



**HAL**  
open science

## Visualizing and monitoring emergent border issues in Central Asia

Giancarlo Luxardo, Françoise Rollan

► **To cite this version:**

Giancarlo Luxardo, Françoise Rollan. Visualizing and monitoring emergent border issues in Central Asia. BORDER REGIONS IN TRANSITION (BRIT) XI, Sep 2011, Genève, Switzerland. 10.18463/luxardo.001 . halshs-00780828

**HAL Id: halshs-00780828**

**<https://shs.hal.science/halshs-00780828>**

Submitted on 24 Feb 2016

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - NonCommercial - NoDerivatives 4.0  
International License

# Visualizing and monitoring emergent border issues in Central Asia

Giancarlo LUXARDO, CNRS Research Engineer, e-mail: giancarlo.luxardo@msha.fr

Françoise ROLLAN, CNRS Research Director, e-mail: francoise.rollan@msha.fr

CNRS – EEE, Maison des Sciences de l'Homme d'Aquitaine, Université Bordeaux III

## Abstract

*Twenty years after their independence, the five countries of Central Asia face a number of issues, which can be observed at their borders, inherited from the Soviet era. The borders demarcating one from another have been enforced as a result of the formation of new national identities. In contrast, more (official or smuggled) exchanges are taking place across the borders of the former USSR. Internet-based media specialized in Central Asia regularly report on events, conflicts and exchanges occurring in the area. They provide a considerable body of information in the form of press releases, which can help the researcher to understand how these events are triggered or interrelated. However, the amount of text rapidly becomes excessive for an individual researcher. Our approach is to assemble these reports in a text corpus and process them with text mining techniques, allowing both information extraction and text categorization. Our text corpus is built with reports (covering a period of 11 years) issued by the Institute for War and Peace Reporting (<http://iwpr.net>), which produces homogeneous and regular information based on reliable and neutral journalism sourcing. With the release dates of the reports it is possible to work on time series and if the corpus is enhanced with the ability to handle easy updates it is possible to monitor current events.*

## 1. Introduction

After the collapse of the USSR in 1991, five new States have been established in Central Asia: Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyzstan and Tajikistan. The borders dividing the new republics are the legacy of the Soviet era<sup>1</sup>. However, the function of these borders has dramatically changed since the attainment of these countries to independence. While under the Soviet regime, they had limited significance beyond administrative matters, the reality of these borders has gained importance in the definition and control of a new territoriality, which could influence both the formation of new national identities and the organization of the emergent economies.

On the other hand, this area also represented a frontier for the USSR demarcating its territory from several Asian states (China, Afghanistan, and Iran) and these borders were on the

---

<sup>1</sup> Haugen A.2003, p.149-210.

contrary particularly hermetic. In the context of the globalization of the economy which followed the end of the USSR and as a result of the need for the new Central Asian states to find new partnerships in alternative to Russia, the exchanges observed at these borders have inevitably increased.

In other parts of the world, changes in local economies and the adaptation to globalization processes favoured the development of regional integration. However in Central Asia, as long as a number of issues questioning the stability of the existing regimes and the sovereignty of states are not solved, it is difficult to envision cooperation between states at regional level. Therefore, the new Central Asian republics are bound to two opposed trends: establishing new borders with their neighbours and allowing more exchanges in the framework of globalization.

How the new borders have reorganised the Central Asian space?<sup>2</sup> These new borders are making life very difficult for people who want to exchange goods or who need to migrate to feed their family. How do people manage to bypass the border where this is possible? How are they able, despite all this, to keep in touch with family members on the other side of the line? How do they feel about these borders, arbitrarily drawn? How do ethnic lines interfere with the borders? What are the local consequences of the new borders, the regional consequences of water mismanagement? How do the NGOs have gained strength and are able to destabilise the Governments? What is the impact of radical Islam attempt to construct a community rival to that of the nation-state that would suppress the borders and overthrow the secular governments, and install the Sharia Law in Central Asia? How the foreign religious missionaries are convincing local people to adopt another religion? What is the influence of the proximity of Afghanistan and the drug and weapon trafficking on these countries? Are these countries strong enough to control their borders in order to stop extremist groups and smuggling? Are they able to coordinate their border policies to prevent conflicts?<sup>3</sup>

It is the interaction of multiple factors: economic, political or cultural, which operate in this area, both locally and globally, that we propose to assess. To do so, we take into consideration a large amount of information, derived from news reports on events occurring in the area, that we attempt to process using both qualitative and quantitative techniques, in order to provide new representations.

## **2. Borders marking out the limits of state authority: a qualitative approach**

Following the collapse of the USSR, an increase of interest and studies about Central Asian States and their borders can be noticed. Besides the books<sup>4</sup>, several Web sites are giving information on borders in Central Asia.<sup>5</sup>

---

<sup>2</sup> Gavrilis G., 2010, p.93-104.

<sup>3</sup> Gavrilis G., 2010, p.118-129.

<sup>4</sup> See Bibliography.

Our text corpus is made up of articles published by one of these Internet-based media services: the Institute for War and Peace Reporting (IWPR)<sup>6</sup>. It has archives dating back to 2000 and regularly reports on political and social events related to the Central Asian Republics (several times a month), using also local surveys. Only articles related to border issues have been extracted. The corpus is comprised of 827 articles, collected from 2000 to the end of 2010. It has been completed by field surveys carried out in the Fergana region in Kyrgyzstan and Uzbekistan, in Khorezm and Karakalpakstan, in Sharisabz, in Tashkent area in Uzbekistan, in Bishkek, Talas and Naryn in Kyrgyzstan, in Almaty region and in Astana in Kazakhstan, and in Penjikent area in Tajikistan<sup>7</sup>.

Since 1991, the year of their independence, the new Central Asian countries have been supervising the definition of their borders. The delimitation of borders is the subject of tough negotiations between States and can last several years. The process is still going on. A major problem comes from the fact that several maps have been used to settle the borders during the Soviet period: one was drawn in 1924-1927 and the other one in 1955.

### *The function of borders*

Borders are places of contact, exchange and confrontation. The establishment of borders in Central Asia produces a number of unprecedented challenges in a world where the tendency is for frontiers to be abolished. They are defining a new territoriality, in line with the newly created Nation-States and their dominant ethnic group, which coincides with the new citizenship of the inhabitants. But what is more important for people, better than kinship, is the place, the territory where they live, because they are bounded to space by memory.<sup>8</sup> What is currently happening on the ground represents a step backwards in time: a new “iron curtain” is breaking up an area which has never been divided before throughout its long history. Each country is gradually erecting boundaries with custom offices, border guards, fences of barbed wire or mining its border.

During the Soviet period, the frontiers were virtual ones, with no reality except on the map. Peoples living in these regions had never experienced a frontier. This was a totally unknown concept for them. People moved on a regular basis from one State to another, with no need for formalities since each Soviet citizen automatically received a passport which was also referring to the nationality (ethnic group), and thanks to it, could move around freely. In the 19<sup>th</sup> century and at the beginning of the 20<sup>th</sup>, the vast territory of Central Asia was called Turkestan, and everyone moved around freely. There was indeed a frontier with the Chinese Empire and with the area of British influence to the south, but no one crossed these borders, apart from a few nomads who were not recognised as citizens by any of the States.

---

<sup>5</sup> Examples: <http://www.eurasianet.org>; <http://iwpr.net>; <http://www.irinnews.org>; <http://www.dur.ac.uk/ibru/>; [http://centralasiaonline.com/cocoon/caii/xhtml/en\\_GB/homepage/](http://centralasiaonline.com/cocoon/caii/xhtml/en_GB/homepage/); <http://enews.fergananews.com/>; <http://www.rferl.org>; <http://crisisgroup.org>; <http://www.cacianalyst.org>; <http://www.centralasianews.net>;

<sup>6</sup> IWPR: an NGO in London and New York, which gives voice to people at the frontlines of conflict, crisis and change. IWPR forges the skills and capacity of local journalism, strengthens local media institutions and engages with civil society and governments to ensure that information achieves impact.

<sup>7</sup> Field surveys totaling several months between 1997 and 2011.

<sup>8</sup> Wijhe A. van, 2010, <http://criticalgeography.wordpress.com/2010/12/01/theorizing-territory/>, (accessed Jul. 20, 2011)

Today the populations of the five Republics are beginning to learn what a border is. Families have been brutally split up by a line that is impassable or almost, a line that is closing in more tightly day by day. A visa is compulsory for anyone who wants to cross this line except for people living in the *rayons* bordering the frontier. Even though no visa is needed in this instance, a fee is levied for the crossing (\$7), and the duration of these visits is limited. But in any case, a passport is required. Very close-knit families, who used to visit one another every week, can now do so only on special occasions.

Security and financial reasons may oblige the State to close its borders. Regularly, Kazakhstan, Kyrgyzstan and Uzbekistan close their borders either because some ethnic violence happened in the neighbouring country or to increase taxes on the imported goods by shuttle traders from Tashkent or from Bishkek. There is a stalemate with Turkmenistan as they have put up a barbed wire fence, particularly in Khorezm, in the Uzbekistan border region which historically stretched along both sides the Amudarya river.

For ordinary people, it is always possible to cross the border illegally, with a small bribe. Contraband food products, textiles and petrol are common currency in Kyrgyzstan and Uzbekistan. In the Fergana, a woman can bring in as much as 500 litres a day across the fields!<sup>9</sup> Smuggling of drugs and weapons has complicity at the highest level<sup>10</sup>. Lorries, carrying hundreds of tons of scrap metal, stolen in Uzbekistan and Kyrgyzstan, cross “legally”, every day the Kyrgyz-Chinese border.

### ***Fluctuating borders in post-Soviet Central Asia***

Gerald Blake points out that: “The states of the former Soviet Union declared in December 1991 that they would respect the boundaries they have inherited, but a number of boundary and territorial disputes have nevertheless emerged.”<sup>11</sup> The delimitation of the borders is currently being carried out, but as it is not completed, the border can be considered as mobile. Contesting and claiming space at the edges of the Nation States is what is being done regularly by the three countries (Uzbekistan, Tajikistan and Kyrgyzstan), which share the land of the Fergana Valley. That area is a sensitive sector as it is the most densely populated region, the richest in agricultural terms for Uzbekistan, Kyrgyzstan and Tajikistan, and it is also rich in energy and mineral resources (oil, water, gold). None of the three countries recognises the established border since two maps are used<sup>12</sup>. For example, Uzbekistan on its southern border, in order to protect itself against Islamic guerrillas incursions, has planted mines on its border, and has taken the opportunity to move the border in the mountain. Tajikistan and Kyrgyzstan have used the pretext of a guerrilla attack, and have moved some border posts in order to gain some space at the expense of the neighbouring country. One of these can decide unilaterally that a local river belongs to it and not to one it uses to be. A dam

---

<sup>9</sup>IWPR, RCA Issue 38, Jan 2001 <http://iwpr.net/report-news/petrol-smuggling-rings-lure-kyrgyz-women>

<sup>10</sup> Gavrilis G., 2010, p.144-151.

<sup>11</sup> Blake G., 2000, In: M. Pratt and J.A. Brown, *Borderlands under Stress*, p.4

<sup>12</sup> One from 1924-1927 and the other one from 1955.

supposedly built by the Uzbeks has been taken with its lake to Kyrgyzstan in the Fergana valley and of course reduced the Kyrgyz territory.

### ***Facing threats to state authority: information without borders***

Regarding the borders, N. Polat has identified three kinds of problems: border issues (delimitation), ethno-border issues, transboundary water issues<sup>13</sup>. These could be considered as physical/human border issues. However, another kind of borders is observed today. With the widespread use of the Internet, international communications are more difficult to control for the authorities. These “virtual borders” are easily overcome by international news agencies or human rights NGOs, while fundamentalist ideologies are dispatched by zealous militants. All this disturbs the authoritarian regimes in place since their independence.

Information, now without borders, is of great concern for these non-democratic governments: with Internet, the whole World is able to learn about the violations of Human Rights. It worries these Central Asian countries. Because of their inclusion in the globalisation, they are dealing economically, with Western countries. They need to export their natural resources on the global market which implies to have good relations with the other countries, especially with the richest ones which are also democratic and fight to impose democracy everywhere. It is difficult to close hermetically the information pipes, like internet, phone and satellite phone. After Independence, a lot of NGOs have entered these countries and they are now operating officially or not, helping the women to get their independence and more generally they introduce people to democracy and fight with the journalists for a free press, with the lawyers for an independent justice.

Internet and its powerful input-output mean of information worry the Central Asian regimes which started to fear the spread of the Arab Spring Revolt and to prevent it, are closing partially Internet access to their citizen. The media are also under high scrutiny and journalists who do not share the ideas of the President, are very often jailed. Since the independence, the opening of the borders has been a chance for the NGOs those fighting for democracy and human rights as well as those introducing religious ideas to enter these countries. Ideas do not have boundaries, they overpass the physical borders.

### ***Other threats: religious movements, foreign to those regularly established in the country***

- ***Muslim missionaries*** (from Saudi Arabia, Egypt, Pakistan, etc.), carrying extremist views, have been able to enter Central Asian countries after the Independence and they are trying to compete with the official Islam controlled and ruled by the State. In reaction to the collapse of the Soviet state and its communist ideology, women and men have turned increasingly to Islam as an easily accessible, socially approved route for self-identification. The state,

---

<sup>13</sup> N. Polat, 2002, *Boundary issues in Central Asia*.

however, has mishandled religious policy, and its approved clergy have been unable to meet the demand for religious instruction.

Lack of basic services, like healthcare, electricity and roads, erodes allegiance to the state and fuels public discontent. The vacuum is easily filled by militants or religious extremists whose messages find a ready reception among desperate populations. Economic hardship is driving Central Asian youngster into the ranks of militant Islamic forces.<sup>14</sup>

The proximity of Afghanistan torn by a civil war is said to influence the spread of radical Islam through the Taliban, al Qaeda, calling for global Jihad or the Islamist Movement of Uzbekistan. Wahhabi propaganda or other movements such as Hizb ut-Tahrir, Salafis, act underground. All these movements laud radical Islam ideas and as a goal, want to establish an Islamic state. Drug trafficking with Afghanistan is used to fund their actions, propaganda and jihad. Trading arms for Taliban and Al Qaeda in exchange of heroin is the work of organized crime networks across Central Asia. The last clashes in southern Kyrgyzstan (Osh, 2010) might not be strangers to these criminal organizations, the “third forces”?

Although, after the interethnic violence in Osh, its mosques were seen as a symbol of unity, they are now under greater scrutiny as ties between Islam and extremism emerge.<sup>15</sup> Extremist groups worry very much the governments of the five countries which are trying to fight them. But strong repression against the Islamist movements gives rise in number of supporters.

- *Christian missionaries* and others<sup>16</sup>, as well, mostly from American protestant obedience. Mormons, Church of Jesus Christ of Latter-Day Saints, Baptists, Seventh Day Adventists, Jehovah Witnesses, Lutherans have been able to settle in these countries<sup>17</sup>. Until the Independence, Orthodox Christian and Muslim clergy have coexisted equably, with neither trying to poach the other congregation. But now, they are deeply suspicious of these foreign groups, accusing them of offering aid in return for conversion.<sup>18</sup> They are trying to convert poor Muslims, giving them food. People are so desperate that in some cases it works, which brings threat in families, some members being becoming Christians and others remaining Muslims. The foreign-funded groups are able to offer their parishioners more than the longer-established religions. Depending on the Church, the benefits may include free English and computer classes, foreign scholarships, business loans, or even flour and imported food.

"Divisions within the family, which are inevitable if individual members adhere to different beliefs, lead to schisms in society, in the state itself, as a whole."<sup>19</sup>

---

<sup>14</sup> Rashid A., 2003, *Jihad. The Rise of Militant Islam in Central Asia*.

<sup>15</sup> January 23, 2011, [http://www.rferl.org/content/kyrgyzstan\\_mosques\\_under\\_scrutiny/2284606.htm](http://www.rferl.org/content/kyrgyzstan_mosques_under_scrutiny/2284606.htm)

<sup>16</sup> Like Hare Krishna, very active in Kazakhstan.

<sup>17</sup> There are currently some 300 Christian groups in Kyrgyzstan. IWPR, RCA Issue 531, 13 Feb 2008, <http://iwpr.net/report-news/tighter-regulation-worries-kyrgyz-faith-groups>

<sup>18</sup> Around 85 non-Islamic religious organizations are registered in Tajikistan, predominantly minority Christian groups. IWPR, RCA Issue 502, 23 Jul 2007, <http://iwpr.net/report-news/tajikistan-bill-religious-practice-raises-concern> (last access July 24th, 2011)

<sup>19</sup> IWPR, RCA Issue 239, Sep 2003, <http://iwpr.net/report-news/missionaries-offer-faith-and-food-kyrgyz> (last access July 26th, 2011)

### ***Globalised economy and politics: foreign military bases***

At a global level, different events occur as a result of the activities of the new states in the globalized economy: pipelines and new transnational roads to transport natural resources and goods, migrations of Central Asian people to Russia and Europe looking for a better standard of living and for disregarding of human rights.

The foreign military bases and foreign military landing facilities make up provisional foreign territories in the Central Asian countries. They are related to the Operation Enduring Freedom led by the US and the UK and other NATO and non-NATO countries, in Afghanistan after 9/11. They are granted to the coalition forces. They constitute another kind of mobile borders inside one Central Asian country because these facilities can be suppressed anytime by the host country. It happened in Uzbekistan when President Karimov disliked the political position of the US, following Andijan events. Termez base and other landing military facilities for the US were cancelled from Uzbekistan. After Andijan, Russia was again welcomed in Uzbekistan since it did not criticize President Karimov protestor slaughtering and did not say anything about the non-compliance with human-rights.

Establishing a military base implies establishing new borders around the base, which necessitate a very strict procedure to enter the base. Security measures are even tougher than at a country border and bribes are not possible because if a local soldier can be corrupted at the border, a foreign soldier (American or Russian) is much more likely to be incorruptible.

### **3. Categorization of border issues: a quantitative approach**

The text corpus is comprised of 827 articles with a total number of approximately 840,000 word occurrences, among which 30,000 are distinct words. This represents about 1 400 pages of an MS-Word document. A number of text analysis software tools have been experimented for this project. The results described in the following have been produced with DTM-Vic<sup>20</sup>, a software freely downloadable on the Web.

#### ***Defining the variables***

The text corpus being segmented by article, three types of variables have been assigned to each article:

- *date* (month - year), the publication date which may allow to study time series, (11 modalities)
- *category*, a "hand-coded" variable identifying the main topic of the article according to a simple coding scheme based on 12 modalities,
- *border*, a "self-assigned" variable identifying the most relevant border (i.e. the two countries) mentioned in the article.

---

<sup>20</sup>Data and Text Mining, Visualization, Inference, Classification; <http://www.dtmvic.com>



For the encoding of the *category* variable, a specific content analysis software has been considered (most of the available tools are based on dictionaries with a hierarchy of categories). However, this approach was not pursued because the first tests showed that the related procedures were more time-consuming than the plain browsing of the text.

The *border* variable is provided by the execution of a number of scripts which also perform various pre-processing tasks on the text. These scripts (written in the Groovy language) recognize the most frequent occurrences of locations and infer the border mainly concerned by the article. This border may refer to two of the five Central Asian countries or one of them and another country among Afghanistan, China, Iran or Russia (it does not necessarily match a "physical" border). It includes 15 modalities.

These three variables allow to partition the corpus according to respective modalities and to complement statistical calculations run on the text (factorial analyses, clustering).

For this corpus, the 12 *categories* identified and related to border issues in Central Asia are the following:

- border* (border delimitation and disputes),
- defense* (security, terrorism, infiltrations),
- economy* (trade, shuttle trade, transport, roads, tourism),
- energy* (oil, gas, pipelines, electricity),
- ethnic issues* (ethnic conflicts, discrimination, language policy),
- foreign military bases* (including landing facilities for war planes),
- ideology* (religious or political movements, NGOs),
- international relations* (with influence),
- migrations* (international migrations including refugees and the associated problems),
- police* (harassment, human rights, freedom of press, of religion, independent justice),
- smuggling* (drugs, weapons, scrap metal, cotton, etc),
- water* (Amu Daria, Syr Daria, Illi, Irtysh, Balkash Lake, Aral Sea, dam, water pollution).

### ***Choosing the statistical processing: the ascendant hierarchical classification***

Several statistical processings of the texts have been tested. The best result is obtained from a clustering of articles using an ascendant hierarchical classification - reciprocal neighbours method, on the factors of a multiple correspondence analysis on the variables and on the texts. After several iterations, the description of the classes allows a categorization in 12 classes, based on the frequency of words. According to the clustering method, the variance interclass should be maximized and the variance intraclass minimized, so that the classes should be as homogeneous as possible and the classes as different as possible. The graphic output of the clustering represents a dendrogram. Then, the interpretation is checked by returning to the text.

What is expected in the definition of classes is not to find back the initial categories but a more precise definition with more complex variables. Each class should be identified by a series of modalities of the variables 'category', 'year' and 'border'.

The best clustering, described in the following, produces 12 classes (Fig.1 and Appendix). Each text is assigned to a class and each class is illustrated by the 20 most characteristic words<sup>21</sup>, which helps in defining the meaning of the classes. The dendrogram can be cut at different levels: going from the bottom to the top, this allows to synthesize and group the different issues. At the top of the dendrogram, only two groups are observed. The description of the classes could lead to the following interpretation.

### *Analysing the dendrogram in 12 classes*

Starting from the bottom of the tree, the 12 classes are identified in the following way:

-*Class 1* represents a quite homogenous class. It is devoted to oil and gas export routes to Europe and the policy followed by President Niazov to diversify these routes (through Iran, Afghanistan and/or through Russia) to the global market. However Turkmenistan poses a problem to Western partners. They worry because Turkmenbashi does not comply with Human Rights. Depriving Niazov from buying its large oil and gas production constitutes a lever of pressure, since Western countries are the strongest Human Rights defenders.

-*Class 2* is totally oriented towards Kazakhstan and its relations with Russia, Turkmenistan and OSCE that Nazarbaiev has finally chaired in 2010. Because of human rights concerns, the decision has been delayed. Kazakhstan has problems with the Russian minority who is calling for autonomy. It is to preserve the country territorial integrity that President Nazarbaiev moved the capital from Almaty to the northern city of Astana. Kazakhstan is also engaged in the globalization process with its rich oil production and other mineral deposits.

-*Class 3* is well identified and refers to the Central Asian migrants, especially the Tajik citizens, going mostly to Russia to find a job. The economic situation is so desperate that hundreds of thousands of young men are leaving the country, in hope to find work in Russia, in order to feed their family. Although many are illegal workers, they send a lot of money to Tajikistan, which helps the national economy to survive. Illegal workers are vulnerable and face discrimination and violence in Moscow.

-*Class 4* is related to radical Islam with IMU<sup>22</sup>, the Talebans and the war in Afghanistan in which the US are engaged. Uzbekistan is also on the same side as the Americans since they have to fight the Islamic Movement of Uzbekistan led by Takhir Yuldash. Tashkent has provided military bases to the Americans. International relations are woven between

---

<sup>21</sup> The number of words is a parameter, determined by the researcher.

<sup>22</sup> Islamic Movement of Uzbekistan

Afghanistan and several countries that fear the Talebans. This class represents the globalization of the war in Afghanistan in which Central Asian countries are also engaged because they feel threatened.

-*Class 5* is only linked to the foreign military bases related to the fight in Afghanistan, installed in several Central Asian countries (in Uzbekistan and Kyrgyzstan for the Americans and in Tajikistan and Kyrgyzstan for the Russians). Some landing and refueling facilities are also given to the coalition forces (in Uzbekistan and in Kazakhstan)

-*Class 6* is associated to economy and especially trade with China. There is an unfair competition between the local traders and the Chinese traders who are invading and breaking the prices of the local markets; It is a problem for Kyrgyzstan which is bordering China and for Uzbekistan which has access to Chinese goods through the Kyrgyz markets. This is a regional problem but related to the globalization of the economy.

-*Class 7* aggregates social unrest and ethnic violence between Kyrgyz and Uzbeks in Osh and Jalalabad and which forced President Bakiev to resign. It appears that the rights of the South are not respected in the government. Some radical Islamist organizations like Hizb ut-Tahrir, are acting underground and preparing the society to move to an Islamic state. This class shows the ethnic problems with their political consequences.

-*Class 8* gathers police problems related to virtual borders. The growth of the Islamic radical group Hizb ut-Tahrir is worrying the Central Asian governments that are adopting tougher approach (Kazakhstan). Women are among the best followers of these groups. Internet constitutes a serious threat to these authoritarian regimes and they try to limit the access (Kazakhstan, Uzbekistan) or to forbid it (Turkmenistan).

-*Class 9* is associated with regional water problems and energy supply. Water supply problems in the Aral region, lack of water for irrigating the cotton agriculture, for fishing industry and disputes between Kyrgyzstan, Tajikistan and Uzbekistan are serious. The power plant projects in Kyrgyzstan and Tajikistan will reduce water available for agriculture. Kazakhstan and Russia are trying in vain to mediate the situation. The situation seems difficult because the five states lack a common vision on how to harmonise their differing interests since resources are unevenly distributed. Tajikistan and Kyrgyzstan, upstream countries, possess 80% of the water resources. Uzbekistan, Kazakhstan and Turkmenistan, the downstream countries, have gas and oil resources and no water for their agricultural needs.

Uzbekistan wants to sell gas to the upstream countries but does not want to pay for water. Any new dam project makes the Uzbek government furious. An example of conflict involving multiple interwoven ramifications of events at work on the borders of Central Asia follows. The construction of a hydropower plant in Tajikistan could trigger an international problem, with Uzbekistan preventing Iran from delivering equipment for the plant, which would reduce the water available for Uzbek agriculture. Iran has replicated by threatening to stop Uzbek trains exporting goods through Iran. A local and regional issue could escalate into an international one.

-*Class 10* assembles local border problems and their related tensions. There are about land belonging to Kyrgyz, Uzbek, Tajik and Kazakh. Incidents are frequent with the border guards and death tolls happen. In some areas (Fergana) the borders as a legacy of the Soviet Union are making the situation impossible to solve. Batken region with its enclaves is one of these.

-*Class 11* brings together smuggling of drug(s), weapons associated to Afghanistan. Use of heroin has brought HIV. Police and custom officers are corrupted, which facilitates smuggling of all kind of goods. Drug is introduced in Tajikistan from Afghanistan by smugglers who cross on foot the border in very remote and difficult places where not even a mule could pass. Drug is exchanged against Kalashnikov at a very low price at the border<sup>23</sup>. This shadow economy brings a lot of insecurity at the borders. Drug addiction and poverty is responsible for extension of HIV. Police is participating in drug trafficking and provide protection for the drug trade not only in Tajikistan but even in Kazakhstan. Metal smuggling, from Kyrgyzstan to China, represents also a great loss for the economy.

-*Class 12* is associated with radical Islam guerrillas. Militants are engaged in the IMU movement and they are also fighting with the Taleban, attacking the security forces of Uzbekistan and Kyrgyzstan. The greatest threat is in Batken region (Kyrgyzstan) and Andijan (Uzbekistan). The instability in Afghanistan and the loose state in Tajikistan facilitate the incursions in the neighbouring countries. It seems that conditions are assembled to extension of conflict and put Central Asia at risk.

### ***Synthesizing the ascendant hierarchical classification***

- If the tree is cut in *eight classes*: the two first classes are united by the international relations between Central Asia, Russia, Iran, Afghanistan and Europe, because of export routes for oil and gas from Turkmenistan and Kazakhstan. Both have ethnic problems with their Russian minority that cannot get double citizenship. Both are engaged in the globalization process although the human rights violations could be a potential bottleneck for Western countries, but not for Russia nor for China. The third class is self-identified and remains stable (International labour migrations). The fourth and fifth form one class related to international relations and interventions in Afghanistan; the sixth is stable (border economy and China implication). The seventh and eighth classes regroup in one and could represent human and virtual borders, with ethnic violence and political consequences and virtual borders as defined with police problems against the NGOs. The ninth and tenth add up to represent the physical border issues (regional water problems and border limits). The eleventh remains that of smuggling and the twelfth the guerrilla infiltrations due to the proximity of Afghanistan.

- With *six classes*, the first four groups remain unchanged. The virtual and human borders and the physical borders issues get aggregated in one group which could be called: virtual and physical border issues. The original last two classes regroup and represent illegal border crossing.

---

<sup>23</sup> <http://iwpr.net/report-news/turning-afghan-heroin-kalashnikovs>, ARR Issue295, 9 Jul 08, 1 kg of heroin is exchanged for 10 Kalakovs (AK-74) or 15 [old mode] Kalashnikovs (AK-47)

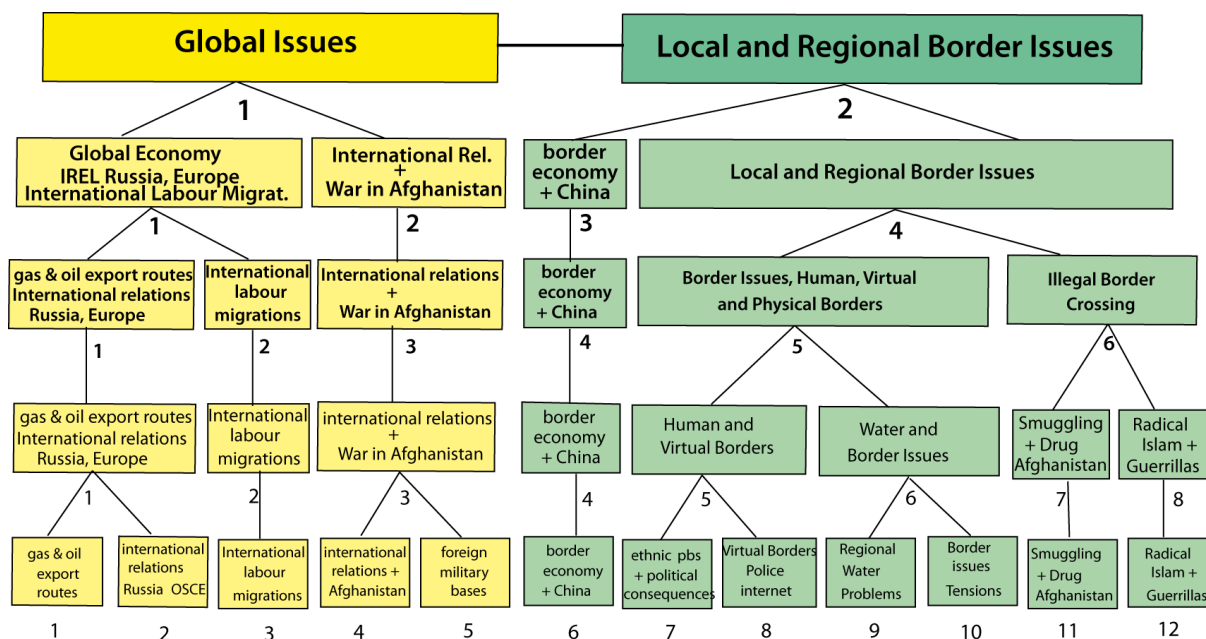


Fig.1- Ascendant hierarchical classification diagram (for the original dendrogram see appendix)

- With *four classes*, it is easier to differentiate global and regional/local problems. The globalization appears with oil and gas and international labour migrations, and with the border economy and economic relations with China are still visible because this group is well identified and homogenous since it gets aggregated at a very low level. The other issues represent regional problems.

- The highest level presents only *two classes*: the global issues (the first five classes) and the local and regional issues which include the seven following classes. What can be seen is that, in all the issues, several external actors to the Post-Soviet countries are very active: Afghanistan, Russia, the US and China. To a lesser degree, Iran, Turkey and Europe are trying to play a role. The external actors do not want to miss the fossil energy resources. The Americans are pushing in favour of a route through Afghanistan and then Pakistan instead of the one through Iran, to reach the global market. China would prefer to double its route through Central Asia and is ready to increase the price.

Within the second group, some local problems could degenerate into regional and may be into global ones, such as water issues and drug and weapon smuggling. Europe and the US are worrying very much about the porous borders of Tajikistan and are asking to International organizations to help the country learning how to control strictly its borders.

The quantitative approach allowed to classify the border issues in Central Asia, to highlight the inter-relationships between the different events occurring at the borders and to organise the problems into global and local/regional issues which was not apparent through a sequential reading.

#### **4. Conclusion**

Inter-ethnic border problems could be considered as the legacy of the Soviet Empire. Most of ethnic conflicts between populations living on both sides of a border in Central Asia are due to a border drawn fairly arbitrarily between the Soviet republics and now sovereign states. This is the case for Kyrgyzstan, Uzbekistan and Tajikistan. The Fergana valley divided between three sovereign states (Uzbekistan, Tajikistan and Kyrgyzstan) is the most sensible area to this problem. As a result, people belonging to the same ethnic population are attached to different countries. In the country where they constitute a minority their rights are not always recognised or enforced. This situation leads to ethnic violence (Andijan in 2009, Osh, Jelal Abad in 2010) which could have serious consequences for the stability of the region. With the resurgence of local ethnic identities, the situation has become very sensitive.

The five states really do need to cooperate, if only to manage their water resources, but these border problems are so serious that each one manages them in its own way, preferably by inconveniencing its neighbour. Tensions are steadily increasing between them. Behind the frontiers, the problem is a political one. Uzbekistan, the most populated country and economically the most advanced, would like to be the leader of the region. Its rapprochement with the United States proves its will to detach itself definitively from Moscow. Kazakhstan, the largest in area, and very rich in energy and mineral resources, has chosen the Russian route because there is a problem with an important Russian minority in the north on its border with Russia, who is simply asking to secede, hence the transfer of the capital to Astana. But Kazakhstan tries to diversify its alliances. It disdains neither China nor the United States nor Europe nor Turkey. President Nazarbaiev, who chaired OSCE in 2010, is doing his best to organize cooperation for the management of water resources. Kyrgyzstan, which contains the sources of the Syr Daria, is not short of water but nor does it have anything else; after September 11, the Kyrgyz agreed to the presence of an American base and more recently, to a Russian one. However, the Kyrgyz language has recently become compulsory for all administrative purposes, which is an obstacle to inter-ethnic understanding. Turkmenistan, a rich country because of oil and gas resources, is isolating itself and has cut off all links, including those with Russian residents, who are now obliged to leave the country. The main finger of blame is pointed at Tajikistan, the poorest State, because it allows drug traffickers to pass through and is believed to be harbouring Islamic terrorists. One question should be raised: in such a globalised world, do the poorest Central Asian countries (Tajikistan and Kyrgyzstan) have the means of controlling their borders? International Organisations are trying to organise the training of border guards, but what is needed is an integrated border control.<sup>24</sup>

---

<sup>24</sup> Gavrilis G., 2010, p.162-165.

## References

- ANDERSON Malcolm, 1997, *Frontiers: Territory and State Formation in the Modern World*, Cambridge, Polity Press, 255 p.
- BUCHANAN Allen, MOORE Margaret (Edited by), 2003, *States, Nations and Borders: The Ethics of Making Boundaries*, Cambridge, Cambridge University Press, 361 p. (The Ethikon Series in Comparative Ethics)
- CHEBOTAREV Andrei, 2002, Kazakhstan's Struggle to maintain Sovereignty over some of its Land and Water Areas, *Central Asia and the Caucasus, Journal of Social and Political Studies*, n°1, pp.71-79.
- CLARKE Michael, 2003, Xinjiang and China's Relations with Central Asia, 1991-2001: Across the "Domestic-Foreign Frontier"? *Asian Ethnicity*, Vol.4, n°2, pp.207-224.
- FOUCHER Michel, 1991, *Fronts et frontières: un tour du monde géopolitique*, Paris, Fayard, 691 p.
- FRAVEL M. Taylor, 2008, *Strong Borders, Secure Nation: Cooperation and Conflict in China's territorial Disputes*, Princeton, Princeton University Press, 376 p.
- GAVRILIS George, 2010, *The Dynamics of Interstate Boundaries*, Cambridge, Cambridge University Press, 203 p.
- GOLUNOV Sergei, 2002, Russia-Kazakhstan : "Security and Cooperation Dilemma" along the Common Border, *Central Asia and the Caucasus, Journal of Social and Political Studies*, n°4, pp.56-65.
- HAUGEN Arne, 2003, *The Establishment of National Republics in Soviet Central Asia*, New York, Palgrave MacMillan, 276 p. (Chap. 8, Drawing Borders, pp.180-210)
- INTERNATIONAL CRISIS GROUP, 2002, Central Asia: Border Disputes and Conflict Potential. Osh/ Brussels, *ICG Asia Report* n°33, 4 April, 36 p. <http://www.crisisweb.org>
- KOLOSSOV Vladimir, 2006, Theoretical Limology: Postmodern Analytical Approaches, *Diogenes*, Vol.53, n°2, pp.11-22.
- KOLOSSOV Vladimir, 1998, Ethnic and Political Identities and Territorialities in the Post-Soviet Space, *Paper submitted to "Nationalisms and identities in a globalized world," August 17-22, 1998, Maynooth, Republic of Ireland, and Belfast, Northern Ireland.*
- MIGDAL Joel Samuel, 2004, *Boundaries and Belonging: States and Societies in the Struggle to Shape Identities and Local Practices*, Cambridge, Cambridge University Press, 363 p.
- POLAT Necati, 2002, *Boundary Issues in Central Asia*. Ardsley, Transnational Publishers Inc., 282 p.
- PRATT Martin, BROWN Janet Allison (Edited by), 2000, *Borderlands under Stress*, The Hague, Netherlands, Kluwer Law International, 446 p., (International Boundary Studies Series, 4)
- RASHID Ahmed, 2003, *Jihad. The Rise of Militant Islam in Central Asia*, New York, The Penguin Books, 281 p.
- ROLLAN Françoise, 2009, "Border infiltrations by Islamist movements and drug traffickers in former Soviet Central Asia: local, regional and global involvement", pp.299-317; In: *Proceedings of the ninth conference of the European Society for Central Asian Studies*, edited by Tomasz Gacek and Jadwiga Pstusińska, Cambridge Scholars Publishing.
- ROLLAN Françoise, 2004, Learning to Live with Frontiers: New Frontiers in Central Asia. *UNISCI Discussion Papers*, Mayo, 11 p. . <http://www.ucm.es/info/unisci/rollan.pdf>
- SCHOFIELD Victoria, 2003, *Afghan Frontier. Feuding and Fighting in Central Asia*, London, Tauris Parke Paperbacks, 383 p.
- SENGUPTA Anita, 2002, *Frontiers into Borders: The Transformation of Identities in Central Asia*, Haryana, Hope India Publications, London, Greenwich Millennium, 224 p.
- SMITH Graham, LAW Vivien, WILSON Andrew, BOHR, ALLWORTH Edward, 1998, *Nation-building in the Post-Soviet Borderlands: The Politics of National Identities*, Cambridge, Cambridge University Press, 293 p.
- TROFIMOV Dmitriy, 2002, Ethnic/Territorial and Border Problems in Central Asia, *Central Asia and the Caucasus, Journal of Social and Political Studies*, n°1, pp.52-63.
- WASTL-WALTER Doris (Edited by), 2011, *The Ashgate Research Companion to Border Studies*, Farnham, Ashgate, 705 p.

WIJHE Alex van, 2010, Theorizing territory, <http://criticalgeography.wordpress.com/2010/12/01/theorizing-territory/> (accessed Jul.20th 2011)

ZHANG Yongjin, AZIZIAN Rouben (Edited by), 1998, *Ethnic Challenges Beyond Borders: Chinese and Russian Perspectives of the Central Asian Conundrum*. London, Mac Millan Press LTD, 240 p.



**Appendix: Dendrogram showing the 12 (red), 8 (dark blue), 6 (light blue), 4 (green) and 2 (yellow) classes**

