The development of relations among the former Soviet republics has not received sufficient attention during the post-Soviet period. It stands to reason that, as the Soviet Union’s successor, Russia’s relations with each of the former Soviet republics deserve special analysis.

This article analyzes the experience Georgia and Russia have accumulated in their economic relations. It focuses in particular on the evolution of Russian-Georgian economic ties in the context of the gradual aggravation of relations in general between Moscow and Tbilisi and delineates the trend toward drawing Georgia into Russia’s Liberal Empire network. The author draws attention to the fact that in spite of this flare-up in Russian-Georgian relations, trade and economic contacts between Russia and Georgia have never been interrupted. The experience gained at the talks between Russia and Georgia on the former’s accession to the WTO and the positive outcome of these talks give every reason to hope that Moscow and Tbilisi can eventually find and launch real mechanisms to resolve the accrued problems.

**Introduction**

The development of relations among the former Soviet republics has not received sufficient attention during the post-Soviet period. It stands to reason that, as the Soviet Union’s successor, Russia’s relations with each of the former Soviet republics deserve special analysis.
Before the Russian-Georgian war of August 2008,\(^1\) study of the relations among these countries was more spontaneous than systematic. And, unfortunately, post-Soviet economic relations among them have received even less attention,\(^2\) although after the war the first joint publications on this topic appeared on the initiative of international organizations.\(^3\)

Unfortunately, after the collapse of the Soviet Union, political relations between Georgia and Russia have mainly been characterized by the term “conflict.” At the present time, this conflict is far from being resolved. Despite the fact that diplomatic relations between the two countries have broken down in the post-war period, economic relations continue unabated. This situation, where there are no official interstate relations between Russia and Georgia while economic relations seem to be developing under their own steam, requires in-depth study.

The aim of this article is to identify the main problems that have recently been hindering and continue to prevent the normal development of economic relations between Russia and Georgia.

“Economic Divorce”

Within the framework of the Soviet Union, economic relations between Georgia and Russia were akin to interregional relations within the single national economic complex of the command economy. It is important to note that due to its relatively small size, Georgia was included in the Transcaucasian economic district in the Soviet economic zoning system, as were other relative small Soviet republics of the Caucasus (Azerbaijan and Armenia).\(^4\)

The disintegration of the Soviet Union also meant the collapse of the command economy, which naturally led to a gradual breakdown in the customary industrial communications among individual enterprises of what is now the post-Soviet expanse. This trend occurred at an accelerated rate in Georgia. In particular, at the beginning of the 1990s, Georgia’s first post-Soviet leadership declared an economic blockade on Russia, which was accomplished by closing the railway junction in the town of Samtredia. This resulted in the industrial communications between Georgian and Russian enterprises (and not only between them) being broken earlier and faster than in other post-Soviet republics, whereby it was Georgia that suffered economically from this.\(^5\) So it was the erroneous steps taken by the Georgian leadership that caused the first economic damage to Georgian-Russian relations. However, it is important to emphasize that Russia nevertheless continued to be Georgia’s top trade partner.

While remaining in the ruble zone, in the fall of 1992, Georgia (like other former Soviet republics) was unable to receive Soviet ruble banknotes (Russian rubles were not introduced to replace Soviet rubles until the summer of 1993),\(^6\) which was Russia’s reaction to the central banks of some former Soviet republics (including Georgia) transferring nonexistent money to Russia, that is, remittances unbacked by corresponding funds. This also accelerated Georgia’s introduction of coupons of the National Bank.\(^7\)

---


\(^2\) An exception is the following article: I.M. Ivanov, “Ekonomicheskie otnosheniia Rossii i Gruzii,” in: Gruzitsia: problemy i perspektivy razvitiia, ed. by E.M. Kozhokin, Vol. 1, Russian Institute of Strategic Studies, Moscow, 2001.


\(^7\) See: Ibid., p. 166.
Almost immediately after the collapse of the Soviet Union, the Commonwealth of Independent States (CIS) was established, to which all the former Soviet republics, apart from the Baltic states, belonged. Georgia joined the CIS later, at the end of 1993, after the Georgian armed forces had to leave Abkhazia in the struggle over the country’s territorial integrity which produced a multi-thousand wave of internally displaced persons (IDPs). In the hope of regulating relations with Russia, the Georgian leadership decided to join the CIS in order to find favor with Moscow, which from the very beginning supported the separatist movements not only in Georgia, but also in other former Soviet republics.8

Despite the fact that numerous important agreements promoting the establishment of economic contacts among its members were adopted within the framework of the CIS, according to popular opinion, the Commonwealth encountered integration difficulties from the very beginning due to the striving to create integration systems on a market basis inherent in the production cooperation characterized by the relatively closed Soviet economic system.9

The mid-1990s is characterized by the fact that both countries, Georgia and Russia, were embroiled in their own problems of making the transition to a market economy, while interstate economic relations were established on the basis of the economic interest of specific economic entities in these countries.

Russia’s currency and financial crisis of August 1998 had a particularly negative effect on the Georgian economy. It also had a negative influence on the stability of the exchange rate of Georgia’s national currency, the Lari, and on its economy as a whole.10 As a result, Turkey was the only country to take precedence over Russia (and not for long) in Georgia’s external trade. This continued until 2006, that is, until Russia closed its market to Georgian wines and mineral water, as well as to all Georgian agricultural products.

Special attention should be paid in Russian-Georgian relations to the Georgian parliament’s compulsory ratification of the agreement on the so-called zero option, according to which Georgia was to relinquish the assets of the former Soviet Union in exchange for restructuring its debt to Russia in keeping with a scheme proposed by the International Monetary Fund and coordinated with the Paris Club.11 Although the initialed text of this agreement said that it did not apply to the diamond fund and accounts in the former Vneshekonombank of the Soviet Union, the official text signed in 1993 no longer featured such a provision, which the Georgian side did not notice until after it was signed. Despite the numerous protests by the Georgian authorities, the Russian side refused to change anything in the signed text, and when Georgia needed to restructure its external debt to Russia, the latter demanded ratification of this agreement in the form in which it had been signed. Since restructuring the external debt was imperative, Georgia had no other alternative but to ratify the agreement on the zero option in the rendition that differed from the initialed text to the detriment of its national interests.

The transportation of Azerbaijani natural resources through Georgia has always held a special place in Russian-Georgian relations. In particular, Russia thought (and unfortunately still thinks) that implementation of this project poses a threat to its national security and contradicts its interests.12


a result, Russia was not only not interested in developing a transport corridor through Georgia and particularly in building pipelines through its territory, but also continued to use every possible way to prevent the implementation of these projects. Moreover, according to Russian experts, Russia is waging an energy war against several former Soviet republics, including Georgia and Azerbaijan.

The Danger of Becoming a Captive of the Liberal Empire

A particular place in Russian foreign policy is occupied by the idea of creating a Liberal Empire, according to which Russia can and should restore its economic influence throughout the post-Soviet expanse by means of economic expansion. In particular, according to the intent of its architects, the Liberal Empire should be created not by means of forced armed occupation of the former Soviet republics, but by gaining possession of the basic economic facilities (by acquiring and developing assets) located in their territories.

Armenia was the first Caucasian country to become part of the Liberal Empire fashioned by Russia. In particular, as early as the end of 2002, the Russian-Armenian agreement on Property in Exchange for Debt was executed, according to which Russia received enterprises from Armenia, the total cost of which proved enough to fully cover Armenia’s debt to Russia of $93 million. Later, Armenia’s economy essentially became totally incorporated into Russia’s Liberal Empire.

However, the fact that Georgia and Azerbaijan are located between Russia and Armenia creates a geographical obstacle to uniting the Armenian and Russian economies into a single economic space. In order to achieve this unification, the Georgian route is much more realistic than the Azerbaijani owing to the Armenian-Azerbaijani conflict. If Georgia is successfully incorporated into the Liberal Empire, it will easier to encompass Azerbaijan in this empire system since all of its main transport and communication arteries, including the strategic pipelines, pass through Georgia.

Georgia’s integration into the Liberal Empire began as early as 2003 when RAO UES bought shares and other assets of the Silk Road American Electrochemical Company which owned the Tbilisi power distributing network, thus enabling RAO UES to gain control over 75% of the country’s electricity network.

After the Rose Revolution in November 2003, Russian companies and their subsidiaries registered in third countries bought up most of the new facilities the Georgian government put up for sale


under insufficiently transparent privatization schemes.20 The Russian Industrial Investors Holding Company was one of those typical companies that managed to acquire the main gold mine and then half of a plant producing gold alloys.21

Gazprom, the gas monopoly controlled by the Russian state, also took active steps aimed at establishing control not only over Georgia’s gas industry, but also over the only gas pipeline via which Russian gas could be pumped both to Georgia and Armenia. Only U.S. interference in the talks between the Georgian government and Gazprom prevented the sale of the pipeline to the latter.22

In 2005, Vneshtorgbank bought the controlling set of shares in the privatized United Georgian Bank—the third largest bank in Georgia.23 This bank was subsequently nationalized by the Russian government. It should be noted that in 2004, state-owned Vneshtorgbank of Russia also acquired a controlling set of shares belonging to Armasberbank of Armenia.24

These examples show that Russia’s active efforts to incorporate Georgia into the Liberal Empire, which began even before the Rose Revolution, significantly intensified after the revolution,25 which the Georgian leadership openly promoted.26

In the context of the real steps Russia took to envelop the Caucasus (primarily Armenia and Georgia) in the network of the Liberal Empire, the opinion that Russia has entirely lost Georgia from the economic perspective27 (or that Georgia and Armenia are of minimum economic value for Russia)28 indicates the prevalence of the political component (compared with the economic) in Moscow’s actions in Georgia.

**Aggravation of Relations, or the Economy beyond Politics**

Supposedly due to the low quality of Georgian wines29 and mineral water30 (although Georgia understood this as the punishment Moscow was inflicting on it for its pro-Western orientation), in

---


2006, Russia’s chief sanitary inspector closed the Russian market to these commodities and to all Georgian agricultural products in general. This had a negative effect on the Georgian economy,\(^{31}\) on the one hand, while it significantly helped Georgian commodities to find access to other markets,\(^ {32}\) on the other. Russia’s blockade on Georgia added fuel to the fire when Moscow halted air, rail, sea, road, as well as postal communication with it.\(^ {33}\)

When Moscow decided to ban the import of Georgian agricultural products into Russia, the prohibition did not extend to Abkhazia.\(^ {34}\) Following in Russia’s footsteps, Abkhazia also banned Georgian wines and mineral water,\(^ {35}\) although Moscow’s decision regarding Abkhazian wines was essentially different to the one it made with respect to Georgian wines.\(^ {36}\)

The Russian-Georgian war made it extremely difficult to use Georgia as a transit corridor for transporting Azerbaijani energy resources. In particular, during this war, Russian aviation also bombed the pipelines passing through Georgian territory\(^ {39}\) that were far from South Ossetia, the protection of which was supposedly the reason for the beginning of the war. The war cast doubt on the security of the pipelines passing through Georgia.\(^ {40}\) There is reason to believe that one of the aims of the Russian aggression was to intensify doubts about the security of the pipelines passing through Georgia.\(^ {41}\) Fortunately, it did not take too much time to restore trust in the transportation of energy resources through Georgia.\(^ {42}\) Furthermore, the fact that Moscow was unable to establish control over these pipelines by military means,\(^ {43}\) that is, completely

---


monopolize the transportation routes of energy resources from the former Soviet Union in the westerly direction, prompted the Americans and Europeans to step up their efforts even more to find ways to develop oil and gas transportation routes as an alternative to Russian routes.44

The aggravation in relations between Georgia and Russia gave rise to the impression that there were no economic relations between these countries either. This of course is not true since Georgia “exports” manpower to Russia and Russia is one of Georgia’s main investors.

In light of the narrow range of external trade operations, trade between Georgia and Russia is extremely limited at present, although it has not been entirely halted. For example, according to the official statistics, the share of Georgian exports to Russia in Georgia’s total export volume dropped from 17.8% in 2005 (that is, one year before Russia declared its ban on the import of food products from Georgia) to 2.0% in 2008, while in 2010 and 2011 it amounted to 2.2% and 1.7%, respectively.45 The same trend is also seen in the drop in the share of Russian imports to Georgia: whereas in 2005 imports from Russia to Georgia amounted to 15.4%, in 2008, this index dropped to 6.7%, while in both 2010 and 2011 it was 5.5%.46 It should be emphasized that in 2010, Russia ranked fifth in Georgia’s external trade turnover (after Turkey, Azerbaijan, Ukraine, and Germany), while in 2011 it ranked sixth (after Turkey, Azerbaijan, Ukraine, China, and Germany).47

It is known that many Georgian citizens, as well as ethnic Georgians who have managed to obtain Russian citizenship, live in Russia,48 and some of their earnings are sent to their relatives living in Georgia. Russia’s introduction of a visa regime with respect to Georgia, as well as the ostracism in 2006 of ethnic Georgians living in Russia (including Russian citizens),49 in addition to the development of the banking system, promoted an increase in the use of banking channels for remittances, which largely replaced the well-established system in the post-Soviet expanse of sending money to relatives through acquaintances returning home.50 Even the Russian-Georgian war of August 2008 could not affect this trend. In particular, in 2005 (that is, one year prior to the ostracism of Georgians in Russia), a total of more than $403 million were sent to Georgia, including more than $240 million from Russia, which amounted to 59.6% of the total amount of all remittances. As early as 2008, the total amount rose 2.5-fold compared with 2005 and reached $1,002 million, while remittances from Russia increased 2.6-fold and amounted to almost $634 million, that is, 63.3% of the total amount of all remittances.51 In 2009, the global financial crisis caused remittances to Georgia (a total of $842 million) to drop to 84 percent of the amount transferred in 2008, while this amount was even less from Russia—only 71.0% ($450 million or 53.5% of the total volume of all remittances to Georgia),52 which is primarily explained by the particular severity of the economic crisis in Russia. Compared with 2009, remittances to Georgia in 2010 rose both on the whole (a total of $940 million) and from Russia (a total of $530 million), whereby the share of

49 The problem of labor immigration is one of the most urgent for Russia (see, for example: S.V. Antufiev, “Realii trudovoy immigratsii v sovremennoy Rossii,” Pravo i bezopasnost, No. 3 (16), August 2005, available at [http://dpr.ru/pravo/pravo_16_18.html]).
52 See: Ibidem.
remittances from Russia to Georgia also grew and amounted to 56.4%. Compared with 2010, in 2011 the given indicators amounted to more than $1,268 million for the country as a whole and more than $655 million from Russia, respectively, although the share of remittances from Russia to Georgia decreased and amounted to 51.7%.

The situation with Russian (and not only Russian) investments in the Georgian economy is much more complicated since statistical information is so incomplete that it does not allow justified conclusions to be drawn about the actual situation. This is primarily caused by the fact that many companies carrying out direct investments are registered in offshore zones, which makes it essentially impossible to trace where the money comes from. Furthermore, according to the official statistics, Russia ranked fifth in the volume of foreign direct investments into Georgia in 2010, and sixth in 2011.

The WTO: A Bone of Contention or Path to Rapprochement

Georgia acceded to the World Trade Organization (WTO) on 14 June, 2000. Russia has been trying to accede to the WTO since 1993 and the long talks did not end until 16 December, 2011. This was preceded by signing an agreement on 9 November, 2011 between Georgia and Russia on the latter’s accession to the WTO.

As a member of the WTO, Georgia was willing from the very beginning to give its consent to Russia’s accession to this organization providing it could open customs control check points on the Abkhazian and South Ossetian sections of the border with Russia. Tbilisi’s conditions were based on the fact that movement of commodities at the borders of the two neighboring countries should be executed on the basis of national customs legislation. It must be emphasized that at this time the Kremlin had still not recognized the state independence of Abkhazia and South Ossetia, so Moscow officially recognized the Abkhazian and South Ossetian sections of the border with Russia as part of the Russian-Georgian border.

The situation was complicated further by the five-day war between Russia and Georgia in August 2008 and Moscow’s unilateral recognition of the state independence of Abkhazia and South Ossetia immediately following it. Moscow regarded economic (and not only economic) relations between Russia, on the one side, and Abkhazia and South Ossetia, on the other, as interstate, regardless of Tbilisi’s reaction, as well as that of international organizations and most states of the world.

On the whole, the Georgian leadership has not changed its prewar position with respect to Russia’s accession to the WTO. Moscow interpreted Tbilisi’s conditions on this issue as exclusively political, although the Georgian side emphasized that its demands fully complied with the system of trade relations since these relations could only be executed by goods crossing the borders of the trading states.

53 See: “Workers’ Remittances by Major Partner Countries, Money Transfers by Countries.”
Abkhazia and South Ossetia were displeased with the agreement reached in Geneva. The thing was that it envisaged the appointment of international observers to monitor the goods crossing the border with Russia, which Abkhazia and South Ossetia perceived as an infringement on their sovereignty.58 According to Moscow’s official position, on the other hand, the indicated agreement between Georgia and Russia does not infringe on the independence of Abkhazia and South Ossetia.

Although the accession process to the WTO usually takes six years, it has taken Russia three times as long, largely owing to the inconsistent steps by the country’s leadership with respect to this accession.60 This was most likely also promoted by the economic skepticism regarding Russia’s accession to the WTO. It was based on approximate calculations, according to which the most Russian companies could gain from accession to the WTO was estimated at $23 billion, while the appearance of foreign companies in the Russian domestic market could reap losses of up to $90 billion a year.

Furthermore, Moscow found it well worth drawing attention to the fact that Russia, as a participating country in the Group of Eight, is not a member of such a large international organization as the WTO, the share of the member states of which accounts for more than 95% of the world trade turnover. Russia was also the only country in the G-20 that was not a member of the WTO. So it was unacceptable for Russia, which has every reason to consider itself a world leader, to, even for political considerations, not be a member of a world organization that directly forms trade rules on a global scale. And from the economic viewpoint, Moscow is extremely interested in participating in drawing up international trade rules, keeping in mind that the WTO member countries account for 92% of Russia’s trade turnover. This explains Russia’s particular interest in accession to the WTO. The possibility of the U.S. cancelling the derogatory Jackson-Vanik amendment also played an important role, which was expected to happen after Russia acceded to the WTO.62

The talks on Russia’s accession to the WTO, and even more the agreement reached with Georgia, confirm the reality yet again that Russia’s interests do not always coincide with the interests of Abkhazia and South Ossetia in everything. And this stands to reason if we keep in mind not only the fact that Russia is territorially much larger than these two states, but also has greater international significance.63 At the same time, however, it is important for Moscow to advocate the state independence of Abkhazia and South Ossetia it has recognized.

Switzerland’s mediation in the talks between Georgia and Russia created a more or less acceptable opportunity for both sides to reach an agreement, for they were able to discuss and come to terms


on the proposals of a third side—Switzerland, which put forward a compromise solution. In particular, observers from a private certified company specializing in customs operations to be recommended by the Swiss side will be appointed in Russian territory to the de facto border with Abkhazia on the River Psou and to the de facto border with South Ossetia at the northern point of the Roki Tunnel, as well as at the Kazbegi-Verkhniy Lars control point on the Military Georgian Road (which links Georgia and Russia through North Ossetia beyond South Ossetian territory).

This solution to a controversial issue between Georgia and Russia in the context of the interests of Abkhazia and South Ossetia can be interpreted ambiguously. On the one hand, Tbilisi could regard using the same observation regime in the customs sections of the borders between Abkhazia and South Ossetia and Russia, as well as at the Kazbegi-Verkhniy Lars check point, as Moscow’s indirect recognition that the border between Georgia and Russia also passes through sections of the latter’s borders with Abkhazia and South Ossetia. On the other hand, precisely the use of identical observation regimes in the customs sections between Russia and Abkhazia and South Ossetia and at the Kazbegi-Verkhniy Lars check point could indirectly mean that Russia has the same regime with all three bordering independent, from Moscow’s viewpoint, states—Abkhazia, Georgia, and South Ossetia.

There is also an essential difference between Abkhazia and South Ossetia. The thing is that the agreement reached between Georgia and Russia applies only to land borders, while trade relations between Russia and Abkhazia are also executed using sea transport. And the sea borders between Russia and Abkhazia are not monitored by international observers. South Ossetia does not have this opportunity. Nor will the air borders between Russia and Abkhazia be monitored, although Abkhazia’s airports are for the time being only designated for receiving passenger and military cargo planes.

It must be admitted that carrying out border observation over goods traffic is essentially an additional barrier to international trade. Furthermore, it should be kept in mind that this barrier applies not only to Abkhazia and South Ossetia but is created equally at all three above-mentioned check points.

However, due to the ban Moscow introduced in 2006 on the import of Georgian agricultural products into Russia, as well as taking into account the relative diversification of Georgian external trade ties (for example, finding new sales markets for Georgian wines), this new barrier will essentially not create any particular additional difficulties for Tbilisi.

In all likelihood, South Ossetia will suffer much more from this barrier since the Russian Federation accounts for the entire volume of its external trade and it is carried out exclusively by land.

As for Abkhazia, it is in a slightly more preferable position, whereby not only because this barrier will not apply to goods transported from Russia by sea. The thing is that Russia accounts for only 64

---

64 The insufficient information available to the public about the agreement reached between Georgia and Russia, particularly the lack of clarity concerning the so-called trade corridors through which freight should move from the Russian city of Adler through Abkhazia to the Georgian city of Zugdidi and from the North Ossetian village of Nar through South Ossetia to the south of the Georgian city of Gori (see: “Georgia-Russia WTO Deal in Details,” Civil.Ge, 18 November, 2011, available at [http://www.civil.ge/eng/article.php?id=24158]), gives reason to think that customs posts will also be opened in territory controlled by Tbilisi at the borders of the separatist regions, which is evaluated as Tbilisi’s failure at these talks (see: L. Tchantouridze, “The Damage to Georgian Sovereignty: On the Agreement to Accept Russia into the World Trade Organization,” State Interest, 4 January, 2010 (in Georgian), available at [http://stateinterest.wordpress.com/2012/01/04/%e1%83%96%e1%83%98%e1%83%90%e1%83%9c%e1%83%9e%e1%83%9a%e1%83%90%e1%83%90%e1%83%a5%e1%83%99%e1%83%a0%e1%83%97%e1%83%95%e1%83%94%e1%83%9a%e1%83%9d%e1%83%a1%e1%83%a1%e1%83%93%e1%83%9a%e1%83%a0%e1%83%94/]).


66 This argument also has a weak side, since this regime does not apply to the fourth Caucasian entity bordering on Russia—Azerbaijan.
two thirds of Abkhazia’s external trade and its second largest trade partner is Turkey, with which it trades by sea.

In our opinion, introduction of the above-mentioned customs monitoring could yield a positive result for the entire region, the gist of which will lie in a cutback in smuggled goods traffic (at this stage it is not possible to give a more or less adequate quantitative assessment).

It should be kept in mind that after Russia accedes to the WTO, the rules of this international organization will apply to most of the countries of the region, since Armenia and Turkey, as well as Georgia, are its members. This will create principles for developing regional trade since the WTO offers legal mechanisms for trade development, primarily by resolving trade conflicts. In so doing, it should be remembered that the WTO institutionally creates the necessary conditions for augmenting trade transactions, although membership in the WTO in itself is not sufficient for increasing these transactions.

It is important to note that the talks between Georgia and Russia on accession of the latter to the WTO has taught the Abkhazians and South Ossets another lesson, showing them that they must learn to live with the fact that Moscow far from always can and wants to reckon with their interests in everything. Furthermore, neither Sukhumi and Tskhinvali, on the one hand, nor Tbilisi, on the other, are used to this yet. However, essentially “a precedent of complete disregard for Abkhazia’s opinion and interests has been created. And precedents, as we know, have the tendency to repeat themselves.”

Russia’s accession to the WTO will create new opportunities for those Georgian companies that decide to return to the Russian market, particularly if they have documents that confirm the quality of their food products. If Moscow does not change its decision to close the Russian market to Georgian commodities, the WTO format could serve as a tool for resolving this controversy.

**Conclusion**

Despite the difficulties in Georgian-Russian relations, particularly after the August 2008 war, economic relations between the two countries continue unabated. In particular, they are still trading with each other (although at a qualitatively low level), while Russian capital is being much more vigorously invested in the Georgian economy and Georgian manpower (just as the manpower from other former Soviet republics) is actively engaged in the Russian economy and remits some of its income to relatives living in Georgia.

Georgia (like other post-Soviet countries) must deal with Russia’s striving to integrate its economy into the Russian economy through the mechanisms of the Liberal Empire, which Moscow is actively engaged in implementing.

Several urgent problems have accumulated in Georgian-Russian economic relations, the resolution of which requires special attention. They primarily relate to the return of Georgian products to the Russian market.

The positive result of the Russian-Georgian talks on Russia’s accession to the WTO gives good reason to expect constructive steps from both Moscow and Tbilisi toward resolving the many other burning problems.

---

67 See: S. Markedonov, op. cit.  
68 L. Tania, op. cit.