10 per cent of the global total. In other words, Russian emigrants living in the United States alone are responsible for ten times more science-based production than their colleagues who stayed behind in Russia.

RUSSIA 2050

The great Lomonosov remarked that it is far less important for Russia to attract new inhabitants than to create conditions which will stop its current inhabitants from looking for a better destiny elsewhere. If our state does not take this problem in hand, our loss of intellectual potential and the quality of our human capital could prove fatal. Without its individual citizens, Russia will never secure for itself a 'better destiny'.

XIII

Eurasian Union

There is another factor which will have a great bearing on the future of the state. The twenty-first century will be characterised by the emergence of powerful geopolitical groupings, new political and economic systems which will be established between states or create wider associations of them, global common markets, and cultural or virtual, which is to say electronic, associations.

The creation of a unified European entity is close to completion. The Americans envisage the establishment of an ideological 'empire' of freedom. Members of the Chinese diaspora in different countries are gradually drawing closer together to form an overseas ethnic Chinese community with its own special cultural and economic identity. The Association of South East Asian Nations (ASEAN) is rapidly cementing political and economic links between its members. There are signs of greater integration between the states of Southern America, including the creation of a South American common market, and geopolitical unification which is ideologically opposed to the states of North America led by the United States. The Arab states in the area of the Persian Gulf are thinking of setting up a common market, even though they are enjoying great prosperity as a result of the oil boom. Most recently there has been talk of

an 'African Federation'. In almost all these cases there has been discussion about the introduction of a single currency on the pattern of that already existing in the European Union.

These and many other developments are signs of a new world order emerging and of states evolving new roles within it. If they are not to be left behind by the mainstream, individual states or any groups they form will need to evolve their own global integration programmes in order to flourish, and more than hold their own against new threats to the world order such as terrorism, or to deal with the emergence of institutions and mechanisms which extend into the internal administration of individual countries. Ultimately, even the reasons for the emergence in recent times of not formally established 'states' or outcast regimes is often to be found in their lack of state structures which would allow them seek integration into the world economy, unless they have a deliberate desire to develop in isolation.

We now need to consider the prospects for Russia's development in the context of tendencies such as these. In its time the Soviet Union was in many respects an example of a geopolitical continent in the making, and I believe we are right to regard its collapse as an immense calamity.

Looking ahead from the current position of Russia and other post-Soviet republics, there seem to be three possible directions which their geopolitical development could take.

The first is to join up with one of the existing arrangements, as many former Eastern European states and the Baltic countries have done by acceding to the European Union.

Secondly, such countries could over time be drawn into and be absorbed administratively by some wider entity, albeit as a result of not being able to resist succumbing to such a subordinate status. Unfortunately there are signs of this happening with some countries of the Commonwealth of Independent States.

Thirdly, if a country can muster the strength to establish its own basis for global integration, it may be able to do so as a union with its own independent standing in the world.

While Russia does of course form part of European civilisation, for it to become integrated into the European Union is objectively out of the question. Any such attempt would be likely to end in tears on both sides, since there are far too many differences between them to be digested, whether in political, economic, social and cultural terms, or on the geopolitical level.

Similar obstacles are likely for some other countries which were once part of the USSR. Since the last wave of EU enlargement, to include Bulgaria and Romania, the doors are likely to stay closed for some considerable future. The EU will need time to adapt to its new borders and a new level of unification. There will be internal tensions to be coped with, brought about by the last wave of accessions and the difficulties encountered in adopting a new European constitution.

In consequence, a country like Ukraine runs the risk of becoming a 'permanent candidate' for EU membership, just as Turkey does. In the latter case the delays have already had consequences, in growing euroscepticism and an awareness on the part of the government that it cannot remain in a state of suspension, since such a candidate cannot get on with a proper development strategy.

Nor can Russia contemplate adopting a slow process of integration into the EU which might take 20 to 30 years to complete. Such an approach would undermine Russia's independent position in the world and weaken its ability to withstand external threats to its security. In such a situation one could imagine within a couple of decades the accession to the EU of the 'Koenigsberg Republic' or a 'Central Black Earth Federation'.

It goes without saying that developments of that kind would conflict with our national interests; and the logic of world development dictates that action needs to be taken, if not today, in the near future. By the year 2050, if not sooner, Russia's main task must be to integrate into its vision of the future above all the post-Soviet space and the world of the Russian-speaking 'compatriots'.

Up to now all attempts to bring about such integration within the former Soviet space have come to nothing. It is true that the Collective Security Treaty Organisation is doing an effective job in its area of responsibility. The Euro-Asiatic Economic Community provides quite an effective example in the area of economic integration. However, the aftermath of the CIS divorce, civilised as it was, continues to undermine any real prospects for a faster, deeper and more substantial unification.

So far as integration is concerned, organisations like GUAM (Georgia, Ukraine, Azerbaijan, Moldova) scarcely have any useful prospects: they can come out with resounding declarations, but their only real purpose in life is to demonstrate their independence of Russia to other international integration bodies, if not to themselves.

In our case the objective must be to identify a realistic nucleus, as the Franco-German partnership was for Europe fifty years ago. Our own best prospect must be the establishment of a Eurasian Union which could bring together in the first instance the Russian Federation, Belarus and Kazakhstan.

Of all the states in the CIS it is Russia, Belarus and Kazakhstan whose political elites and public have the greatest potential, and the willingness, for full-blown integration, notwithstanding all the current difficulties and problems that they face. We are already the three states which have achieved the highest level of integration, corresponding more or less to that reached in the 1980s by the then members of what is now the EU.

What this means is that by drawing on European experience, a Eurasian Union could in the foreseeable future put into effect an integration programme which would be on the same level as that in the EU today. Its tasks would be to set up a system of super-national structures, to set about creating a common infrastructure and a common economic and political space, a single external and security policy, a single currency and citizenship, and the adoption of a single Union Constitution.

A deeper level of economic and geopolitical integration with other post-Soviet states would be a much longer strategic undertaking, to be done in stages as the Eurasian Union itself expanded, rather as the EU has done. Such successive waves would depend on the Union's ability to develop and attract further candidates for integration.

This is bound to happen eventually, since it is only if the integration process is successful that such groupings can be competitive on a global scale, while at the same time providing improvements in public well-being and standards of living for all their citizens. Success also depends on such things as macroeconomic regulation, the establishment of a unified political and justice system, mobility and free movement in the labour market, and common citizenship.

RUSSIA 2050

Integration can also facilitate an open market system and increased demand within national economies. This is a key requirement for Russia at the present time, if it is to speed up economic growth and economic restructuring, while moving away from reliance on raw material exports. What is more, integration fosters new industrial branches and sectors which can compete on a global scale.

The creation of a 'stability pact' which would apply to all branches of the economy and a single currency zone would allow the member states to enhance their role in the world economy and boost their efficiency and drawing power, to the benefit of their stability and sovereign power in the global context.

Finally, achieving this degree of economic unity between Russia and its post-Soviet associates would enable them to create a common space in which the two large scale integrated groupings, the Eurasian and the European, would work in a constructive partnership to strengthen their joint influence on the global stage.

XIV

Russia's Path to the World of the Future

In the course of the next five to seven years Russia will have to make crucial strategic choices. The way we tackle fundamental social, economic and other domestic issues will largely decide the fate of our country over the next several decades, right up to what I would call the Rubicon of the twenty-first century in the year 2050.

The Government must therefore define and adopt its strategic planning objectives with the greatest urgency, in full awareness of the fact that time is short and room for manoeuvre much less that we might believe or hope for. The path global development is taking can only put increasing pressure on any time we might need for reflection.

Overall political and economic developments worldwide are going to be conditioned above all by pressure on the earth's resources from economic globalisation and the growth of its population. Scientific and technological progress will gain pace during a rather ill-defined period for the future of the scientific and technological revolution and its leadership; this in turn will increase the disproportions between the various political and international issues with which it has to deal. An even greater role will be played by shortages in the supply of traditional un-renewable natural resources and increased standards in the way they are consumed. There will be an increasing trend towards the formation of powerful supernational groups; the form they take and the competition between them will determine the evolution of the new world order and the political map of the world.

Russia's best hopes for successful development in the period up to 2050 will depend to a decisive extent on our ability to reassess and put into a global context the new demands which will be made over time on our state and society. This will entail a transition from stabilising the country to embarking on a programme for thoroughgoing modernisation, in a full awareness of the values on which national unity depends. For this, it will be essential to have an understanding of what a fully functioning, as opposed to theoretical sovereignty means in this world of the future.

In this book, I have sought to analyse the trends and factors which our country will need to take account of in this endeavour. They can be summed up in three principal requirements we must satisfy, in order to overcome the storms of the future: we risk otherwise being thrown completely off and out of the mainstream of world history.

The first of these is that our state sovereignty is bound up with economic independence. This entails above all turning away from dependence on raw materials, and effective modernisation of our economic policies and national infrastructure.

However if we are short-sighted enough, we could simply continue with the old raw material-based development model, which is to say to consume the national reserves and resources which should be devoted to highquality economic modernisation and fritter them away in what I would call a 'Backwardness Conservation Fund'. We could then well expect to be overcome by the 'inertia of economic exhaustion'.

If this should come about we would be reinforcing the current tendency. We would see the gradual demise of the system of balanced production, the heavy processing industries, and high technology and science based enterprises. The gradual degradation of the military-industrial complex would follow, and the loss of this potential could signify our arrival at a point of no return, from which we could not recover our position as a

leader of global development and membership of the group of the world's leading countries.

Russian economic dependence on the fluctuations of international markets will continue to grow, with its consequences for our social policy. We shall simply be unable to resist the awful fate of turning into a raw materials appendage to the world economies; and if we see the emergence of a system for the international control of natural resources, the effective centre of our national administration will move abroad. In that case Russia would, whether we like it or not, really come to the end of the road, and we would find ourselves confined to the periphery of world economic and political affairs, with no hope for the future.

The second requirement is that our state sovereignty, and the Russian nation, should be in a powerful enough demographic position to achieve its national objectives. This will entail combining an increase in our present population with more effective exploitation of our national territory and its resources, and in the process build up the human capital on which modernisation will depend.

If we fail to do this, Russia faces the prospect of national collapse, which we might call something like 'The swallowing of the wilderness', since without demographic renewal and the development of decently endowed human capital our country really could become an 'empty space' in global terms within only a few decades from now.

In such a case there would be no all-embracing state, individual regions could eventually be detached and absorbed by neighbouring states, and natural resources would be internationalised. To crown it all, we could find the empty space itself being turned in a sort of reservation in which all the problems of our contemporary world could be dumped, whether waves of migration, ecological waste, or international terrorism.

The third requirement is to adapt our state sovereignty to global processes by creating a geopolitical continent with the Russian nation at its heart; this could involve a process of attracting into its orbit other countries and peoples who would share its vision and strategies for future development.

Even if we are reasonably successful with our programme of active economic and demographic modernisation, we shall not achieve our objectives if we overlook the need for a civilised approach to integration and adaptation into and within the wider community. That would leave us in a state of isolationist backwardness.

One fundamental tendency would the total consolidation of centres of power on our national perimeter. By being locked into its own borders we would lose the ability to exercise influence on global development and would be subject to the pressures and conflicts arising from or within the cordon sanitaire which the new geopolitical 'continents' would impose on us.

Were Russia to be consigned to the periphery, geopolitically speaking, it would of course make our economic expansion impossible, in that we would become nothing more than a place for trading and exchange while the new world centres competed amongst themselves for arrangements to suit themselves. Further down the line we could see Russian resources being divided up and the encroachment of the other geopolitical 'continents' on to our own territory. This might begin with the attachment, in a cultural or ideological sense, of large regions of our country to enterprises controlled by European, Chinese, or Islamic interests, and in due course lead to their complete assimilation of them.

To take an optimistic, and at the same time absolutely essential view of the position we wish Russia to reach by the year 2050, we have to accept that there is no alternative to meeting in full the three requirements that I have outlined. They must also be tackled without any delay: we must begin today to construct, brick by brick, an edifice which incorporates completion of the many tasks already on the agenda, and to take all the many steps without which Russia will be unable to complete its trajectory of development in the decades now before us.

A particularly urgent task is to undertake the practical tasks on which the modernisation of international institutions, and Russia's place within them, is going to depend. This will entail a new coalition for establishing how global leadership can be formulated in such a way that no one country will exercise a controlling interest. The aim here should be to reduce, by gradual and unprovocative steps, the excessive influence the United States has on world affairs and its presumption of responsibility for them; while at the same time correspondingly empowering other global powers which are capable of exercising conventional responsibility.

Ultimately we have to acknowledge that there are a number of all too evident reasons for the assertion by the United States in recent years of pretensions to unique leadership and its attempts to extend US sovereignty literally to all parts of the globe. One is to be found in the decline of international mechanisms for arriving at decisions relating to the maintenance of international security. In recent years, furthermore, the international community has been quite unable to grasp the practicalities of tackling this issue. When I say practicalities, I mean going beyond expressing good intentions in the matter of modernising existing international institutions, and creating new ones which correspond to present day realities and the challenges of the new global order.

This is why is it more than ever pressing to embark on reform of the United Nations and the Security Council, to restore the true functions of the organization and make it impossible for any single power to dominate the management of world affairs. In the same way, the accession of Russia to the World Trade Organisation should not be simply a matter of our carrying out its instructions. We should make our accession a means for bringing about modernisation and fairer rules for international trade.

The WTO as it exists today encroaches on the right of states to support their national producers/manufacturers, to the advantage of importers of manufactured products. The effort to protect world trade from interference from national governments does not correspond to the realities of the new world and its paths to development. New rules for the management of markets worldwide should make it impossible to discriminate against particular countries on the basis of the length of time they have been members of the WTO, and leave it to national governments to decide how to manage their internal markets, and give support to national producers whose activities are critical to the preservation of national identity.

There is no doubt that it will become all the more urgent over the next few years to set up a new Global Ecological Pact for Sustainable Development, since the system established by the Kyoto Protocol is not just a partial measure, but has become very outdated, and indeed has not even become fully operational.

It has become very urgent to secure a new strategic agreement with the European Union in the course of 2007. Looking ahead to the coming decades, such an agreement could become the main document in which we could define a model for our future relationship with a global coalition of Western countries, and not just in the field of energy supplies. Particular attention will have to be paid to the way it is drafted and to ensuring that it strikes the right balance; also that it carries forward the formulation of a system to define 'unified economic and political spaces' with the European Union which can be used to work out integrated technologies in the post-Soviet space, as a prelude to a future Eurasian Union.

Another task for the coming years should be an effort to give greater definition and institutional capacities to what is at present no more than a potential grouping of Brazil, Russia, India and China. The establishment of practical cooperation and integration between four such future world leaders would do a great deal to bring about an enhanced degree of joint influence which these countries could exercise on the political and economic situation worldwide. One can also envisage that other countries which are in the forefront of development might wish to align themselves with them. Russia's status as a permanent member of the UN Security Council and of the G8 could facilitate efforts to enhance the standing of Brazil and India in the UN; and at the same time it could exercise a moderating role in the dialogue between the economic leaders of the old western countries in the G8 and the new economic leaders of the BRIC, thereby enabling it to exert more influence internationally.

Russia's main task within the G8 will be to maintain a dialogue in the medium term with the Western 'coalition' while seeking to reduce the 'unipolar' domination of the United States, even within the framework of the coalition and its global strategy.

Overall, Russia should strive to develop and strengthen a pluralistic strategy by means of its presence within international organisations devoted to cooperation and dialogue with great variation in their principles, strategies, geographical reach and memberships. In addition to the G8, this would take in BRIC, with its potential for more institutional development, and for example the 'Natural Gas OPEC', the Shanghai Cooperation Organisation, the Asian-Pacific Forum for economic cooperation, the partnership with the EU, and integration projects within the post-Soviet space, from the Commonwealth of Independent States to the Eurasian economic space and the Collective Security Treaty Organisation.

Such a strategy could in present day circumstances provide a multiplying effect on our global influence, whose mechanism derives from 'participatory resources' in international cooperative projects which Russia possesses, and which could be further expanded if the state finds the capacities to promote interaction between projects of this kind and can act as a more effective integrator than other countries.

While tackling global tasks in the international context, Russia should also put into effect a number of programmes for the strategic development of social and economic projects in our country.

When we review the place and role of Russia in the area of energy supplies worldwide we can find a productive escape from the dead end into which our government's financial policies have driven us. A refusal to increase the export of strategic resources, in favour of highly processed goods and technology exports would remove from the future agenda the problem of 'sterilising' the income from unconventional oil and gas income and take it out of the real economy of the country. By removing the noose of constraint as a raw materials appendage to the world economy Russia can free itself from the current ideology of the Stabilisation Fund, or whatever name is given to it, which up to now has existed only as a fund to suppress development.

Once we can get away from dependence on raw materials exports and reorientate our production towards the manufacture and export of energy products, we shall benefit from a boost for our national industry and efforts to secure progress in scientific and technological areas. This in turn will lead to their absorption of energy income without the problems created by the previous policy. Global competition for leadership in the energy field and the search for solutions to global problems generally will promote the exploitation of 'beneficial' oil income to satisfy the needs of social development and to enhance our national security.

In regard to our accumulation of 'dead reserves', their return to life as active sources of funding to the benefit of the Russian economy will require their transfer from the present State Fund for Russian Development to a Fund for Future Generations. Here we should employ the approach widely used elsewhere in the world of setting up not one fund, but two, of which one serves as a cushion to soften the impact of any financial crisis while the other is employed directly for purposes of development. It is

important to grasp that establishing a Development Fund and a Fund for Future Generations does not mean that we should once again put the money on deposit to earn a percentage income, as we did, and wasted, with the Stabilisation Fund. Rather, we should devote the income here and now to developing the country and its economy, and to resolving the demographic, infrastructural and other problems which Russia currently faces.

If the 'accumulating' Stabilisation Fund remains under the Government's control, the establishment of its priorities and general direction should be transferred either to a special Council reporting to the President of Russia or to the Council, already in existence, which is responsible for putting into effect urgent national projects and demographic policies. After providing for a corresponding broadening of the system for establishing national projects, it should turn its attention first and foremost to programmes for diversification and innovative approaches to the development of the national economy, with the emphasis on the word economy!

What this means is that a very substantial share of current oil revenues should be earmarked for use in state projects in infrastructure, social welfare and modernisation. This is directed primarily at 'super-industrialisation' and participation in the new scientific and technological restructuring of the economy. This entails the revival of science, the establishment of a powerful innovative productive sector and a system for the use of applied science in priority areas. Also advance financing of the social sectors which require reform, the development of national infrastructure, a long-term programme to 'save the people' and the demographic reestablishment and growth of the country.

Taking into account the need to move away from an economy dependent on the export of raw materials, and the need to re-orientate the productive funds of the energy sector, there is now an urgent need to decide on the principles for determining how to develop our transport infrastructure. Our system for transporting energy products should not be directed only, or to such an extent, to deliveries to the West and the Asian-Pacific Region of liquefied natural gas and oil, but rather to the future export of energy products. Specialised raw material transportation is essential for the internal energy transport system, to bring together the new processing manufacturing facilities within Russia and Russian mineral deposits. It should be stressed once again that increasingly in the new century global processes will be defined by the ecological and biological pressures on the human population, by the lack of new land for cultivation and the limits on the use of existing land. Also by demographic limits, and growing competition for fertile soil and clean water. For objective reasons our country will inevitably find itself at the centre of these struggles. Struggles which will become increasingly desperate as demographic pressures become more dangerous, because Russia will be losing population while the populations of our near and more remote neighbours continue to expand.

If we are to safeguard our international position and our natural and ecological resources and our control over them, it will be necessary in part to direct them to integrated projects and use them as a basis for a system of regional and global alliances which Russia can control and dominate. For this reason the energy strategies we put into effect today will be no less significant than systematic initiatives like plans to direct part of the water resources from Siberian rivers to the south, into Central Asia.

At the same time, in view of Russia's possession of the world's most extensive land resources and reserves of productive arable land, our national development will depend in the full meaning of the word on our ability to make correct use of this 'golden land fund'. The role of agriculture and its expansion across our national territory, and comprehensive improvement of life in the countryside will be vital elements in the strategic development of Russia in the twenty-first century.

Here, Russia has to take account of two key problems and seek to resolve them. First, we must to everything possible, using whatever resources we possess, to bring about the restructuring of our agriculture on the land, the agrarian sector of the wider economy, and to bring in investment from businesses and private resources. What this means is that we must create efficient agricultural management, effective ownership structures and return land to be run by its owners.

This also means tackling the truly fundamental sociological issue: how to get people to return to the countryside. It will entail finding means to recolonise the Russian land to the right level and preventing excessive urban development. It also means that people who live in the countryside should be able to count on ample resources for satisfying their aspirations there. What I mean by this is, and I repeat, that they will need resources not just for productive purposes but in any other areas which are important to them. What one might call de-urbanisation, the levelling out of discrepancies between life in the country and in the towns, the modernisation of infrastructure in the countryside, and the construction of new settlements and small townships will do more than anything else to secure demographic growth, to increase the birth-rate and ensure greater longevity for the population as a whole.

Thus the national project 'Agriculture' must be broadened out and supplemented by a full-blooded programme to bring the Russian village to life. Other requirements will be the construction of modern living accommodation in the countryside, the expansion of road networks, new gas supplies, fundamental improvement in education and public health facilities, and new trade and cultural opportunities. In today's information-based society the provision of new facilities in that area will also be vital for agricultural communities. Information and electronic communications will the key to removing many of the problems and inconveniences of life in the country and make a country life-style more attractive not just to young people but to townspeople as well.

Speaking, as today we must, of fostering our human resources as our most important national priority, we need to emphasise in particular that Russia simply cannot allow our society to waste away by burying our young people and those most capable of productive work. Each year Russia loses up to 40,000 people in road accidents. A further 50,000 lives, at the least, are lost as a direct result of alcohol poisoning, while the estimate must be increased several times if we also take into account losses from alcohol-related illnesses. Up to 100,000 more lives are sacrificed to drug-taking and its consequences. What this means is that in the course of the next five years Russia may lose up to a million of its citizens to this social madness. It must be obvious that the authorities must make it an absolute priority, and use whatever severe and well-targeted programmes are necessary, to bring down these losses and find ways of assessing the effectiveness of the measures they take.

Another priority for Russia must be to devise comprehensive programmes to bring about the return of people who represent the intellectual, scientific, and post-industrial potential of our nation. The 'brain drain' has many downsides, but there are also potential benefits. One is that such individuals have not only continued to work in the sciences over the past few years, but have also made great progress in their research and in professions integrated into global science and its economic applications; they also, as a consequence, understand the norms, trends and requirements of global development. This invaluable experience is something which our country truly needs, so as to bring about the reform of our education system, our sciences, the modernisation of our economy, and the overall management of the state.

Our goal of bringing home Russian specialist researchers will only be achieved if the state can bring about an *innovative economy with a full*scale programme of front-line and innovative research in applied sciences, together with the means to incorporate their results into the management of the economy as a whole and into productive processes.

In this context it has to be conceded that Russian science, for all the enormous experience it has accumulated, is not at present, to put it mildly, in the best possible state. Russian expenditure on basic scientific and applied research constitutes about 1 per cent of gross national product, compared to a range in Germany, the United States and Japan of 2.6 per cent to 2.8 per cent. Even the widely advertised allocation of 4.8 billion dollars to the Federal scientific and technological development programme does not bear comparison with expenditures abroad: General Motors announced in 2006 that it planned to allocate 15 billion dollars over the next five years to new technological research.

It is all too apparent that Russian science needs significantly greater funding, and that providing this is a matter for the state. So it is for the state to make specific proposals to the scientific community for innovative research and then to provide adequate resources for the most promising fields for investigation and implementation. If this can be accompanied by venture capital, technology parks, free economic zones and business involvement, we should be able to make a qualitative leap forward in developing our own scientific and technological complex with a number of new priorities to pursue.

Amongst such priority areas we should include in the first instance new technologies to exploit the energy potential of un-renewable natural resources. Russia can lay claim to the status of an 'energy superpower' only if it can tackle long term tasks designed to raise the ecological and industrial efficiency of traditional extraction and processing methods for useful minerals. This may also entail the processing of non-traditional minerals which at present cannot be used for energy generation, the 'dirty oil and gas resources'. Technologies for the production of energy from biological and organic sources will also be needed. Nuclear energy must also remain one of our main priorities within our state energy policy, all the more so in that Russia has strategic competitive advantages: a resource base and very substantial experience in exploiting it.

The 1970s saw the energy revolution and nothing will insure Russia against a repeat of it, the more so since almost all the leading world economies are interested in it. For this reason it is important that Russia should take a leading role in this scientific and innovative process, ensuring that the technological changes work to our own advantage.

The second key area for scientific progress is biotechnology. It is generally agreed that the twenty-first century will see the *triumph* of biology over physics. The application of biotechnology will not just raise the competitive capacities of the Russian economy, but also help to resolve a whole range of social problems.

To take one example, we shall not succeed in overcoming demographic problems without drastic improvements in public health, in life expectancy and the quality of life for Russian citizens. We need to understand that the development of indigenous biotechnologies based on the Russian health industry is the most important direction that the structural reshaping of the Russian economy can take, in accordance with the demands of the twenty-first century and the tasks needed by the post-industrial world. Also vital are the application of biotechnologies, and ecological technology in the management of Russian agriculture. This should make it possible to establish a cadre of new farmers and improve our food security, while increasing our potential for the export of ecologically pure foodstuffs.

One further obvious priority must be space-related technologies, using the competitive advantage we have retained in the fundamental science involved, so as to continue our extraterrestrial explorations.

It is apparent that our country's defence capabilities will greatly depend on the intensive development of advanced technology with dual applications in space-related projects, taking into account the expanding scope of the American anti-missile defence system and the active space programmes of China and India. It also makes sense to devote attention to the development of cosmic energy sources, the extraction of useful minerals and the use of a range of manufactures in space exploration. Such projects may look at present like science fiction, but they will be commonplace by the middle of the century.

.

In expressing my thanks to those of you who have read to the end of this book I would like to add the following: some of you, dear readers, will share my views, and others will be critical; but I am glad to have both opponents and comrades-in-arms, since I consider it important to launch a serious discussion on the issues I have outlined, and then to act accordingly.

A Doctrine for Russian development in a globalised world should, I believe, emerge from this process, and the degree to which government policy measures up to its aims and challenges should demonstrate how effective our system of state power and administration really is.

There have been two dates in Russian history in the twentieth century which more than any others mark the greatness and unity of our nation. The first is 9 May 1945, the day of the Great Victory at the end of the Second World War. The second is 12 April 1961, the day on which Gagarin's flight into space became a symbol of the triumphal progress of human civilisation. These represent our Russian national idea: the capacity and readiness to stand up for our freedom and independence, and to conquer new horizons in the development of our own country and of the whole of mankind.

We cannot yet know which landmarks and which dates will prove to be the most significant in the twenty-first century. In that sense the project 'Russia 2050' which I have discussed in this book can serve as only the most general guide.

But this does not alter the essence of the matter. Russia must become fully aware of the tasks it faces in the world of today and itself become those changes which it wishes to see. In doing so, it must find the strength to transform these changes into reality and find itself in the future of all mankind.

Y.M.L.

Notes

