

1. The Baku-Tbilisi-Ceyhan Pipeline: School of Modernity

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More Than Engineering

Amidst the backlash caused by the Jacobins' brutality during the French Revolution, a heretofore little noticed aristocrat, the Comte Henri de Saint-Simon (1760-1825), made a breathtakingly visionary announcement. Henceforth, he declared, it would be engineers, not politicians, who would change the world. His disciples quickly proved him right. One of them, the great engineer Ferdinand de Lessups, designed and built the Suez Canal, which brought far more change to the Middle East than Napoleon's vaunted expedition to Egypt and the Holy Land. Others transformed the world from the Americas to Asia.

Since Saint-Simon's time the image of the heroic engineer, conceiving and constructing giant power dams that bring electricity to impoverished regions, linking continents with bridges, and devising communications technologies that obliterate distance, has become a commonplace in virtually all cultures of the world.

The image is powerful, but very much in need of revision as a new millennium dawns. The completion of the pipeline linking the Caspian and Mediterranean provides the perfect opportunity to update it. Not that the Baku-Tbilisi-Ceyhan (BTC) Pipeline is anything less than a grand achievement of engineering. Extending for 1,760 kilometers across extremely rugged terrain, it traverses wildly divergent climatic and geological zones, many of them notable for their seismic instability. Techniques and chemical coatings that worked perfectly in one region had to be modified to suit others. Pumping stations have to lift the oil hundreds of meters and then control its descent once more to sea level. Yet most of these bold processes had been devised and mastered elsewhere. Even the vast scale of this three billion dollar project has precedents on several continents.

What sets the BTC pipeline apart is not its technology, impressive though it is, but two sets of relationships that endured from the germination of the idea to its final

completion. First, one must speak of the close correspondence that existed at all stages of the pipeline's development between the politicians, businessmen, and economists who defined the project's ends and the engineers and builders who devised the means by which those ends could be achieved. Second, and no less important, one must stress the intimate working relationship that was established between the international experts in business and technology and the three countries traversed by the pipeline and the myriad communities and millions of citizens affected by it. These relationships turned an ambitious undertaking in the hermetic worlds of business, politics and engineering into an innovative initiative in the sphere of economic, social, and civic development.

Getting to the Starting Line: BTC and Public Policy

The BTC pipeline is a child of urgent public policy imperatives, all of which were expressed initially in the subjunctive, that is, in terms of "ifs." Thus, *if* a pipeline could be built that could transport Caspian energy resources to the West it would create a critical new source of supply to vast regions that are ever more hungry for oil. Even though the total reserves of the Caspian basin pale by comparison with those of the Persian Gulf region, they are hugely important. North Sea oil gave a timely boost to the economies of northern Europe just as demand was soaring and production lagged elsewhere. Caspian oil held promise of doing the same.

Further, it was understood that *if* such a pipeline could be constructed, it would provide the newly independent states of the Caucasus and Central Asia a degree of control over the export of their most valuable commodity that they would not otherwise have. The alternative was to leave this vital export in the sole hands of the successor to the USSR, the Russian Republic, and its state-controlled monopoly, Transneft. In the post-imperial era, when many Russian politicians still dreamed of reviving their country's dominion in the Caspian basin, this would be an invitation to mischief. It would place the fragile new sovereignties under constant threat, and divert their energies from building viable independent states and free societies to non-productive geopolitical concerns.

Finally, *if* such a pipeline could run clear to the Mediterranean, it would avert what was almost universally agreed was a looming ecological disaster posed by the burgeoning transit of huge tankers through the narrow and winding Bosphorus, the very heart of Istanbul.

These three "ifs" were not merely rhetorical. When the BTC was conceived, the burden of proof lay firmly on the side of anyone proposing that such a pipeline could be built. Experts in many countries garnered seemingly conclusive evidence that the cost of the project would be prohibitive, which would in turn raise the cost

of oil passing through it to exorbitant levels. Russian politicians in the Yeltsin era vehemently denounced the notion of a direct east-west pipeline independent of their control as an unwarranted curtailment of their natural rights in the South Caucasus. And some ecologists argued that the dangers arising from a large-diameter pipeline passing through the geologically unstable zones of eastern Anatolia would surpass even the threat of a tanker wreck in the Bosphorus. Others, concerned with global warming, argued that the world should be curtailing the burning of hydrocarbons, not increasing it.

These concerns created a climate of profound doubt about the entire enterprise among many in both Europe and America. Then, to complicate things still further, the government of the United States, which had been approached to extend large credits to help finance the pipeline, announced that it would not support the project until it was proven that it could be built and managed in a way that made good business sense. Never mind the mounting pressure on world oil supplies, ecological dangers in the Bosphorus, or concerns over the new sovereignties of some of the potential beneficiary states – Azerbaijan, Georgia, Kazakhstan, and Turkmenistan. None of these could be addressed with a new pipeline unless the venture would be profitable.

There was great wisdom in this decision, but in the short run it complicated the project. Skeptics regrouped to warn that huge overruns of construction costs would be inevitable, and that even if construction was miraculously completed within budget, there would not be enough oil to keep the big tube filled.

Thanks to these concerns, widely aired in the media, the project became a favorite target for scoffers. Critics in all the sponsoring countries attacked their leaders for wasting taxpayers' money to finance it, and within the region for not driving a hard enough bargain. Shareholders of BP and other participating firms denounced their companies' officers for being obsessed with unrealistic and naïve "pipeline dreams." As governments changed in Azerbaijan, Georgia, and Turkey, and also in Great Britain, the United States, and Norway, the pipeline could be dismissed as an ill-advised enthusiasm of the outgoing leaders. In Azerbaijan some oppositionists saw it as President Heydar Aliyev's irrational infatuation, and in Georgia it was dismissed as the pet project of former President Shevardnadze. Little by little the project was reduced to the status of an abstraction, a symbol of dubious decision-making.

During August 2000, in an effort to refocus world attention on the reality of the proposed pipeline, a group of twenty-four Americans, Azerbaijanis, British, Georgians, Swedes, and Turks under the leadership of the intrepid American journalist-writer Thomas Goltz, traveled the entire route in order to deliver the

first oil from the Caspian to the Mediterranean port of Ceyhan – by motorcycle. As they bounced along dirt roads through three countries and traversed many more linguistic and cultural zones, they captured the drama that is the essence of all great undertakings. Televised interviews with citizens of the remote towns and villages they visited revealed something that the skeptics failed to include in their dyspeptic view of the project: that those most directly affected by Baku-Tbilisi-Ceyhan welcomed it and prayed that it would be a success, not only for its sponsors but for the people of the entire region.

After several years of careful research, the international team of engineers and economists working under the consortium “BTC Pipeline Company” determined that the project could be accomplished in a manner consistent with sound business principles and with minimal environmental risk. As to Russia’s concerns, all the governments involved insisted that they relied upon and welcomed the continued export of Caspian oil through Russia. They also pointed out to Moscow that Russia’s own project for a pipeline from the Caspian across southern Russia to the Black Sea port of Novorossiisk was being built with the participation of western firms, notably Exxon (later ExxonMobil). In short, the BTC pipeline was not against anyone. And it was discovered that there would be enough oil for both it and Russia’s project to thrive.

Such were the kinds of concerns that had to be addressed before work on the BTC pipeline could commence. At no point was the project advanced as a heroic engineering scheme a la Saint-Simon, needing no defense beyond the assertion of its visionary character. The engineers (and also the economists) were less drivers than facilitators. In the end, BTC was launched because it made good sense from the perspective of public policy in all the participating countries. Had it been otherwise, it would never have gained the strong support from all sides of the political spectrum that it achieved in both Europe and America.

“It’s About More Than Oil.”

It goes without saying that the Baku-Tbilisi-Ceyhan pipeline is, and should be, “all about oil,” as critics charge. But it is, equally, about economic, social, and civic development, not only within the individual participating countries but among them, and also between this western-most zone of Asia and the Euro-Atlantic world. This important dimension of the project was not implanted from the top down. Rather, it arose from the close working relationships that arose between the international experts in business and technology and thousands of key men and women in the three countries traversed by the pipeline. This in turn shaped the project’s relation to the myriad communities and millions of citizens affected by it.

Together, these relationships broadened the project's focus far beyond the delivery of oil to include the entire sphere of economic, social, and civic development.

Development issues have loomed far larger in the BTC project than in most other such undertakings. Their centrality has meant that the *process* of designing, constructing and managing the pipeline has been no less important to the pipeline's success than the mere putting in place of the steel tube. The heart of this process has been an intensive process of consultation that has already run to several thousand meetings. Virtually anyone affected by the work has been given an opportunity to register his or her concerns. Anyone confused about how and where to do so could consult the *Citizens Guide* that BP issued and disseminated widely. An international board of experts, the "Caspian Development Advisory Panel" introduced further dimensions into the wide-ranging discussion.

In Turkey alone the project affected some three hundred villages, nearly all in the relatively backward eastern and south-central zones of Anatolia. There, as well as in Georgia and Azerbaijan, communities were not sufficiently organized to interact effectively with a large international enterprise. Therefore, the Consortium mounted a "Community Investment Program" that included assistance to villages in organizing themselves to take advantage of jobs and opportunities in everything from provisioning to sanitation.

In recent years the word "sustainable" has become a mantra of international development banks, national development agencies, and NGOs. In the process, it has lost much of its meaning. However, the need for the BTC project to meet the austere demands of the free market has imposed practical pressures on every aspect of the associated development efforts that might otherwise have been absent. Thanks to these, the changes fostered by BTC show every sign of becoming permanent. Such changes can be grouped under the following nine headings. Each pertains directly to the overall processes of development and regional integration in the South Caucasus and the broader region of which it is a part.

Nine Degrees of Development

First, BTC has pioneered in the field of risk assessment, setting a high standard for all subsequent business ventures in the region. This began with the selection of the route and extended down to every detail of the planning. Against the background of crude engineering practices during the Soviet era, this stress on calculating and managing both physical and human risk is nothing short of a revolution.

Second, BTC would never have succeeded without the development and systematic application of uniform standards of law across all three jurisdictions, i.e.,

Azerbaijan, Georgia, and Turkey. Since these standards extend from engineering principles to issues of environment, health, and safety, they, too, add up to a transforming force in all the three societies.

Third, without local support the project could not succeed. This meant above all respecting the legal and human rights of affected populations. This was all the more important because the majority of firms participating in the project were from abroad. Hence, the consortium had to conduct itself like Caesar's wife and be above reproach. Aside from the fact that this was consistent with the values of most responsible international firms today, it set a new standard in Azerbaijan and Georgia that local firms will henceforth be expected to live up to. Some issues, like land acquisition and pipeline security, were especially sensitive. Because these matters were largely settled through negotiation rather than litigation, the process educated thousands of people on how to interact effectively and fairly with large enterprises in a market economy.

Fourth, every phase of the planning and construction required the help of thousands, and at times tens of thousands, of Azerbaijanis, Georgians, and Turks. Most needed to be trained. Thanks to this, the project became a major purveyor of skills both in technical and civil areas, an educational institution whose benefits will outlive the construction of BTC and possibly BTC itself. Specialists in the development field refer to this process as "capacity building" and see it as essential to economic modernization. Ordinary folks think of it as the key to feeding their families.

Fifth, the many disputes that were bound to arise in the course of so complex a project forced the pipeline consortium into the field of conflict resolution. When necessary, it resorted to courts of law, proceeding in accordance with local practice in each country. In far more instances than were documented, differences were resolved through the customary methods with which all local inhabitants were intimately familiar. More common, however, was the use of informal grievance procedures to settle disputes. These did not preempt citizens' right to sue in a court of law, but the fact that few chose to do so attests to the effectiveness of these innovative methods for resolving conflicts. Considering that in Turkey alone there were 62,000 landowners with whom agreements on land costs and the value of lost crops had to be reached, this is no mean achievement.

Sixth, all of this was conducted under conditions of transparency that were new not only to economic life in the former Soviet states but also in many parts of the more traditional areas of Turkey. Fortunately, the provisions of the British-sponsored "Extractive Industries Transparency Initiative" were readily at hand and could be adopted as a standard. Since these were clearly set forth in the *Citizens*

Guide and other publicly available documents issued by the consortium, individuals in the three countries could invoke principles of transparency against the consortium if they deemed it necessary. Here, again, the BTC project acted as a civic educator, raising expectations and opening effective paths of action at the local and regional level that were scarcely been available to ordinary citizens before BTC. These will outlive the construction process and will doubtless be invoked as local publics seek to address the heritage of corruption that infuses much of the region.

Seventh, the BTC project opened vast new territory to the activities of non-governmental organizations in all three countries, legitimizing and greatly strengthening them in the process. The NGOs, of course, might argue that it was shortcomings in the work of the BTC Pipeline Company and its chief participating firms that forced them to take action, and that without resolute intervention by the NGOs, the project would have done more harm than good. Polemics aside, it is to the credit of BP and SOCAR (the State Oil Company of the Azerbaijan Republic) that they recognized the value of cooperating with the more responsible NGOs.

Thus, a project in Georgia funded by the Eurasia Foundation and a region-wide initiative mounted by George Soros' Open Society Institute both interacted regularly with pipeline Company officials at national and local levels. Together, they addressed matters as varied as public disclosure, human rights, preservation of archaeological sites, and local-sourcing policies in the areas of employment and procurement. And when Amnesty International in 2004 identified what it claimed was a long series of abuses committed by the pipeline's builders and their friends in government, the Pipeline Company responded not by dwelling on instances of careless research by the NGO but by entering into extensive consultation with it. The consortium's readiness to take this step strengthened the NGOs' legitimacy as a force independent of both government and business, and also encouraged responsible and constructive behavior on the part of the NGOs themselves.

Eighth, the entire process of planning and executing the pipeline project fostered levels of regional interaction and cooperation that would earlier have been inconceivable. Not only did Azerbaijan, Georgia, and Turkey have to collaborate with one another, but they had to do so as equals and not as senior and junior partners. Considering that Turkey is nearly ten times the size of its eastern neighbors and wields many times their economic might, this is an impressive achievement. In the process, each party understood that the whole of their joint endeavor was far greater than the sum of their individual contributions, and that that regional whole had to be protected at all cost. To be sure, each country vied for

advantage in the project but in the end they all opted to work for the regional benefit.

The stimulus to regional thinking will not end with the completion of the pipeline from Baku to Ceyhan. Kazakhstan has already signed an agreement to send some of its new oil westward through BTC and is building tankers to link its oilfields with Baku. Discussions regarding a possible trans-Caspian pipeline promise to extend eastward the regional cooperation generated by BTC.

Ninth, the BTC project has been, along with NATO's Partnership for Peace, the single greatest promoter of interaction between the South Caucasus and Europe. As David Blatchford shows in his essay in this volume, the BTC project chose to apply European Union standards (notably EU environmental directives) in several key areas affecting national law in the three participating states. In this process, Turkey already assumes the role of Europe's eastern outpost, as it does more systematically within NATO. This is an important part of a much larger process by which the Black Sea littoral states are being drawn closer to Europe. As it develops, this process will expand from an initial focus on security and oil transport to social and economic policies more broadly. Thus, BTC is playing a vitally important role in drawing the new Caspian states out of the generations-long isolation to which they were condemned by the Soviet Union.

Unanswered Questions

The formal commissioning of the Baku-Tbilisi-Ceyhan pipeline on 25 May 2005 in Baku marks the culmination of a work begun with the collapse of the USSR in 1991. Its completion caps a process that extended international cooperation and integration into many areas from which they had earlier been barred. This has been accomplished over a decade and a half, during which every participating country saw a change of administrations. There is much that divides prime ministers Özal and Erdogan in Turkey, Major and Blair in Great Britain, and Brundtland, Suipe, Jagland, and Bondevik in Norway, or that separates presidents Shevardnadze and Saakashvili in Georgia, Heydar Aliyev and Ilham Aliyev in Azerbaijan, and Clinton and Bush in the United States. But with respect to the BTC project, they all spoke with one voice. Surely, this demonstrates that on this important issue democratic states have proven themselves capable of taking a long-term and strategic view, notwithstanding the ebbs and flows of politics.

Yet it is too early to declare that the Baku-Tbilisi-Ceyhan project is an unqualified success. Many of the most important consequences of the pipeline's construction will become apparent only as the oil begins to flow and the revenues from its sale

reach the participating countries. Among these, several will warrant particular attention.

To what extent will Azerbaijan and Georgia avoid what Vladimir Papava in this volume terms the “paradox of plenty,” in other words, the unequal distribution of revenues among the population? Azerbaijan’s Oil Fund, which is modeled closely on Norway’s successful prototype, holds much promise. Yet it remains to be seen whether average Azerbaijanis will feel that it serves the country as a whole and all its citizens.

Similarly, will these two countries be able to escape the problem of governmentalism which has plagued many countries enriched by revenues from state-based oil sales or transport fees? And will they succeed in immunizing themselves against the so-called “Dutch disease,” which arises when oil revenues drive up the cost of inputs to the non-oil economy without the possibility of offsetting those costs through higher prices on outputs?

No less important are the international dimensions of revenues deriving from the BTC pipeline. Armenia still occupies a fifth of Azerbaijan’s territory as a consequence of the disastrous war over Nagorno-Karabakh. Oil revenues flowing to the government in Baku will decisively shift the balance of power between the two countries in Azerbaijan’s favor. Will Azerbaijan succeed in using this new reality in such a way as to resolve peacefully the Karabakh problem, or will the shift instead drive the two parties into a renewal of armed conflict? The challenge will be to convince Armenia of the benefits that could accrue from participating in a regional economy, and to demonstrate that these outweigh any conceivable gains that might come from prolonging the conflict in Karabakh.

Finally, what lessons will Azerbaijan’s and Georgia’s neighbors draw from the successful opening of the BTC pipeline? Will Russia conclude that its interests are best served by respecting the sovereignty and independence of its southern neighbors, rather than continuing its decade-long covert and overt pressures against them? Will Iran abandon its religious and cultural propaganda against Azerbaijan, and concede that a prosperous neighbor across the Araxes River poses no threat to Teheran, even if that neighbor maintains cordial relations with the West? And, finally, will energy-rich Turkmenistan, under sustained pressure from Russia’s state monopolies, Transneft and Gazprom, which still control its energy exports, resolve its differences with Azerbaijan and begin exporting through the BTC route?

The answers to these questions are far from clear today. What is certain, though, is that positive outcomes will be achieved only through the same kind of coordinated and sustained effort that brought the BTC pipeline to a successful conclusion.

There are solid grounds for optimism. The opening of the Baku-Tbilisi-Ceyhan pipeline eloquently refutes the smug assertions of skeptics and doomsayers in many countries. It is a monument to what can be achieved through the exercise of persistence and tenacity on a national and international level. If those same qualities can be mobilized to address the profound changes that BTC will soon wreak in the South Caucasus, there is every reason to believe that the resulting transformations will be positive.