STUDIA

UNIVERSITATIS BABEȘ - BOLYAI

STUDIA EUROPAEA

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I. POLITICS AND POLICIES IN EUROPE

PLURALISM AND INTEREST GROUPS IN CENTRAL AND EASTERN EUROPE: A COMPARATIVE PERSPECTIVE

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ABSTRACT. The paper deals with the recent development of pluralism and interest groups in Central and Eastern Europe. This process is placed in an international context characterized by proliferation of interest groups and the increasing complexity of their activities. Several similarities and differences regarding the comparison between American and European interest group systems are mentioned. The main conclusion is that in Central-Eastern Europe the basic framework for pluralism hase been established and the countries are developing pluralist tendencies with certain particularities.

For the people in Eastern and Central Europe pluralism is perceived as an alternative to their recent past. But they already understand that pluralism is a "polymorphous concept"[1], having various faces and specific features in various regions and countries. That is why they need to know more about pluralism from a comparative perspective.

Some political scientists have expressed their belief that the recent changes in Eastern and Central Europe could stimulate the revitalizing of the theory of pluralism. Having in view this perspective we need to mention that a first condition for such revitalization is the so-called "reunification of language" of Western and Eastern researchers[2]. Pluralism, for example, is a very often used word in Romania after 1989, but almost always it means a multiparty system. At the same time, for an American scientist, a study of the emergence of pluralism in our region focused on political parties could be seen as a departure from the essence of pluralism. Therefore it is important to reveal various meanings of pluralism and to identify the regenerative potential of the concept and, implicitly, of pluralist theory.

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[1] Luigi Graziano, "Pluralism in Comparative Perspective: Notes on the European and American Tradition", *Communist and Post-Communist Studies*, Vol. 26, No. 4, December, 1993, p. 341.

[2] Ralf Dahrendorf, *Reflecţii asupra revoluţiei in Europa*, Bucureşti, Humanitas, 1993, p. 14.

A Comparative Perspective on Pluralism and Interest Groups

No doubt, the antecedents of pluralism can be found in the ancient Greek thought, namely in Aristotle's vision that the state is multiple in its own nature and involves separation among its specific activities. This view was the origin of the modern principle of the separation of power, which is considered to be one of the basic principles of pluralism.

But those who named themselves "pluralists" for the first time were some British scholars, in the first decades of our century. Particularly H.J. Laski and J.N. Figgis expressed a reaction against the monist state and blamed it for the excessive centralization of power and for making human experience uniform. They pleaded for a "pluralist state", a decentralized one, where the power is diffused to the local authorities and autonomous associations as well[3].

Early European pluralism had, in its turn, some American roots in the federalist ideas of James Madison and in William James's philosophy as well. Despite various opinions regarding the relationship between these two expressions of pluralism, it is obvious that they "feed" and stimulate each other. And, of course, they have preserved and developed some specific features. In passing over the Ocean, pluralism lost its abstract character based on a prescriptive view and acquired an empirical character and a descriptive orientation by focusing on the theory of interest groups.

Although all Western societies are pluralist democracies, the experience of the United States in this respect is considered to be the most significant one. Pluralism was a characteristic of the United States from the very beginning. One favorable circumstance was the diversity of those who established the new nation: they were new emigrants of various origins. In addition, a new diversity emerged, resulting from the regional variety in a huge country. But it did not impede the convergence of some principles and interests.

The expression of this convergence was the American *Constitution*, which is based on two principles: separation of powers and federalism. For those who are interested in the bases of pluralism *The Federalist Papers* are very instructive readings. Most remarkable is James Madison's *Federalist No. 10* approach to "factions", in which many people will see the prototype of interest groups and political parties. Unlike the pluralists of the XXth century, Madison did not consider that factions are necessarily something good, but since their causes are in human nature itself, they cannot be removed and the only method of "curing the mischiefs" is to control their effects[4]. Although Madison did not use the word "pluralism", he expressed a pluralist view.

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[3] H.J. Laski, "The Pluralistic State" and J.N. Figgis, "Churches in the Modern State", in Paul Q. Hirst, ed., *The Pluralist Theory of the State*, London and New York, Routledge, 1989.

[4] James Madison, "The Federalist Papers. No.10", in Theodore J. Lowi and Benjamin Ginsberg, *American Government: Freedom and Power*, New York, London, W.W. Norton & Company, 1992, p. A 35.

Pluralism started to develop as a new trend in American political science at the beginning of the XXth century, thanks to those theorists who considered group interests as the fundamental factors for economic and political behavior. Arthur F. Bentley inaugurated this new trend in his book *The Process of Government* (1908)[5]. David B. Truman carried on Bentley's work, giving his own book a title very suggestive for this affiliation: *The Governmental Process...*(1951)[6]. Robert A. Dahl is the outstanding personality of pluralist theory in the second half of the century. Focusing on the relationship between interest groups and government, Dahl searched for an analytical model of pluralist democracy. He identified it in the so-called "polyarchy", using an ancient Greek word in order to describe a modern system in which the power is distributed among various agents[7].

Certain criticisms have been expressed regarding American pluralism. Theodore Lowi, for example, reproached it especially for the exaggerated role conferred to groups, which weakened democratic government[8]. These criticisms have influenced pluralists to reconsider some of their ideas. Most of the "new" pluralists are preoccupied with making distinctions among various types of groups and identifying ways of reconciling private and public interests. If in the 1950s-1960s the interest group theory was developed through the theory of pluralism, in the recent decades it has been developed as an independent field or subfield of research in the United States.

In the last half of the century, comparative studies on pluralism and especially those on interest groups have made great progress in defining the theoretical framework and basic concepts as well as in identifying some functional equivalencies and specific features. It is to be mentioned that while most American scholars prefer to use the term "interest groups", many Europeans consider it to be interchangeable with "pressure groups"[9].

The systematic comparative study of interest groups started at the end of the 1950s and the beginning of the 1960s. Most studies were part of more comprehensive inquiries, such as those conducted by Gabriel A. Almond and Sidney Verba on civic culture[10]. In the following decades, comparative studies focused distinctly on interest groups, emphasizing their origin and maintenance, and also their role in public policy-making. An example is the approach of interest group systems in twelve Western democracies, coordinated by Clive Thomas,

[5] Arthur F. Bentley, *The Process of Government: A Study of Social Pressures*, Bloomington Ind., The Principia Press, 1949.

[6] David B. Truman, *The Governmental Process: Political Interests and Public Opinion*, Second Ed., New York, Alfred A. Knopf, 1971.

[7] Robert A. Dahl. *Polyarchy: Participation and Opposition*, New Haven, Yale University Press, 1971.

[8] Theodore J. Lowi, *The End of Liberalism: Ideology, Policy, and the Crisis of Public Authority*, New York, W.W. Norton & Company Inc., 1969.

[9] See, for example, Martin J. Smith, *Pressure Politics*, Manchester, Baseline Books, 1995.

[10] Gabriel A. Almond, Sidney Verba, *Cultura civică: Atitudini politice și democratice în cinci națiuni*, București, Editura DU STYLE, 1996.

which offers an analytical framework for understanding the factors that influence group activity[11].

Several similarities and differences regarding the comparison between American and European interest group system are to be mentioned. On the one hand, there are some common trends in an international environment characterized by a process of transnationalization of interest group activity: proliferation of interest groups and the increasing complexity of their activities; increasing fragmentation of interest group systems; and development of new techniques of lobbying.

On the other hand, it is obvious that in the United States interest groups are more numerous and more visible than in any other country; they demonstrate the ability to use very sophisticated strategies and tactics, such as: contract lobbyists and new lobbying techniques, involvement in elections through Political Action Committees; the use of the courts in certain cases, and so on. In the countries of the European Union, some specific features were created by the provisions of the Maastricht Treaty. Since 1993 an increasing number of decisions have been taken at the European level in a very complex system, with multiple points of access. Consequently, interest groups have to lobby not only at the national level, but also in various European institutions. One way to maximize the groups influence is through joining European federations of groups, the so-called "Eurogroups". As a result of interactions among various groups and institutions at various levels many policy networks have developed.

Aspects of Pluralism and Interest Groups in Central-Eastern Europe

The changes which have occurred in Central-Eastern Europe since 1989 have generated various interpretations. Some scholars have expressed their belief that these changes are moving in a pluralist direction and they are a stimulus for revisiting the theory of pluralism itself; other have expressed some doubts.

The problem of compatibility between these countries and pluralism was approached even before the 1990s. During the Cold War, the absolute opposition between pluralism and totalitarianism was a very popular image among Western political scientists. However, at the end of the 1960 and in the 1970s some attempts were made to demonstrate the compatibility of marxism and pluralism[12]. Such attempts were encouraged after 1985, by the political changes initiated by Gorbachev, who quite often used the formula "socialist pluralism".

However, there are many competing opinions regarding this matter. Most differences result from different understandings of pluralism. Supporters of the

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[11] Clive S. Thomas, ed., *First World Interest Groups: A Comparative Perspective*, Westport, London, Greenwood Press, 1993.

[12] See Andrej Korbonski, "The Decline and the Rise of Pluralism in East Central Europe, 1949-1989, or How Not to See the Forest for the Trees", *Communist and Post-Communist Studies*, Vol. 26, No. 4, December, 1993, pp. 441-443.

above mentioned formula gave it a broad meaning, by identifying pluralism with the emergence of various groups which try to oppose a regime or of various factions within the one party. Opponents relied on a narrower understanding of pluralism. If we take into account Giovanni Sartori's definition of pluralism as meaning "constitutional pluralism", that is division of powers (checks and balances), and party pluralism[13], it follows that this concept is incompatible with a regime with a single center of power and one party. Although the extension of pluralism in to the pre '90s regimes of Eastern and Central Europe is doubtful, it is also symptomatic for the period when new paradigms were searched for, in order to describe some changes which had occurred (like "post-totalitarian regime", developed by Juan Linz in 1975[14]).

Considering the controversial nature of compatibility between pluralism and totalitarian regimes, another paradigm was very much in use for describing the changes: "civil society". Beginning in the early 1980s, when "Solidarity" was founded, continuing with the years of "Perestroika", civil society was often invoked to define those social activities based on free association independent of the state.

After the fall of communism, civil society has also been a key analytical concept, although on various meanings. Sometimes it includes any kind of free association (political or not); at other times, it considers only those associations which are apolitical or even critical towards politics.

In the new context, pluralism is more and more often considered to be the best word to characterize the new power relationship. What does pluralism mean in Eastern-Central Europe? First of all, a multiparty system. The evidence for this claim is the impressive proliferation of parties in all the countries in the region, although many of them had various other names. Constitutional pluralism was approached in different ways. Although all of the countries adopted certain formulas for renouncing a unique center of power and renewing governmental institutions and process, only Bulgaria and Romania decided to replace their constitutions immediately. According to the *Constitution of Romania* (1991), political pluralism is among those few provisions which shall not be subject to revision[15].

Recent developments confirm the assertion that the Central and Eastern countries are advancing to crystallize pluralism. In Romania, for example, parties entered a new stage regarding their organization, programs and activities. In accordance with a new *Law of Political Parties* (1996), 10,000 members are necessary for an organization to be registered as a party[16] (not 251, as required in the early 1990s). As a consequence of the new law, before the 1996 parliamentary and presidential elections, 51 parties were officially registered (in comparison with

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[13] Giovanni Sartori, *Parties and Party Systems: A Framework for Analysis*, Vol. I, Cambridge, Cambridge University Press, 1976, pp. 13-18.

[14] Juan Linz, "Totalitarianism and Authoritarianism", in Fred I. Greenstein and Nelson W. Polsby, eds., *The Handbook of Political Science: Macropolitical Theory*, Reading, Addison Wesley, 1975, pp. 336-350.

[15] *Constituția României*, București, Regia Autonomă "Monitorul Oficial", 1991.

[16] "Legea partidelor politice", in *Monitorul Oficial al României*, No. 87, 29 April, 1996, p. 3.

200 parties, before the 1992 elections). Among other associations trade unions are most prominent because of their role in defending employees' interests and rights; at the national level, their confederations (peak associations) are consulted, as part of a tripartite relationship with employers' associations and the government, regarding the projects of certain laws. At the same time, the number of non-governmental organizations, which are concerned with various fields, such as education and culture, science and technology, human rights etc, has continually increased. Their proliferation has been encouraged by support on their behalf from similar organizations in other countries.

These developments can be considered arguments for asserting that many features of Western system of interest groups, particularly their proliferation and transnationalization of their activity, have started to characterize our region too. Undoubtedly, this process has essentially a positive influence on the democratic functioning of society. But some perils have to be avoided. One of them is "hyperpluralism", that is an exaggerated proliferation of various groups followed by an exaggerated growth of their capacity to influence and have access to the policy-making process. Regarding political parties, the dangers consist mainly in the so-called "polarized pluralism" (in Sartori's terms), characterized by the presence of too many relevant parties separated by deep cleavages. The consequence could be the so-called "Balkanization", or an excessive fragmentation of the political system.

We can conclude that in Eastern and Central Europe the legitimate institutions and the basic framework for pluralism have been established and that the countries are developing pluralist tendencies with certain particularities. But these countries need more time to learn what pluralism means in theory and practice as well.

COMPARATIVE PARTY SYSTEMS
IN EAST CENTRAL EUROPE

VALENTIN NAUMESCU

ABSTRACT. Giovanni Sartori developed in '70s a famous and comprehensive theory of political party systems that combined two variables: the number of parties in National Assembly (Parliament) and the style (behaviour) of those parties. According to this approach, he elaborated six major types of party systems:

1. *Single-party system*, when only one party is allowed (right or left, fascist or communist) such as the Communist Parties in East Central Europe, between 1948 and 1989;

2. *Hegemonic party system*, where other political parties are permitted and can participate in the general elections, but one party is strongly predominant, as in Mexico for the past 65 years;

3. *Predominant party system*, in which there are some competing parties but one party gains the majority of votes and governs alone a long period of time (at least four consecutive elections), but can be and finally is defeated by the opposition parties, as happened in Sweden, Ireland or Japan;

4. *Two party system*, a very competitive system (UK, USA, Australia) in which there is alternation of single-party governments between those two parties;

5. *Moderate pluralism*, where three to five relevant parties with coalescent behaviour tend to form bipolar, centre-right versus centre-left governmental coalitions or two of three parties. Almost all parties are potential coalition partners. Electorate's preferences are generally, speaking, centrist and party competition is centripetal (moving to the centre). Example: Germany.

6. *Polarised pluralism*, when there are usually more than five parties, with significant "ideological distance" between them. There is at least one anti-system party, which rejects the democratic rules. Generally, the competition is strongly polarised and centrifugal (moving to the extremes), based on principles, emotions and passions, rather than arguments, reasonable debates or ability to compromise. Example: East Central Europe (ECE) in the inter-war period and some South Eastern countries in the early 1990s.

A) Inter-war party systems in ECE

The inter-war ECE party systems were, actually, quite short. For instance, what happened in Poland was typical for the whole region: 32 political parties obtained representation in the Sejm after the 1918 elections and had great difficulty in working together. Parliamentary system became more and more chaotic until it was abolished by a military coup, led by Marshal Pilsudski, who instaured a personal dictatorship. In the late 1930s, in Romania, Yougoslavia and Bulgaria there were monarchical dictatorships and in Hungary a military one. Almost everywhere assassinations of leading politicians and the rise of fascists groups threatened the political order (Crawford, 1996).

The inter-war party systems were characterised by polarised pluralism:

- many parties in parliaments (e.g. 32 in Poland), with significant ideological distance between them;

- several extremist and fascist anti-system parties, that tried to abolish the liberal democratic systems (e.g. in Germany, Austria, Poland, Hungary, Romania)

- very severe political competition, strongly polarised and centrifugal, with an increasing support for extremes during the 1930s, as in Germany.

The exception to this scenario came from a coalescent party behaviour that emerged in Czechoslovakia under the strong moral leadership of their first President, Tomas Masaryk.

B) Post-war party system

Almost everywhere the Communist Party was the only one allowed. Even when other political parties were permitted (e.g. the People's Party in Czechoslovakia or the Peasants' Party in Poland) they were obedient to the Communists. That's why we can apreciate these situations as *single party systems*, behind a mask of competition provided by satellite parties.

C) Party Systems in ECE since 1990

Repeating the inter-war scenario, in the early '90s the post-revolutionary party systems were characterised by a multiplicity of political parties and a lack of consensus between most of them.

It would be a mistake, however, to classify these system as pure "polarised pluralism", because they were "in-between", with components of both polarised and moderate pluralism (Crawford, 1996).

a) The emergence of moderate pluralism

After the first or second election, these were three to five relevant parties with a degree of coalescent behaviour, such as 1990-1992 DEMOS coalition in Slovenia, 1990-1994 in Hungary or the Czech Republic from 1993.

The coalitions in ECE have been often bipolar, centre-right versus centre-left, for example in Bulgaria (1990-1994) when the democratic SDS constituted one pole and the BSP reformed communists the other one. The same situation were in Romania, beginning with 1992, when the whole political system were structured based on two main forces: the centre-right Democratic Convention and the centre-left PDSR.

In the former Czechoslovakia, 1990-1993, the right-left bipolarity was expressed by two party-systems, each of them concentrated in one of the two republics. The party systems were already built around the ethnic/national cleavage represented by the two republics within the federation (Crawford, 1996).

b) The resistance of polarised pluralism

There are still some fascist and anti-system parties, but these have been quite small in electoral support, such as the Republic Party leaded by Sladek in the Czech Republic. The only possible exception could be Romania, where Vadim Tudor and his PRM represents 15 per cent of the preferences.

On the other hand, no really hard-line Communist (extreme left-wing) parties remain relevant, with the possible exception of the Slovak ZRS.

Bulgaria had some extreme monarchist and ultranational parties. The Slovak SNS and HZDS were both anti-system parties in the period 1990-1993.

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In all ECE countries, *political party competition was strongly polarised and centrifugal*, but especially oriented against the Communists in the first elections (in Romania, until the third elections) and then regarding the speed of the economic reforms.

There were many parties in the various parliaments, with significant ideological distance between them and a lack of coalescent behaviour, sometimes even in the same coalition.

In Bulgaria and Romania, for instance, ideological polarisation was very marked in the early 1990s. The Bulgarian SDS and its leader Filip Dimitrov promoted a radical anti-communism, which made any cooperation with the BSP almost impossible. In Romania, the same attitude belonged to Corneliu Coposu and the Democratic Convention till 1996.

In Hungary, party competition was also highly ideological between the MSZP and MDF, mainly over the issue of de-communisation.

Due to the emotional approaches and the lack of experience, the new political systems in ECE countries had several parliamentary and governmental crises.

c) Contradictions, confusion, fragmentation and instability

The political trends that emerged from the first elections covered almost the whole right-left spectrum, in an incredible *confusion*. For instance, in Czechoslovakia OF included among its leaders both Petr Uhl, a convinced Trotskyist, and Vaclav Klaus, a famous neo-liberal monetarist economist. It was self-evident that such heterogeneous groups would begin sooner or later to split into different factions. This phenomenon started once with the normalisation of politics, after the defeat of the former Communist parties.

The Polish "Solidarnosc" split into about fifteen different parliamentary groups, no later than one year and a half after its electoral victory in June 1989. The Czech OF divided into three new factions. The Romanian FSN separated into two and the Bulgarian SDS split in various directions before the 1994 elections (Crawford, 1996).

There was an intensive proliferation of political parties in ECE, which clearly affected the political stability. For instance, *fragmentation* reached a huge level in Poland in 1991: 29 parties obtained parliamentary representation and only two parties scored over 9 per cent!

On the other hand, there was a high degree of *volatility* among parliamentary factions. In Hungarian Parliament-probably the most stable ECE parliament in 1990-1994-10 per cent of deputies left their previous party in order to establish ten new parties, another 10 per cent changed their memberships to existing parties and 5 per cent simply resigned. Totally, 25 per cent of the electoral result changed during the four years.

d) Instead of conclusions

Instability within the party systems has decreased somewhat since the mid 1990s.

Anyway, the features described above are typical for undeveloped party systems. Due to the newness of the political situation, party fragmentation was inevitable. In a way, transitions to democracy needs several parties at the beginning, in order to cover the "rainbow" of interests and attitudes emerging after many decades of totalitarian system (Crawford, 1996).

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LANGUAGE LOYALTY AND GROUP IDENTITY
IN THE SOUTH ASIAN COMMUNITY IN BRITAIN

SANDA TOMULEȚIU

ABSTRACT. Drawing on the experience of the South Asian community in Britain, the present paper focuses on the relationship between mother tongue, ethnic identity, and cultural preservation, trying to surface certain cultural patterns within the analyzed ethnic group.

Introduction

With the increasing awareness of other modes of 'being in the world' - grown out of the blurring of spatial and temporal boundaries as formerly defined by traditional geography and history - the old concepts of identity, whether national, cultural or religious, are being challenged, thus opening ways to a new, post-colonial perspective. Within the contemporary fore-grounding of community-identities, language is particularly high on the priority list, as "It is not merely the audible and recognizable evidence of common ground, but it can be used to propagate the very identity it demonstrates" (Quirk, 1993: 32-33).

Of the non-White ethnic groups that form the cultural and linguistic diversity of Britain, the South Asian community is the largest, according to the HMSO publication Britain 1995. Of the population of the UK, 2.7% is formed by South Asians from India, Pakistan and Bangladesh, of which half were born in the UK (30-31, cited in Townson, 1995: 17). It is their community and the nexus between group identity and language loyalty that will be the focus of the present paper.

The first section will approach the subject by looking at the place held by the mother tongue of the South Asian communities in their homeland. Building upon the argument of section one, the next step will consist in following further differentiation both within and among the South Asian communities with regard to mother tongue, in direct connection with their perceived national/cultural identity. Based on the aspects analyzed, the conclusions will try to give an insight into the future status of mother tongues among South Asians in Britain.

Mother tongue in the 'homeland'

The importance attached by South Asians to the mother tongue is reflected in the references to it in their folklore: "Language is the lifeblood of a people" (de Zoysa, 1991:142). "Our language is Punjabi. It is our life and soul, it is a treasure of folksongs" (Dhani Ram Chatrik in Mahandru, ibid.:115); "One's language is the

provenance / Of all developed thought; / Until we know our mother tongue / Our hearts remain distraught" (Bhartendu Harischandra, translated by Rupert Snell, in Verma, ibid.: 103).

Given the complexity of the South Asian linguistic diversity at 'home' - Fasold (1995: 20) says that India, "the sociolinguistic giant", has "several hundred" linguistic varieties - it may be helpful to start by clarifying what exactly is understood today by 'mother tongue' with application to the South Asian context. Originally drawing on the conventional idea of the mother as the one passing the language to her children, - Romaine (1994: 38) gives an example of the father in this role, in the Vaupes area of Colombia and Brazil, but the idea is the same - 'mother tongue' designated until 1941 "the language first learned by the respondent and still spoken"; following the Official Language Act of 1969, it came to mean "the language first learned and still understood" (ibid.: 37).

The linguistic, religious and political complexity of the Indian social landscape, however, broadens the designation sphere of the concept, making it somewhat ambiguous: it can mean the national language - as Urdu is for Pakistani speakers of Punjabi - or the language spoken in the home which is also the national one - as it is the case of Punjabi for the Sikhs, to give but two examples. In multilingual India, languages follow a diglossic pattern of use, each with its well-established function. Thus, according to Romaine, there is a language for 'high' functions, such as writing, reading, broadcasting, and the home language, serving 'lower' purposes (e.g. friendly conversations). The low variety (L) is learned in the home and is used "in familial and familiar interactions", while the high variety (H) is acquired in school and is always related to institutions outside the home (ibid.: 46, 47 passim) which is what makes it synonymous with power and prestige. It is precisely through this diglossic use of languages that the socio-political significances attached to language are being constantly reinforced.

In whichever of the above-mentioned positions it may be, as Fishman (cited in Fasold, 1995: 3) pointed out, the mother tongue "serves as a link with 'the glorious past',"being"not only a vehicle for the history of a nationality, but a part of history itself". Within that history politics and religion play a major role when it comes to national or cultural group-awareness. Both had helped develop a strong sense of national/religious identity, meanwhile constructing tight-knit, sometimes rather rigid, communities.

When high symbolic value is being attached to a language, this has many chances to become identified by the community investing it with that value with the very notions it stands for, that is national unity (e.g. Hindi) or religious allegiance (e.g. Urdu). This happens to be the case with Urdu, Hindi and Punjabi, which function as tokens of socio-cultural identity for the Gujarati and Punjabi Muslims, the Hindus in Punjab and Gujarat and respectively, the Sikhs. The language invested with high national symbolism is usually the language of government, literacy or religion, and has played some major part in the making of national/cultural identity.

In the di/multiglossic use of languages (or dialects) it is the high variety that gets the primary language loyalty: Hindi, as the language of education in India, also connected with the liberation movement (Verma, 1991: 104), Urdu, as the

language of national unity but also of education and government in Pakistan (Khan, ibid.: 130), then Bengali with its direct connection with the nationalist movements of Bangladesh in the 1950s and 1960s (Chakravarty and Narain, 1986 in Husain, ibid.: 76), also Punjabi, "understandably treated with deep affection by Sikhs", the language of their Scripture and the repository of "a strong literary tradition dating back to the fifteenth century, and of a rich folk literature" (Mahandru, ibid. :117).

If, on the one hand, the language adopted as mother tongue for a particular ethnic community, for the reasons above-mentioned, serves towards creating group-solidarity and group-identity - either on ethnic or religious grounds - language loyalty can also serve to build what Fishman calls 'contrastive self-identification' (cited in Fasold, ibid.). When misunderstood or overemphasized, this Other-conscious ethnic identity can seriously damage inter-community relations, having the potential of creating racial conflicts. About the divisive force of language in India there is a magistral description in Salman Rushdie's novel *Midnight's Children*:

> India had been divided anew, into fourteen states and six centrally administered 'territories'. But the boundaries of these states were not formed by rivers, or mountains, or any natural features of the terrain; they were, instead, walls of words. Language divided us: Kerala was for speakers of Malayalam, the only palindromically-named tongue on earth; in Karnataka you were supposed to speak Kanarese; and the amputated state of Madras ... enclosed the aficionados of Tamil (1982: 189).

Values and attitudes

In the socio-cultural context of Britain, the already complex linguistic identity of the South Asians enters the sphere of new challenges coming both from within the community (i.e. the second-generation) and from the mainstream culture (i.e. English), the importance of the mother tongue as marker of cultural identity being implicit in the responses to these challenges.

As "it is in the nature of proud historical identities, and above all communal faiths, that they are cherished and give comfort regardless of what others think"; (Modood, 1992: 82) a high priority with the Indian communities in Britain is the preservation and affirmation of their group-identity. Therefore, the social activities within the community, aimed at the maintenance of a well-identified cultural profile, constitute the way of affirming this group-identity against the British and also, against other ethnic groups. Thus, while being an instrument of ethnic solidarity, language can also lead to ethnic separatism (see the first section). A comparison between Hindu speakers and Muslims in Britain is rather relevant with respect to the nexus between language significance in the homeland (Urdu as separatist language of religion while Hindu - the language of national prestige with whom almost any Indian could identify) and the importance given to community language in the British social context. If Hindus hold a special place among the South Asian groups - meaning that of all groups they are the best integrated into the British society - due to several aspects such as living in nuclear families, having jobs outside their own community, but also diffuse patterns of settlement and social

networks (Verma, ibid.: 106-109 passim), the extended family of the Muslims, on the other hand, their tradition of biradari - in its turn "an important element in the maintenance of purdah" - the regular links with the homeland, and the ethnic economy (Khan, ibid.: 135) show a tight-knit community, with every condition for a high mother tongue-loyalty met: Khan (132) records a relevant statement in this respect, of a 35-year-old Urdu speaker: "Urdu is our national language, symbol of our cultural heritage and religion. Our community is nothing without Urdu. It keeps the community united." This attitude points to an understanding of identity defined, hence confined by national, and respectively group borders, having the language as the seal of ethnic identity. An exemplification of the way in which language in Britain still follows old patterns, brought over from India, is given in Hanif Kureishi's novel *The Buddha of Suburbia*: in the name of "authenticity," Karim is asked to do the Indian (Bengali) accent; he tries to resist as it is "a political matter" to him. (1990: 147).

It is precisely at this level of 'contrastive group-identification' (to adapt Fishman's coinage - mentioned in the first section - to the present context) that a major divide within the community takes place namely that between first and second generations of settlers. It is generally the first generation that emphasizes the necessity of maintaining an ethnic-centered identity, supporting, therefore, the practice of religious and life-cycle rituals, cultural and religious festivals, and social ceremonies ensuring the maintenance of the culture and the language of the community; for instance, Khan mentions the "public gatherings [Mushairas and Qawwalis], where poets recite lyrics known as gazal, the most popular of all the classical forms of Urdu poetry" as being among the cultural activities especially common with the first generation of settlers (1991: 135). There is, however, another reason behind their concern with maintaining culturally-specific community activities, via mother tongue, namely the ensurance of 'trans-generational cultural reproduction'. As Appadurai puts it, with the already-familiar world-wide phenomenon of immigration, when tradition,

> ethnicity, kinship and other identity-markers ... become slippery, as the search for certainties is regularly frustrated by the fluidities of transnational communication ... the pains of cultural reproduction...are, of course, not eased by the effects of mechanical art (or mass-media, if you will) since these media afford powerful resources for counter-nodes of identity which youth can project against parental wishes or desires (1994: 334-335).

In contrast with the huge input from the British culture by way of mass media, comes the little, if any, contribution made by the South Asian communities in this direction for the younger generations (Verma, 1991: 111).

Looking at the second generation, the language loyalty of the British-born South Asians is dual: to the community language, by way of descent, but also to English, as the language of the country of adoption, synonymous with achievement and independence. If the key words for the majority of first generation settlers seems to be *preservation* and *resistance*, the word that appears to be defining the younger generations is *integration* - that is linguistically 'translated' in an increasing

tendency towards language shift. As Janet Holmes rightly observes (which applies perfectly - as a principle - to the South Asian youth), "Rapid shift occurs when people are anxious to 'get on' in a society where knowledge of the second language is a pre-requisite for success! (1995: 66) Khan (1991: 132), Dave (ibid.: 94), and Mahandru (ibid.:121) present the second-generation Muslims, Gujarati and respectively Punjabi as shifting towards English and sharing their loyalties to two cultures. As Khan highlights the role played by English in the establishing of the young Indians' identity,

> The importance of English in a British setting, however, especially for second-generation speakers, should not be underestimated. The second generation of Urdu-Punjabi speakers have access to two cultures and two identities: they have loyalties to both their community and to mainstream British society... Comments on this subject included: English is the most important language because we live in England...We learn Urdu because our parents want us to. It is really not very important. I don't know why we have to learn Urdu - we use it only when we go to Pakistan. Here English has more value than Urdu (ibid.: 132).

Their loyalty to the community is however being slowly obscured by their loyalty to the mainstream culture - naturally more appealing to someone born in it and lacking any ties with a culturally different past. Also, as Khan argues, "subject to strong pressure from their parents to retain their religious and cultural identities which are closely associated with language" the linguistic attitudes of the second generation can be "seen as a function of the tension between these two forces" (ibid.). Kureishi illustrates the increasing gap between the loyalties - cultural and linguistic - of the first and second generations of settlers in a striking opposition of values, of significance being his depiction of the resistance inherent in Anwar's sense of ethnic identity: Anwar (first generation) is going on a "major Gandhi diet" in the name of "our way" because of his daughter's refusal to marry Changez while Karim (Anwar's son) is "homily on contemporary morals" (1990: 60).

Conclusions

The linguistic picture of the South Asian community in Britain is far from being a homogeneous one as both sociological studies and post-colonial fiction acknowledge. Any attempt at understanding the relevance of languages - particularly those having the status of mother tongue - for the South Asian sense of ethnic identity ought to start with the importance conferred to the Indian languages on the subcontinent. Having its roots in what Firdaus Kanga calls "the visceral hatred that poisons the subcontinent" (1991: 236) the linguistic identities are simultaneously built on *unity* and, paradoxically, *division*, the mother tongue functioning, consequently, as marker of group-identity as opposed to OTHER group-identities.

In Britain, OTHERNESS is being preserved in the significance attributed to the mother tongue, particularly by first-generation speakers, mainly in the emphasis on the maintenance of a separate ethnic identity in the present, by continuing the

tradition of community life inherent in the Indian society - a kind of world within a world - (with the exception of those who have chosen integration over ethnic separatism), and in the future by way of imposing the 'mother tongue' (questionable in the case of some British-born South Asians) upon the younger generations.

However, as Romaine says, "Identification with a language and positive attitudes towards it cannot guarantee its maintenance" (ibid.: 54). The force that moves the linguistic tide towards language shift - passing through diglossic patterns of use, code switching and bilingualism - is the young generation. However, as Romaine argues, diglossia and code switching can be "positive forces in maintaining bilingualism" (ibid.). Whether South Asian mother tongues will survive the pressure of the conjugated forces of English - as the language of communication, education, mass-media, ultimately achievement - and the youth - as inherent factor of change in any social area, seems to depend on the willingness of the more conservative to re-define their sense of community and the subsequent place of mother tongue in the British context. For, although "the family ties between the various generations seem to be quite durable though there are signs that the youngest generation may break away from some of these connections (Ballard and Ballard, 1977, cited in Mahandru, ibid.: 122).

By reinforcing the indestructible nexus between mother tongue and ethnic identity or cultural preservation, the potential for resistance on the part of the young can only grow, ultimately the choice of identity being in favor of the culture that offers the most while also lacking the tension that often is all that remains of old Indian certainties (i.e. the family, the kinship, the community).

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LES PERSPECTIVES D'UNE POLITIQUE
REGIONALE EN ROUMANIE

MARIUS SUCIU[1]

RÉSUMÉ. Le régime communiste a essayé presque 50 ans d'éliminer les décalages entre les régions par une très coûteuse et inefficace politique d'industrialisation des départements moins développés du pays. Les gouvernements qui se sont succédés après 1989 ont laissé le développement régional au gré des mécanismes de l'économie libre de marché, même si les départements n'étaient pas tous préparés d'une manière égale pour entrer dans une économie de marché. Le resultat a été une augmentation alarmante des disparités interdepartamentaux. L'adhésion de la Roumanie à l'UE oblige le gouvernement d'élaborer et d'appliquer une politique régionale compatible avec les normes communautaires et capable d'apporter des corrections aux déséquilibres économiques territoriales. Par cette étude on se propose de mener quelques réflexions critiques sur les premiers projets concernant la politique régionale, élaborés par les experts du gouvernement roumain.

Mots clé: politique régionale; autonomie locale; aménagement du territoire; collectivités territoriales; intégration européenne.

La Révolution roumaine de 1989 a enterré, également, parmi d'autres, la politique communiste de systématisation qui s'est propose à créer un territoire national harmonieux et uniformément développé. Mais les gouvernements qui se sont succédés après 1989 ne se sont pas dépêchés de mettre en place une autre politique d'aménagement du territoire. Par contre, quand une initiative de développement régional est venue de l'intérieur - l'initiative de 1994 des départements du sud-ouest du pays Arad, Timis et Caras-Severin de se constituer dans une association pour la promotion économique du Banat - elle a été rapidement rejetée par les représentants de l'Etat qui la considérait dangereuse pour l'avenir unitaire du pays. Et malgré tout au début de 1996 à l'indication de la Commission Européenne et par l'aide du programme PHARE, le même gouvernement se lance dans l'élaboration d'une politique nationale de développement régionale. Toute cela démontre encore une fois que toutes les grandes affaires de l'Etat roumain d'après 1989 (décentralisation administrative,

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autonomie locale, privatisation, aménagement du territoire) sont des choix qui résultent surtout d'une contrainte extérieure que d'un débat national, ce qui fait que toute une série des questions viennent se poser quant aux chances de réussite de ces démarches mimétiques.

Tout ce processus de reforme qui définie d'ailleurs la transition sont synonymes avec une rupture systémique interne qui décompose les bases du système antérieur. Cette rupture a des lourdes conséquences sur la société. C'est pour cela que toutes ces affaires doivent être menées d'abord à l'arène du débat politique interne, du débat académique et surtout du débat publique. On ne peut pas construire une société démocratique sans engager toutes les catégories d'acteurs de la société.

On va essayer dans les lignes suivantes de s'impliquer dans le débat sur la politique régionale en Roumanie en structurant la problématique qu'on propose à analyser sur plusieurs niveaux:

A. Les objectifs du programme PHARE pour la politique de développement régional ;

B. Les problèmes régionaux actuels;

C. Le nouveau cadre opérationnel et institutionnel pour la mise en place d'une politique régionale;

D. Les difficultés de l'application d'une vraie politique régionale.

A. Les objectifs du programme PHARE pour la politique de développement régional en Roumanie

Le programme PHARE pour la politique de développement régional en Roumanie[2] a débuté au 1 février 1996 et s'est terminé au 31 janvier 1998. Ce programme a été coordonné par le Département pour l'Administration Publique Locale avec l'assistance d'un groupe des experts roumains et étrangers[3]. Les activités du programme ont été gérées par le Groupe de Travail Interministériel (Task Force) pour la politique régionale, forme par des représentants de quelques institutions centrales et des ONG.

Dans le cadre de ce programme se sont déroulées plusieurs actions:
- une analyse des disparités interdépartementales en Roumanie pour la période 1990-1994;
- une analyse de quatre régions pilote (les départements Alba, Dolj, Teleorman, et Vaslui);
- l'organisation des ateliers de travail et des visites d'étude.

Ces activités ont culminé avec l'élaboration d'une "Livre Vert" qui fait une synthèse des problèmes régionaux en Roumanie et présente les propositions sur le futur découpage opérationnel aménagement du territoire, sur les structures

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[2] Le contracte a été mis en marche par un consortium forme par le firmes Rambol (Danemark), EPRC (Royaume- Unie) et GOM Vlaams-Brabant (Belgique).

[3] Le groupe des experts a été formé par Torben Norkaer Hansen, Ioan Ianos, Gabriel Pascariu, Victor Platon et Dumitru Sandu.

institutionnelles qui vont gérer cette politique et aussi sur les instruments financiers qui vont permettre la mise en place de la politique régionale.

En synthèse, les objectifs principaux de ce programme ont été:

- offrir d'assistance aux départements du gouvernement, aux ministères, aux autorités départementales aux ONG et à d'autres institutions impliquées dans le processus de l'implémentation de la politique régionale;

- saisir les politiciens, les spécialistes et l'opinion publique sur les problèmes régionaux par la diffusion des informations et des documents dans ce sens;

- la préparation d'un rapport intitule "Problèmes régionaux et politiques de développement régional en Roumanie" en vue d'être publié par UE et OCDE.

B. Les problèmes régionaux actuels en Roumanie

Les disparités inter-régionales sont en général le résultat d'une construction géographique différenciée des territoires a travers l'histoire. Les disparités interdépartementales de Roumanie sont aussi le résultat d'une construction différenciée des territoires qui compose aujourd'hui le pays et aussi le résultat des politiques économiques et surtout industrielles qui ont été menées successivement. Le destin historique a fait que deux territoires, bien différenciés de point de vue économique, sociale et même culturel, se rejoignent après la première guerre mondiale: la Transylvanie et le Royaume de la Roumanie. La Transylvanie a évolué presque mille ans sous l'influence germanique et hongroise. Cette influence a eu des conséquences positives sur le développement de cette province: le développement d'un réseau urbain reparti d'une manière équilibrée dans l'espace; le développement d'une économie favorisé par la présence des ressources minérales importantes et une force de travail assez bien qualifiée; l'édification d'une infrastructure de base surtout dans le XIX-ème siècle (routes, chemins de fer); l'implantation d'un système administratif qui était reconnu comme l'un de plus efficace de l'Europe pour cette période.

Les provinces qui se trouvaient au sud et à l'est des Carpates n'ont pas eu la chance d'évoluer dans les mêmes conditions. Longtemps champs de bataille au contact des grands empires et sous l'influence de l'empire ottoman, les deux provinces n'ont pas bénéficié d'un développement socio-économique semblable au celui d'au-delà de Carpates. C'est pour cela que les quatre décennies d'indépendance et de construction moderne de l'Etat après 1877 n'ont pas réussi de rattraper les décalages qui se relevaient tout à fait évidents entre les deux composants de l'Etat roumain après l'unification de 1918.

Les politiques économiques et surtout les politiques industrielles constituent une autre cause majeure des disparités intra-régionales de Roumanie. Avant la deuxième guerre mondiale les activités industrielles se sont concentrées dans la proximité des ressources minérales et énergétiques en contribuant au développement de ces régions alors que les autres régions restaient encore agricoles avec un niveau des revenus très bas.

La carte Nr.1. LA DISTRIBUTION REGIONALE DE L'INDICATEUR GLOBAL DE DEVELOPPEMENT EN ROUMANIE
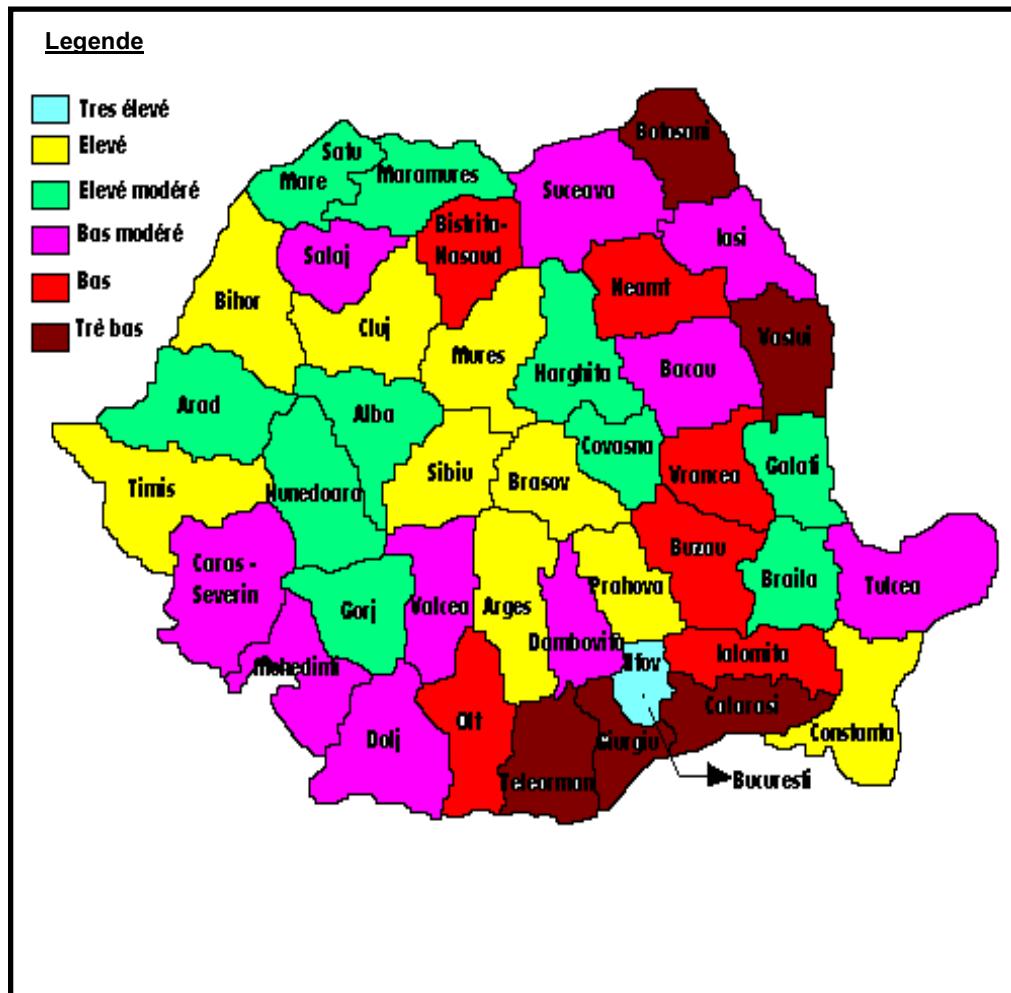
Après la guerre, les gouvernements communistes ont opté pour une unique solution du développement économique: le développement du secteur industriel. Ainsi, pour assurer un développement équilibre (en sens egalitariste) des toutes les régions, la planification socialiste a orienté les investissements industriels vers toutes les régions des pays, même s'ils n'étaient pas justifies de point de vue économique. L'effet des ces politiques a été l'industrialisation rapide des départements moins développés au détriment de ceux plus développés[4].

Par cette politique on a essayé d'utiliser intégralement le potentiel de la main d'oeuvre et la diminution des disparités interdépartementales. Mais ce mode de redistribution des ressources nationales s'est montrait finalement très coûteux et inefficace, ce qui a déterminé le ralentissement du rythme du développement économique, l'épuisement des ressources et l'entrée dans la crise qui a déterminé finalement la chute du régime communiste.

Après 1989 dans les conditions de l'édification d'un système économique basé sur les principes du marché, les ressources ont la tendance de s'orienter vers les régions où la maximisation de leur utilisation est possible. Ainsi, les régions plus pauvres qui ont connue un développement industriel artificiel, sont soumises à un impact très sévère du processus de la transition et des ajustements structurels exigés par le passage à un système économique de marché.

Les plus récentes études[5] sur les disparités régionales en Roumanie ont été fait par un groupe d'experts roumains et étrangers, en s'appuyant sur des indicateurs utilisés dans les pratiques de l'Union Européenne[6]. Les conclusions que ces études relèvent ne sont tout à fait inattendues:

- "Les poches de la pauvreté" sont représentées par les départements de l'est de la Moldavie - Vaslui et Botoșani - caractérisé par une pauvreté générale et par les départements de la plaine du sud - Teleorman, Giurgiu, Călărași et Ialomita - caractérisés surtout par une pauvreté culturelle.

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[4] En 1975 les objectifs de la politique d'aménagement du territoire fixaient un seuil minimal de 10 mld. lei production industrielle/an pour chaque département. En 1980 ce seuil a été remplacé par un indicateur de la production économique/habitant.

[5] Voir le rapport *Disparitati regionale în Romania, 1990-1994*, elaboré par le Groupe de Consultance Rambol, Bucuresti, 1996.

[6] Pour l'élaboration d'une hierarchie des département selon *l'Indicateur Global de Développement* on a utilisé 17 indicateurs groupés en 4 catégories: 1. ECONOMIE (PIB/hab; le taux de chômage); 2.INFRASTRUCTURE (la densité des routes/100 km²; densité des chemins de fer/1000 km²; abonnaments téléphoniques/1000 hab; lits d'hopital/1000 hab; pourcentage des élèves inscrits dans les lycées du total des jeunes entre 15-18 ans; la quantité de l'eau potable distribuée/personne/jour; pourcentage des ménages connectées aux systèmes de distribution de l'eau); 3. DEMOGRAPHIE (l'indicateur de la pression humaine; le taux de la migration nete; l'indicateur de la vitalité démographique; le pourcentage de la population urbaine);4. NIVEAU DE VIE FAMILIALE (voitures en proprieté privée/1000 hab.; pourcentage de la population > 12 ans à une éducation supérieure à l'école élémentaire; la migration extra-départementale; le taux de la mortalité infantile).

- La plupart des départements à un niveau bas et très bas du développement se trouvent en Moldavie et Muntenie, alors que la plupart des départements à un niveau élevé du développement sont localisés en Transylvanie et Banat.

- Les plus amples disparités ont été identifiées dans les domaines du développement économique et du niveau de vie des ménages pour lesquelles les valeurs moyennes de 5 premiers départements sont de 2.4 fois plus élevées par rapport aux 5 derniers départements, alors que, en ce qui concerne le PIB, les valeurs moyennes sont seulement 1.5 fois plus élevées.

- Plus de 45 % du nombre des entreprises enregistrées en Roumanie se trouvent concentrées dans les 8 départements plus développés qui détiennent seulement 30 % de la population du pays.

- En sens dynamique on a pu constater que la hiérarchie des départements est restée presque la même comme en 1990: maximum de stabilité, tant dans les cas des départements bien développés (Timiș, Brașov, Cluj, Sibiu), que dans les cas des départements les moins développés (Giurgiu, Botoșani, Vaslui, Călărași, Teleorman).

- En ce qui concerne la tendance d'augmentation des disparités interdépartementales, on a pu constater une faible augmentation (de 42 à 46 points) entre le premier et le dernier département au niveau de l'Indicateur Global de Développement (INDV) dans la période 1990-1994. Cette situation vient nous confirmer que le rythme de la réforme a été très lent en Roumanie. Une accélération du rythme de la réforme va déterminer sans doute une augmentation considérable des disparités entre les départements.

C. Le nouveau cadre opérationnel et institutionnel pour la mise en place d'une politique régionale en Roumanie

La mise en place d'une politique régionale exige quelques éléments fondamentaux:
- un découpage territorial pertinent
- un cadre institutionnel
- des instruments financiers
- un cadre normatif adéquat.

A la Conférence sur le développement régional de mai 1997, des responsables administratifs, experts et politiciens ont proposé un découpage territorial opérationnel dont la maille soit similaire et "ajustable" à la maille régionale de l'Union Européenne. Ce projet regroupe les 42 départements en 8 régions. Fondé sur les principes, classiques en la matière, d'identification des niveaux de disparités d'infrastructure et économie, des types de structures socio-démographiques auxquels sont associés, la connaissance des interactions entre les lieux, ce découpage établit 7 unités de dimensions voisines, plus Bucarest et son environnement immédiat.

La carte Nr.2. *LES REGIONS DE DEVELOPPEMENT PROPOSEES POUR LA NOUVELLE POLITIQUE REGIONALE EN ROUMANIE*
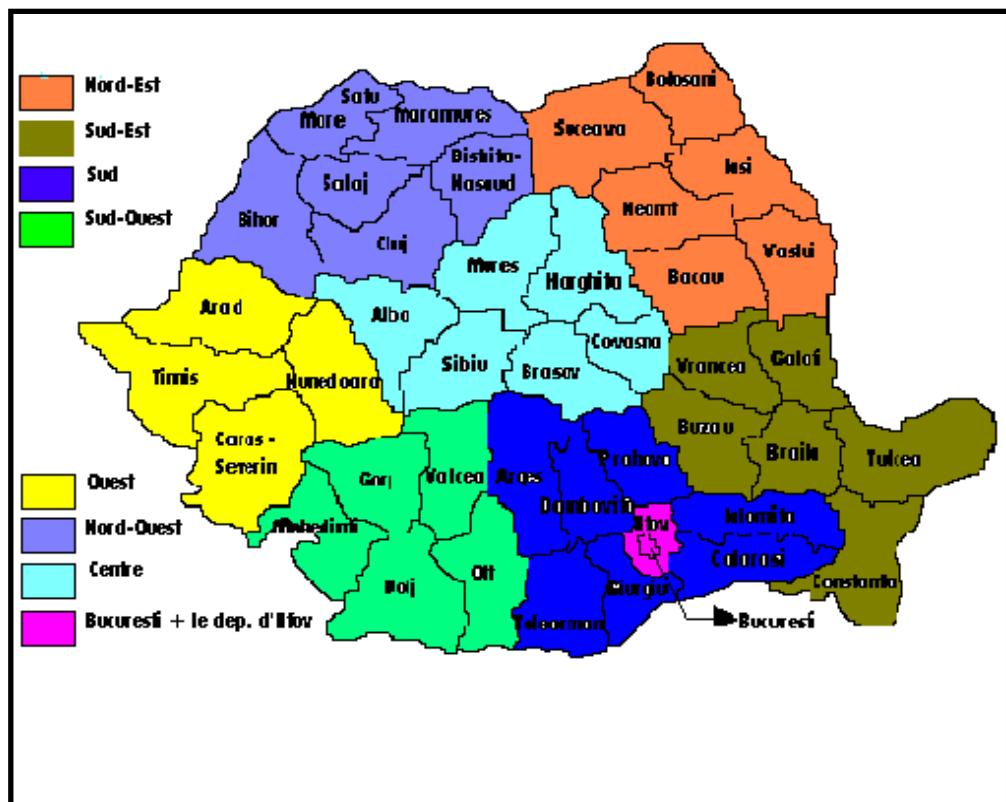
Dans la future politique régionale on va s'opérer avec plusieurs types d'unités territoriales:

- *régions de développement* = groupements de départements voisins qui sont ou pourraient être intégrés de point de vue fonctionnel;
- *régions statistiques* = régions de développement utilisées pour la collecte et l'analyse des données;
- *sous-régions* = groupement de départements voisins dans l'intérieur d'une même région avec des problèmes de développement similaires;
- *aires prioritaires* = groupements des villes, communes ou départements avec des problèmes spécifiques (aires de pauvreté; aires mineures; aires industrielles en déclin; aires à un haut niveau de pollution, etc).

En ce qui concerne la mise en place d'une structure institutionnelle pour la politique régionale les responsables roumains ont choisi parmi les variantes offertes par les pratiques des pays de l'UE la variante d'une autorité administrative centrale déléguée. Dans ce cas on considère que les responsabilités politiques et administratives seront séparées et ainsi cette institution va avoir un haut degré d'indépendance fonctionnelle. Cette unité centrale, responsable avec l'élaboration et l'implémentation de la politique régionale va être nommée Le Conseil National pour le Développement Régional (CNDR) et va être directement subordonné au gouvernement. Les attributions de CNDR seraient:

- l'élaboration du Programme National de Développement Régional

- la formulation des propositions auprès du gouvernement pour la constitution du Fond National de Développement Régional (FNDR);

- la prise de décisions concernant l'allocation de FNDR pour les différents fonds régionales;

- l'élaboration des propositions législatives et des nouvelles réglementations dans le domaine du développement régional;

- la stimulation de la coopération entre les régions, sous-régions, départements et municipalités;

La structure de CNDR devrait se baser sur les principes de la représentativité de différents secteurs relevants pour le développement régional:

- ministères et d'autres organisations et agences centrales (Agence Nationale de Privatisation, FPP, Commission Nationale de Statistique);

- des ONG (Fédération des Villes de Roumanie, associations de PME, syndicats, patrons).

CNDR va être assisté d'un Secrétariat Exécutif et va avoir à sa disposition plusieurs groupes opérationnels:

- Le Groupe pour l'élaboration de la Stratégie Nationale de Développement Régionale;

- Le Groupe pour la Cohésion Européenne

- Le groupe d'Assistance du Développement Régionale;

- Le Groupe pour la Formation Professionnelle

- Le Groupe de Recherche et Evaluation;

- Le Groupe de Contrôle et Prévisions Budgétaires

Les régions et les sous-régions de développement avec leurs principaux indicateurs du développement.
(Source: "Livre Vert", Programme PHARE, 1997)

Régions	Sous-régions	Indicateur du développement régional	Salariés /1000 hab.	Population urbaine (%)	Voitures privées /1000 hab.	Pourcentage des personnes qui ont suivi seulement le premier cycle scolaire (12 ans et plus)	Taux de la mortalité infantile 1993-1994
NORD-EST	Botoşani Vaslui, Iaşi	39	216	46	36	35	27
	Suceava Neamt, Bacă u	42	227	43	55	29	26
SUD-EST	Bră ila, Galaţi Constanţa, Tulcea	56	295	65	76	28	23
	Vrancea, Buză u	42	206	40	68	35	20
SUD	Argeş, Dâmboviţa, Prahova	55	291	45	96	29	20
	Teleorman, Giurgiu, Ialomiţa, Că lă raşi	35	196	36	55	43	27
SUD-OUEST	Dolj, Olt, Mehedinţi	47	213	47	80	33	22
	Gorj, Vâlcea	51	294	42	67	28	19
O OUEST	Timiş, Arad	68	298	58	119	24	19
	Caras-Severin, Hunedoara	56	317	68	85	24	21
NORD-VEST	Cluj, Bihor	65	280	60	105	25	20
	Satu-Mare, Maramures, Bistriţa-Nă să ud	46	233	46	71	27	18
CENTRE	Braşov, Sibiu	70	336	73	113	17	16
	Covasna, Harghita, Mureş, Alba	58	272	52	107	24	16
BUCUREŞTI			376	89	137	18	15
	TOTAL	51	272	55	85	28	21

Au niveau régional, les partenaires de CNDR seront les Agences de Développement Régionale (ADR). Ces institutions seront responsables de l'application de la politique régionale dans leurs régions en accord avec les principes définie au niveau national par la politique de développement régional. Le Conseil de ADR sera composé par les représentants des organisations suivantes:

- Les Conseils des Départements;

- les principales villes de la région;

- les associations inter-communales

- les préfectures;

- les Chambres de Commerce et d'Industrie;

- les organisations des hommes d'affaires

- les associations des fermiers;

- les représentants des organisations syndicales et régionales

- les représentants des institutions académiques et de recherche;

- d'autres représentants des organisations régionales (agences; fonds de propriété ou des associations non-gouvernamentales.

Le Conseil va être présidé par un membre élu par le Conseil. CNDR va être également représenté par des observateurs sans droit de vote.

Les responsabilités des ADR vis-à-vis de CNDR seront:

- l'application des programmes de développement régionale en concordance avec la stratégie nationale;

- la gestion des ressources accordées par CNDR pour l'implémentation du programme du développement régionale

- l'information CNDR concernant les problèmes spécifiques de la région.

Et enfin, les responsabilités vis-à- vis de la région vise:

- la définition et l'application du programme de développement régionale

- l'obtention de la part de CNDR de fonds nécessaires;

- l'administration du Fond Régional de Développement.

Comme instrument financier qui va soutenir la politique régionale on a été proposé la création de FNDR qui va être formé par l'allocation d'une partie du Budget d'Etat. FNDR va subventionner les projets de développement régional gérés par les ADR qui seront obligées d'attirer également d'autres ressources: contributions des départements et des collectivités locales; des ressources provenant du secteur privé, bancaire, des fonds internationaux.

Dans le domaine normatif, même si on a fixé un calendrier précis (1998-1999) pour l'implémentation des premières actions de ce programme, on n'a rien réalisé jusqu'au présent, ce que peut atttarder l'application des mesures prévues.

La carte no. 3. LES AIRES PRIORITAIRES PREVUES PAR LA NOUVELLE POLITIQUE REGIONALE EN ROUMANIE
(Source: Livre Vert, 1997)
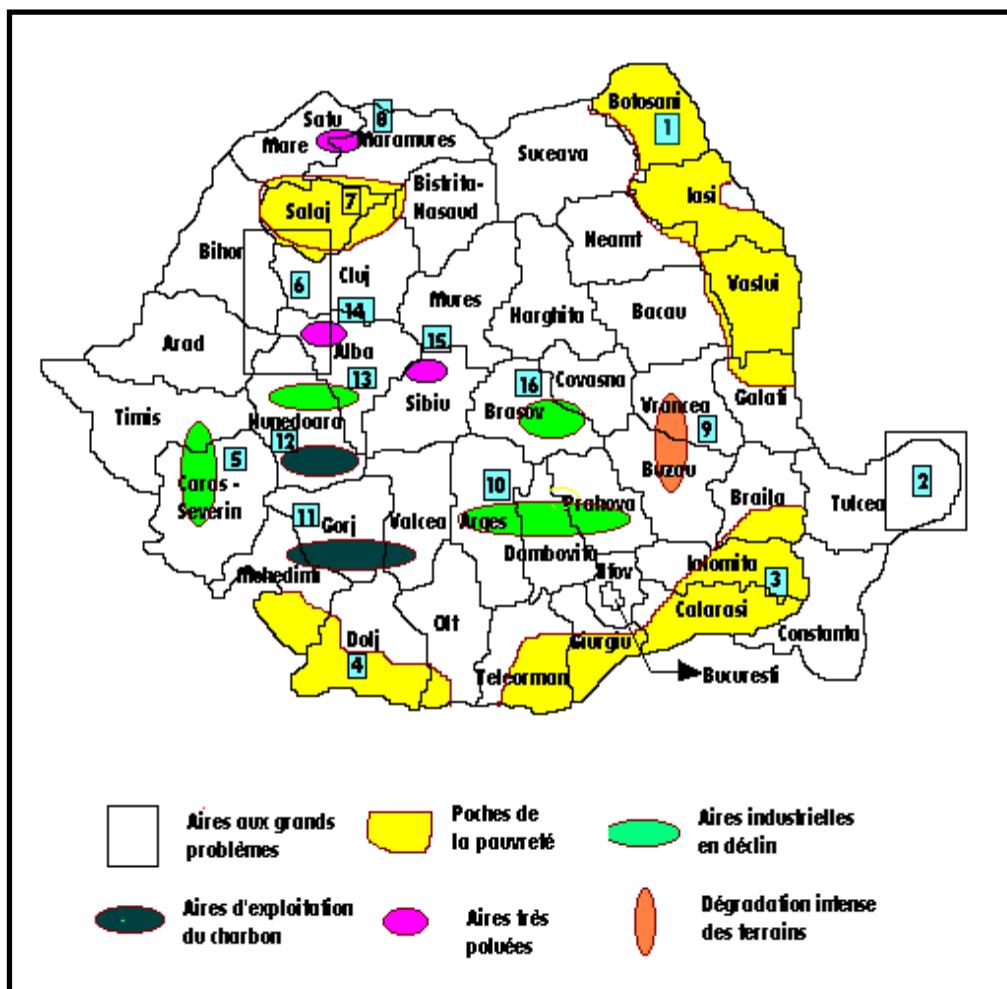
1. Podișul Moldovei; 2. Delta Dunării; 3,4. Câmpia Română; 5. L'aire minière et métalurgique du Banat; 6. Munții Apuseni; 7. L'aire rurale Sălaj-Bistrița; 8. L'aire minière et métalurgique du Baia-Mare; 9 Subcarpații de Curbură; 10. L'aire industrielle Pitești-Târgoviște-Ploiești; 11. L'aire minière de l'Oltenie; 12. L'aire carbonifère de Valea Jiului; 13. L'aire métalurgique de Hunedoara; 14. Zlatna; 15. Copșa-Mică; 16. L'aire industrielle de Brașov.
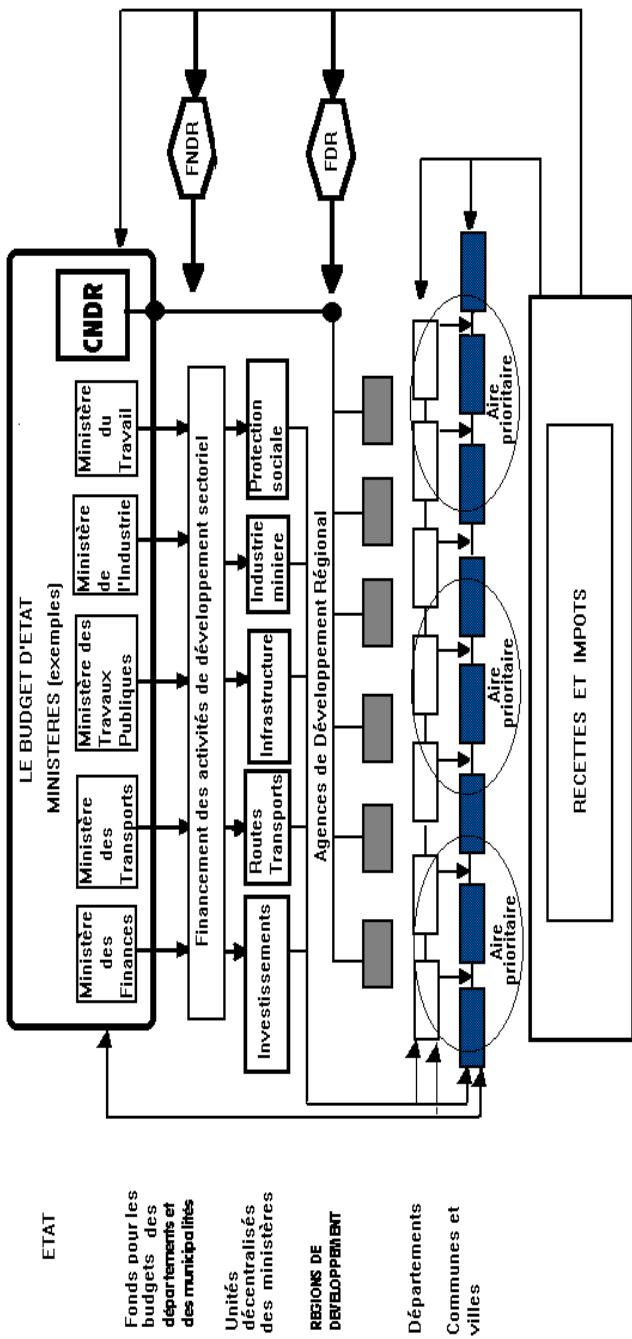
Fig. 1. Le système de financement de la politique régionale en Roumanie (Proposotion : Livre Vert)

D. Les difficultés de l'application d'une vraie
politique régionale en Roumanie

Après la présentation des démarches officielles concernant une politique régionale en Roumanie, la première question pertinente qui pourrait être posée est: quelles sont les chances de réussite du projet?

Le premier constat qui pourrait nous mener vers une prévision pessimiste c'est qu'aucun pays, dans l'histoire récente, n'a pas réussi de mener des politiques de rééquilibrage territorial dans une période de crise. Les périodes de crise ne sont pas favorables aux politiques des solidarités parce qu'il n'y a pas des ressources à redistribuer. Or, la Roumanie se trouve dans une crise chronique, plutôt que dans une phase de transition. La transition implique un changement élémentaire qui donne de signaux sur la direction et la destination de cette transition. Mais la Roumanie n'a pas encore abouti à ce changement. Les gouvernements qui se sont succédés depuis 1989 n'ont réussi que de perpétuer la crise déclenchée par le régime communiste. C'est à dire de perpétuer une gestion des ressources manquée de rentabilité économique en invoquant toujours des raisons sociales qui en réalité étaient électorales.

Une politique régionale en Roumanie ne peut pas être envisagée que comme une partie du processus global de réforme. Donc, on ne peut pas séparer la problématique d'une politique régionale des autres composants de la réforme. Et puisque toutes les réformes se sont arrêtées dans des points clé, la politique régionale n'a que la chance de rester également dans un état incipient. Il ne faut pas ignorer que l'étude sur les disparités régionales et les projet sur la politique régionale se sont fait avec l'argent de l'UE. Dès maintenant le ballon se trouve dans le terrain de l'Etat roumain et on ne sait pas s'il y a la volonté et la capacité de le jouer.

La mise en place d'une politique régionale sera étroitement liée à l'évolution de la réforme dans le domaine de l'autonomie locale et de la décentralisation[7]. Cette réforme suppose la redistribution du pouvoir politique, des compétences et des ressources entre l'Etat et les collectivités territoriales. Mais il faut mentionner que le vrai pouvoir d'une collectivité locale n'est pas donné par le nombre des compétences qu'on a lui été accordées, mais par le volume de ressources qu'elle détient pour exercer ses compétences. Et ce qui bloque maintenant la réforme administrative c'est justement ce problème des ressources. Même si la loi qui a déclenché le processus de la réforme administrative date depuis 1991, jusqu'au présent on n'a rien encore fait en ce qui concerne la décentralisation des ressources financières.En outre on attend depuis 8 ans la loi sur le patrimoine qui devrait donner la légitimité des collectivités locales sur les

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[7] Les futurs actes normatifs ne pourront pas faire abstraction des compétences qui ont déjà été accordées aux collectivités locales et départementales en ce qui concerne l'aménagement du territoire par la loi 69/1991, rééditée en 1996, et par la loi 50/1991. Les principes très centralistes, ennoncés dans le projet de la politique régionale pourraient entrer en contradiction avec ce que la loi prévoit déjà.

biens et sur le territoire qu'elles gèrent. Toute cela a des répercussions négatives sur le processus de la construction du local en Roumanie. Les budgets des collectivités locales sont dérisoires et sont formés en grande partie par des subventions de l'Etat et par des sommes défalquées (salaires, TVA). Les revenus locaux dans les budgets représentent seulement environ 20 %. L'Etat a confié aux collectivités locales les taxes et les impôts les moins performants en oubliant souvent de les ajuster d'après la même logique par laquelle on opère les ajustements des taxes et des impôts centraux[8]. Les collectivités locales ne prennent part a l'imposition sur les activités économiques et donc elles ne sont guère stimulées pour favoriser le développement économique. Les élus des municipalités et des Conseils de Département - surtout ceux des départements plus développés - contestent l'actuel système de redistribution des ressources par l'administration centrale et revendiquent le droit, stipulé même dans la Constitution, de gérer d'une manière plus importante les ressources obtenues sur leur territoire.

En conséquence, la réforme administrative, qui s'est proposé d'instaurer l'autonomie locale et de stimuler les capacités locales pour donner une autre dimension au développement, n'a en fait réussi qu'à mener les collectivités locales - communes, villes, départements - au isolément. Or, la future politique régionale est fondée sur les solidarités politiques, techniques et financières locales et départementales. Mais la coopération entre les collectivités locales n'a pas d'objet s'il n'y a pas de ressources importantes à partager. On ne coopère pas en vue de partager la pauvreté. C'est pour cela qu'en Roumanie c'est très difficile à identifier à présent des coopérations intra-territoriales.

Le projet sur la politique régionale accorde un rôle primordial aux solidarités inter et intra-départamentales ou mieux dire à la solidarisation des principaux acteurs qui compte au niveau des départements. D'ailleurs, on a vu que le découpage envisagé a un caractère purement technique et ne se propose pas de créer un nouveau niveau politico-administratif. Pour voir quelles sont les perspectives d'un tel modèle il faut s'arrêter un instant sur la situation dans l'intérieur des départements.

Les espaces infradépartamentaux sont marqués au présent des disparités plus fort que celles enregistrées au niveau interdépartemental, même dans le cas des départements les plus développés. Après 1989, le développement se concentre exclusivement, d'une manière alarmante, dans les grandes villes - chefs-lieu des départements -, les seuls lieux où les ressources ont la chance de se reproduire. C'est donc dans l'intérieur des départements qu' on identifie les plus écrasantes ruptures: entre le rural et l'urbain, d'une part, entre les villes moyennes et petites et les grandes villes, d'autre part. Et malgré tout, les départements n'ont pas réussi dans les dernières années de mettre en place des politiques de développement pour les zones défavorisé, même si au présent les compétences d'aménagement du territoire au niveau du territoire départemental sont dans la charge des Conseils de Département. Mais on l'a montré plus haut que les

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[8] Les taxes pour les loyers des logements gérés par les municipalités sont fixé encore selon une loi de 1974, ce qui fait que la taxe mensuelle pour un appartement ne soit plus élevée de 1000 lei (0.2 $).

instances publiques locales et départementales n'ont pas les moyens de stimuler le développement territorial et d'y participer. Il y a tout de même des politiques de développement dans l'intérieur des départements, mais ces politiques sont menées par des acteurs plus forts (Chambres de Commerces, Fonds Privés, investisseurs étrangers et locaux, etc.) et visent notamment des lieux aux enjeux importants. C'est par l'intermédiaire de ces politiques que les stratégies s'articulent au niveau des départements, mais pas du tout au profit des zones défavorisées. Et les instances publiques locales n'ont d'autre choix que d'y participer.

Alors on se demande comment pourrait les instances publiques et les acteurs économiques d'un département participer à une politique régionale quand ils ne sont pas capables de mener une politique de rééquilibrage territoriale dans leur propre département? C'est difficile à imaginer, par exemple, que les instances publiques et les acteurs économiques du département d'Arad ou de Timiș vont accepter à contribuer financièrement aux projets qui visent les zones en déclin industriel du département de Hunedoara.

Dans une économie de marché on ne peut plus imaginer une politique régionale centralisée et contraignante. Et en même temps on ne peut pas discuter d'une politique régionale si les régions n'ont pas la volonté et les moyens d'y participer. Pour l'avenir, en vue de mettre en application tous les projets proposés, l'Etat roumain va avoir la difficile tâche de trouver les solutions magiques qui déterminent les départements et les collectivités locales des participer à ces démarches.

L'une des conditions indispensables qui s'impose est d'assurer une vraie autonomie financière aux collectivités locales et départementales pour que celles-ci puissent bénéficier des ressources nécessaires en vue de se doter d'un appareil technique capable[9] d'élaborer et d'appliquer des politiques de développement local et en vue d'assurer un minimum des infrastructures nécessaires pour la diffusion du développement au niveau des territoires.

Une autre condition indispensable sera la création d'un cadre normatif qui permette l'application d'une fiscalité différenciée et même l'offre des primes pour les entreprises qui acceptent de s'implanter dans les régions défavorisées. Car il ne faut pas oublier que les acteurs économiques ne vont jamais participer à une politique régionale par des raisons humanitaires.

Le rôle du "local" dans les politiques de solidarités et d'équilibrage territorial est crucial. Mais l'Etat doit être conscient que ce "local" doit être soutenu pour retrouver et réaffirmer son identité perdue et de reconstruire l'esprit communautaire détruit par le communisme.

Dans le contexte du passage à une économie de marché et dans la perspective de l'intégration européenne de la Roumanie, l'utilité d'une politique

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[9]Après 1989 les instances publiques locales et départementales ont été déporvues de meilleurs spécialistes qui travaillaient dans les directions techniques de celles-ci (architects, ingénieurs, économistes, juristes) qui ont été attirés par le secteur privé plus atractif de point de vue de la rémuneration. C'est la même raison qui fait que les administrations publiques ne puissent pas recruter des jeunes spécialistes qui préfère également le secteur privé.

régionale est incontestable. Mais, sans prendre en compte les difficultés qui s'opposent et les mesures immédiates et indispensables qui s'imposent, les démarches suivies jusqu'au présent vont s'ajouter à tant d'autres formes sans fond promues depuis 8 ans. En ce sens on a essayé d'apporter quelques modestes réflexions autour de la multitude des problèmes posée par l'application d'une politique régionale en Roumanie.

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HOW DO I SEE THE OTHER?
WILL A NEW EUROPE HAVE PROBLEMS LIKE KOSOVO?

BOGDAN CIPRIAN ONIN

ABSTRACT. The immediate picture of the times in 1989 was Francis Fukuyama's well known article *The End of History*. It was, in a way, a philosophic declaration of the victorious party of the Cold War. Rather than the end, there was the rebirth of history[1]. This rebirth has shown itself in the power of nationalism. The collapse of the Soviet Union and Yugoslavia as well as the break-up of Czechoslovakia were caused or at least accelerated in large part by nationalism. For the first time since 1945 a major European war broke out in the Balkans largely caused by nationalism. There are historical reasons behind the inclination to nationalism in Europe.

The Image Of The Other

In the beginig of the political sort the Greeks created the **polis**. The world beyond it was named by a word composed of foreigners or aliens: **barbaroi** or **barbarians**. The image of the other was created. Barbarian was a person who was not able to speak *normal* (that was Greek, of course) making some strange noises of *bar-bar*. The **polis** wasn't just the city where they lived. It was a place where human beings like the Greeks had imposed the rules of law, teaching the others values such as: justice, freedom, compassion, autonomy, authority and security. The rules were complex and just. They were applied to those within the **polis** but, on the other hand were also standards to play outdoors, that governed dealings with "foreigners[2]". Within the polis, "according to the Athenian thinking, different spheres of rules specified rights and wrongs, the just and the unjust"[3].

The other and its problem will be present in Europe in all its ages, but it will be discussed mostly after that the Continent will face the threat of the Islam. Under the pressure of its warriors Europe was forced to live in a historic ghetto.

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[1] Glenny, Misha, *The rebirth of history. Eastern Europe in the age of democracy*, London, Penguin Books, 1990.

[2] All those who were not members of one's city.

[3] R. B .J. Walker, "International Relations and the Concept of the Political" in Ken Booth and Steve Smith, eds. *International Relations Theory Today* (Cambridge, Polity Press 1995), 306-327.

The crusades were a try to escape from the trap of the Muslims. They were more like an offensive self-defence (as said by the Pope Urban II) and the idea of *the other* was very clear in the thoughts of both warriors. For example, the world was divided by the Christians in: Christianity and the rest, while the Muslims had the world divided in the "House of Peace" and the "House of War"[4]. The fear of Islam became even greater when the Ottoman Empire took under its control important parts of the Continent (like Spain or Sicily) or places with a great religious or strategic importance (like The Holy Land or North Africa). In the history of the civilizations, the Crusades had an outstanding role in defining the personality of the Christian, as seen at that time. These holy wars were also the first great offensive against a different religion, in fact a different culture having other beliefs and values. They proved also that Christianity is able to act as one under the unique leadership of a Pope. Although the aim of these wars was the extermination of the other, they proved to be a period of great intercultural exchanges[5].

THE COFLICTS

The first conflict based on religion is the one that started when the Muslims came to Europe for the first time, a conflict which is continued even today. The representative model is the one in Yugoslavia between Serbia (Orthodox) and Bosnia (partially Muslim). Today the problem is settled, but the Balkans are so "touchy" today because of another problem: the one in Kosovo.

Another region that was insecure for a long period of time because of religion can be considered also Ireland (Eire). The "war" started here during the 12th century when the occupation by the English people began. Around the sixteenth century the conflict gained also a religious co-notation: the problem of religion was accepted as one of the ways to fight the oppressor. Ireland remained Catholic Conservative while the rest of England became independent from the Church of Rome. Those who were Catholic have been deprived of their lands for the profit of the English nobility. In the nineteenth century the Irish people formed secret societies to fight the oppressor. Autonomy[6] was given only in 1913. The Protestants in Ulster, then, made an insurrection not willing to enter a political community mainly Catholic. The war of the IRA and Sinn Fein against British troops was made of terrorist attacks, but helped Ireland to win its independence in 1921[7].

Another part of Europe where a religious conflict could explode is Turkey, because of the rising of fundamentalist Muslims, who don't agree to the "westernization" of their country.

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[4] the House of Peace are the territories which are occupied by the Muslims, while the House of War are those territories that will be conquered by them, …the others.

[5] The only striking exception was the fourth Crusade which was organised entirely by seniors of the time without the help of the Church.

[6] "Home Rule".

[7] The new free State of Ireland was lesser: the nine provinces of Ulster have been excluded.

EASTERN EUROPE

Definition of: There are three civilizations, in Eastern Europe: the West-European, the East-European and the Islamic one. The first one is a Catholic / Protestant Christian, the second is an Orthodox Christian, while the third one is Muslim.[8] Their cultures, sometimes, found themselves used in conflicts between members belonging to different nations, having also another religion. A culture is a common (or unique) perception of reality shared by a particular group of people[9]. This fundamental sense of the reality gives to that society its norms, which are "preserved, developed further and handed down to succeeding generations"[10]. Because of that, culture became the most important and determinant factor in human social life.

CULTURES

Culture may exist on two "dimensions": the micro level could be the nationality or the ethnicity (which means that the *others* have a different language) and the macro also known as civilised world and which is expressed by a sophisticated, institutionalised religion (or philosophy-or both). Many times it is so difficult to see or to separate the natures of a conflict or war. This happens because the features all form a global image. You can not have the real "map" of these discords unless you're ready to study all the aspects that form it. Religion, history, language, colour, wealth can all be found when a scenario is described. A man is composite of the *moral*, *religious*, *economic* and *political* man. Then you should understand that all these are equal important.

Eastern Europe is a very interesting region from the point of view that studies of anthropology or politics can be made easily because it is formed by a great variety of ideologies, beliefs, languages[11], states, etc. Therefore some great conflicts existed here even since the states were formed. Famous are the conflicts in Transylvania, Macedonia, Albania, Bosnia and Turkey.

The Serbs and the Kosovars. We will try to describe a little this conflict because it can be the one able to present the worst war-scenario in Europe for the next decade. Kosovo is a small region in the south of Yugoslavia and the north of Albania. The major part of its population is formed by Muslims of Albanian

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[8] " There are […] three civilizations […] containing among them at least seventeen major nationalities in total. The key to understanding the events of 1989 and later, which ended the Communist Era in Eastern Europe, lies in gasping the nature of their realities and how they interrelate with one another on both levels of culture." Dennis P. Hupchick, *Conflict and Chaos in Eastern Europe* (New York: St. Martin's Press, 1995), 4-5.

[9] which can be called *a society*.

[10] Hupchick. "Preface".

[11] "Having three civilizations, seventeen major nationalities, at least seven forms of religion, two separate alphabets, nineteen states is complex and confusing enough as it is…" Hupchick 17.

nationality. The Serbs are just 1/10 of the population. Dreniça, the rebelious part of Kosovo is the region where the Liberation Army "KLA[12]" has its roots.

The conflict between the Serbs and the Slovene (sustained also by the Croats) developed during 1989, will look little compared to the one that can explode in Kosovo.

The reasons for the conflict:

In the past six years, ethnic Albanians have backed independence in an illegal referendum, illegally elected their own Parliament and President, and set up their own education system. No Albanian leader dared to demand anything else short of full independence. On the other side, Serbs view Kosovo as their historical heartland.

This is, in my opinion the most dangerous spot in Europe, right now, because the parties involved are many and very determined. The parties are: Serbia, Albania, Macedonia, Greece, Turkey, Bulgaria and Montenegro.

MY OPINION ABOUT…

I made here some interesting statements about Europe and the Balkans, about the image of *the other* and of *yourself*. Some of these statements speak about the past without telling much about the future. That's because the future is hard to predict in a strange world like ours (I' m thinking more of the Balkans right now). Future is a mere problem of understanding *the other* who *is*, in a way, *you*. I can not know what will be the situation in Europe over a decade, but because I see that *the other*, still, manages to scare us I can only say that religious based conflicts may be seen also here.

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[12] Kosovo Liberation Army: clandestine guerilla group.

FROM WELFARE TO WORK
(Solutions From America)

VALENTIN NAUMESCU

ABSTRACT. The debate about poverty is a debate about unemployment. In the EU countries and in the USA, poverty has little connection to low wages in general. ***Non-work*** and even low working hours are a more important cause of poverty than low wages. The widely accepted explanations for this non-work-lack of childcare, poor job skills, the decline of heavy industry- are only partially convincing. The main reason for non-work is that poor people have sunk into a ***culture of poverty***. They have stopped even expecting to work.

The idea that the ***poor must be required to work***, not just offered the chance to, has emerged in American Social policy because of the nature of the poverty problem and of the failure to solve it on voluntary basis (Lawrence MEAD, 1997).

Non-work: the main cause of poverty

Poor persons are highly diverse, as are the causes of poverty. My analysis applies mainly to working-age adults, who are the most controversial of the poor population and the key to any solution to poverty.

I also concentrate mainly on long-term poor adults, meaning those who are poor for more than two years at a stretch, because they are the hardest to help and the most important politically. This is the group that most exercises the public and is most debated among the experts. In the urban setting, these poor people primarily mean ***long-term welfare mothers*** and ***low-skilled single men***, who are often the absent fathers of welfare families.

These long-term, employable, poor adults are not a large group-perhaps five percent of the of the population-but they are the core of the poverty problem.

Why Work Must Be Enforced

The idea that the poor must be required to work, not just offered the chance to, has emerged in American social policy because of the nature of the poverty problem and of the failure to solve it on a voluntary basis. (Lawrence MEAD, 1997).

The Employment Problem

There is some evidence that poor adults work more than they report. Poor families appear to spend more money than they say they receive. Half or maybe more of welfare recipients may work overtime, often without declaring the income, in order to avoid reductions in their grants.

Some experts conclude from this that most poor who seem not to work are actually employed. Of course, such conclusions go too far. ***Welfare mothers are needy mainly because of low working hours***, not low wages. Work levels among simple mothers on welfare are clearly much lower than among simple mothers not on welfare, among whom the work rate is about 85 percent.

Much of the decline in work levels reflects the decline in the poverty level since 1959 *(see Table 1 and Table 2)*. As real wages rose, most working poor people earned their way out of poverty. It is difficult to work normal hours and remain poor, so almost by definition ***the remaining poor are mostly people without jobs***. After 1960 the low-income families worked less, just when better of families were working more. This was due to the new culture of welfare grants, which stimulate step by step the non-work attitude. For instance, in the UK, the proportion of ***poor who are working-aged (ages between 18 and 64) rose from 42 percent in 1960 to 51 percent in 1995***. The reasons for this include a decline in the number of children per family and drop in poverty among retired person because of rising social security payments. Rather, the decline in work is linked to the growth in the female-headed families, mostly at the lowest income levels. Poor female heads themselves are not working less, (their work level has always been low) but now more such families are among the poor, and this reduces the work level for the poverty population as a whole.

Work effort by female heads in general is rising. Poor female heads, however, work less than others, and ***poor adults seem to work less***, whether or not they are married. Among black people, which compose most of the long-term poor population, two thirds of poor female-headed families were needy before the breakup of the parents as well as after, equally because of non-work. Even among the heads of poor married-couple families, a work decline has occurred.

Some of this reflects greater retirement among older persons who are disabled. But even if one defines the employable stringently, excluding persons who are older and disabled, students and parents with children under six, since 1960 the share of poor family heads who could work has risen while the share actually working has fallen (Lawrence MEAD, 1997).

Of course, there are also **other factors** than work-effort that can determine whether people are poor. Non-workers more often have to care for children than workers do, and they would average lower earnings than those currently employed if they took a job. If they worked steadily, more would remain poor even with employment than existing workers would. If one allowed for these factors, poverty levels would not vary so extremely with work level.

Nevertheless, the effect of non-work is so great that overcoming it is strategic for reducing poverty. And if work levels among poor people were to recover to former levels, providing aid to needy persons would also be more popular.

Non-work is costly for poor families also in other than income terms. It contributes to the **problems of lifestyle** that, as much as low income, conspire to keep people needy today. It is often said that the problems of poor people are rooted in the family, particularly the absence of fathers. But **the greatest reason why poor adults fail as parents is inability to function as breadwinners**. Fathers leave families mainly because they don't work steadily. One of the reasons poor children often fail in school and later on the job is that they have not had the example of parents working consistently outside the home (Lawrence MEAD, 1997).

What Stops the Poor from Working?

The Work-Problem is so important that, in large part, the debate about poverty is a debate about employment. The great question is **why poor adults work so much less consistently than better-off adults**. The tradition among experts has been to seek impediments outside poor people themselves. Perhaps low wages leave people poor even if they work or discourage them from working. Perhaps poor people are barred from employment by sheer lack of jobs or childcare, racial bias, or by the welfare system, which reduces the family's grant in proportion to earnings. Perhaps they simply cannot work because of the burdens of childbearing, disability, or a lack of marketable skills.

All these theories have drawn intense research attention. Each of the theories appears to be a little bit true, but none of them-singly or in combination-appears to explain more than a small part of the work problem.

The trouble with the wage theory is that if most poor adults are not even employed, low wages cannot cause their poverty. If "working poverty" were more prevalent, this theory would be more persuasive. It is commonly said that work does not pay low-skilled individuals enough to be worthwhile. But it clearly pays them enough to avoid poverty and welfare in most cases, provided the adults in families work the hours typical of society. That means **full-year and full-time** for the family head, with at least some work by the spouse or another family member.

Poverty is often blamed on the minimum wage because it is assumed that when poor adults go to work, this is what they earn. It is easy to show that working even full-year and full-time at the minimum wage cannot support a family above poverty. But such calculations mean little because the vast majority of poor workers actually earn above the minimum wage; ***they are poor mainly because of low working hours***. Few minimum-wage workers have to try to support a family alone. Most are secondary workers, usually spouses or teenage children, in families in which the head is working for more than the minimum wage. For these reasons, in the USA and UK, the minimum wage actually has little connection to poverty. Most recently, ***the Congress has raised the minimum wage to 5,15 USD/hour*** and this has reduced once more the link between it and poverty.

To contend that low wages or benefits are central to poverty, one would have to show that they were a cause of low working hours as well as low returns per hour. Perhaps low wages and benefits discourage low-skilled people from working, whereas higher returns would cause them to put in more hours. Research has not shown, however, that work effort among the poor responds much to this sort of incentive. The labor supply of low-income mothers is remarkably unresponsive to payoff levels. Employment by welfare mothers is little affected by welfare benefit levels or by the wages the mothers are able to earn. It is work effort by the middle class that has responded to stagnant wages in recent decades-and by rising, not falling.

Other theories of non-work also have small support. There is some evidence that employers discriminate against minorities in favor of whites, if one controls for all factors except race. There may be some statistical discrimination, in that some individuals who would be good employees are not hired because their racial group has a bad reputation. But the extend is probably limited because employers use a number of indicators-class and job history as well as race-to pick among job applicants.

Economic trends

The theory that jobs are lacking rests heavily on the notion that economy today offers much less opportunity to poor persons than it once did.

In the last two decades, the decline of manufacturing has idled many workers, real wages have grown little, and inequality among incomes has risen. Less educated workers, especially among younger men, have suffered actual losses in earnings. All this, it is said, is the major cause of today's non-work and poverty. It seems obvious that the destruction of millions of manufacturing jobs in American cities since the 1970's must have radically reduced the opportunities available to today's low-skilled job seekers.

The theory that de-industrialization is responsible for the disorders of the ghetto has limited support. Most jobs, however, still demand only low moderate skills. Urban employers complain mostly about employees' lack of basic work discipline-inability to show up for work and take orders-rather than a lack of advanced skills.

The Culture of Poverty

More important than any economic factor, as a cause of poverty, I do believe is what used to be called the culture of poverty. Many poor adults resist taking the low-paid jobs that are available to them. A greater number are simply defeatist about work or unable to organize their personal lives to hold jobs consistently. These feelings are rooted, in turn, in the history lack of opportunity that minority groups-who compose most of the poor-knew in these countries (especially UK and USA) and in their countries of origin in the past. Of course, most members of these groups are employed and not poor. But some remain unconvinced that it is worth striving in America, despite the equal opportunity reforms of recent decades.

Equally important is that values such as the need to work are no longer well-enforced in ghetto areas. In large measure, *non-work results simply because welfare and other public programmes do not yet require most adults recipients to work as a condition of support* (Lawrence MEAD, 1997).

Solutions from America

Government has no easy way to do that, but the best thing it can do is to restore order in the inner city. Above all, it can require that poor parents work, because employment failures are the greatest cause of family failures. If parents do not work no programme to help the children is likely to achieve much. To a child, to have functioning parents is worth 25 Head Start programmes. Only if parents work and fulfil other civilities, such as obeying the low, can they have the self-respect needed to command the respect of their children.

Those who would be free must first be bound. Parents who would bequeath freedom to their children must first live orderly lives. The source of bondage for today's seriously poor is no longer social injustice but the disorders of their private lives.

For these citizens, the way forward is no longer liberation but obligation.

Table 1. Work Experience of Poor Heads of Families

% of all heads	1959	1970	1975	1985	1995
Worked at any time	68	55	50	50	52
Full-year and full-time	31	20	16	16	19

% of female heads	1959	1970	1975	1985	1995
Worked at any time	43	43	37	40	46
Full-year and full-time	11	8	6	7	13

Table 2. Poverty Rates by Employment Status Of Persons 16 and Over and Family Heads, In Per Cent: 1995

	All Heads	Female Heads
Worked at any time	7	22
Full-year and full-time	4	10
With children under 18		
	All Heads	Female Heads
Worked at any time	11	28
Full-year and full-time	5	13

Note:
Full-year means at least 50 weeks a year, full-time at least 35 hours a week.

Source:
Data are from US department of Commerce, Bureau of Censors, "Poverty in the United States", March 1996

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AVANT QUE CA NE SOIT TROP TARD

ALIN FUMURESCU

I. INTRODUCTION

L'euphorie a passe. Apres la fete de la chute du communisme on se reveille un peu etourdi, avec une planete pleine de megots, de verres sales et de coflits a gerer. Le monde a change, les acteurs et les concepts aussi. Memes les guerres. Essayant de tenir le pas, l'ONU a modifie, a son tour, ses modalites d'action. Au debut ca semblait fonctionner tres bien, puis on s'est rendu compte qu'en effet cela ne marchait pas du tout. Pourquoi? Et quoi faire?

Voila les questions auxquelles on va essayer de repondre.

Avant que ca ne soit trop tard.

Un changement de contexte

La fin du monde bipolair a marque le debut d'une exceptionnelle acceleration de l'histoire, qui a remis en cause la plupart des concepts fonctionnels depuis plusieurs decennies. Desormais, on ne se trouve pas seulement entre deux siecles (deux millenairs meme), mais entre deux mondes. D'une cote c'est le monde "classique", celui des Etats et d'une societe interetatique; malgre les propheties des dernieres annees sur la fin de l'Etat-nation, on doit maintenant reconnaître qu'il s'agit d'un acteur qui a encore un role important a jouer, au moins dans un futur previsible. De l'autre cote c'est le monde "globale", fonde sur de multiples resaux de communications, d'une economie mondiale plus ou moins occulte, avec un langage propre, dans lequel on retrouve a la fois le meilleur et le pire.

Ces deux mondes superposes interactionent d'une facon complexe. Resultat ? Boulversements politiques, strategiques et militaires, economiques ou culturels.

La menace d'un holocaust nucleaire c'est, sans doute, eloigne, mais en faisant place a la multiplication des conflicts localises qui, pour la plupart des cas, peuvent etre considere comme des guerres civiles. On a passe de la guerre froide a la paix chaude, dans laquelle, a la guerre se substitue un concept de gestion des crises.

Dans le nouveau contexte, l'economie, surtout celle trans- et internationalisee est appelee a jouer un role de plus en plus important, qui va de paire avec le social. On peut plus parler de securite sans prendre en compte ces

aspects. Comme une consequence de l'aide financiere apportee par le FMI a plusieurs pays, "l'ingerence" de cette organisation dans les affaires interieures des Etats s'est accrue. "Toujours et en tout lieu, celui qui paie commande". Du meme le role du GATT. Les deux peuvent apparaître comme de veritables cercles de pouvoir mondial.

Face a ces nouvelles donnees, l'ONU ne pouvait pas rester les bras croisees.

Le changement des modalites d'action de l'ONU

Depuis la premiere mission avec des observateurs militaires de l'ONU, en mai 1948, pendant la premiere guerre arabo-israelienne, beaucoup de choses ont changes si fort que les changements ne pouvaient pas passer inapercus.

Pendant la guerre froide, a cause du blocage par veto du Conseil de Securite, seulement 13 operations pour le maintien de la paix ont ete menees sous l'egide de l'ONU. Le role principal revenait alors a l'Assemblee Generale qui se trouvait "dans le main" du Tier-monde. Et meme si les resolutions n'avaient pas une efficacite visible, on peut pas pour autant nier leur valeur morale et leur impact ideologique, consolide par repetion.

Apres le sommet de Washington (1987) entre Bush et Gorbatchev, les choses ont change, pas seulement du point de vue "quantitatif" (21 operations pour le maintien de la paix de 1988 a nos jours), mais aussi et surtout du point de vue "qualitatif". Les operations ne se contentent desormais de forces d'interposition chargees d'observer le respect du cessez-le-feu, mais s'acquittent de taches beaucoup plus complexes qu'auparavant deminement, reparations de routes, surveillance des elections, assurance du fonctionnement des institutions, etc.

Pour conclure, en quelques annees seulement, le concept de maintien de la paix a profondement evolue, et ca s'est passe dans un contexte dans lequel les forces de l'ONU sont appelees a intervenir dans des conflits internes - une nouvelle mission a laquelle rien ne semblait la destiner. Or il n'existe pas, pour le moment, de formule acceptee par l'ensemble de la communaute internationale pour resoudre ce type de conflit.

On arrive comme ca au point considere dans la plupart des interventions comme etant le plus "chaud": le droit d'ingerence, droit invente par le juriste international Mario Bettati. Cependant, l'article 2 de la Charte des Nations Unies affirme le principe de la "non-ingerence dans les affaires interieures d'un Etat". Par opposition donc au droit d'ingerence (qui doit etre distingue de l'assistance).

Et si on ajoute a cela le fait que - faute de moyens et d'une volonte politique convergeante des Etats-membres - l'ONU a ete oblige de deleguer ses competences dans des nombreuses situations, mandatant de forces armees nationales d'une grande puissance (notamment les Etats Unies) pour resoudre les crises, on commence a se rapprocher des causes de cette crise de confiance a l'egard de l'ONU, qui personne n'essaie maintenant de cacher, le secretaire general de l'Organisation y compris.

Les causes de l'echec...

Si on engage une action sur un diagnostic faux, ca va tourner mal. Ca ne vent pas dire pour autant "qu'il faut attendre le diagnostic parfait. Le diagnostic parfait est l'autopsie"(Federico Mayor).

Comme n'importe quelle demarche de ce genre, il faut commencer par une analyse critique des concepts utilises. Face aux nouvelles donnees, les anciens concepts, comme ceux de guerre, de communaute internationale etc, ne couvrent plus entierement la realite. Pour resoudre cette difficulte conceptuelle, "il faut chercher ensemble de nouveax concepts" (Boutros Boutros-Ghali), ou mieux definir ceux qui existent deja.

Mais ca n'est pas tout. Les difficultes theoriques une fois depassees, il reste quand meme celles pratiques, plus liees au monde concret. La plupart des interventions y on fait reference. Passons-les en revue.

- a confusion entre les operations pour le maintien de la paix et l'action coercitive, entre l'hummanitaire et le militaire; un melange qui ne deroute pas seulement l'opinion publique (et, en consequence, accroit la crise de confiance), mais aussi parmi les militaires eux-memes, impliques dans ce mission. On est arrive jusqu'a affirmer qu' entre le militaire et l'humanitaire il y a une contradiction ontologique, insurmontable.

- la confusion entre les operations de l'ONU et celles autorisees par l'ONU.

- la dispersion de l'autorite qui fait que les militaires demandent des instructions aux gouvernements nationaux. Le probleme du commandement renvoie a celui des objectifs. Qui les definit? Qui assure le controle des operations ?

- dans une operation militaire on doit ouvrir un monopole de la decision, mais ce monopole est en contradiction avec la neutralite

- l'inadequation des moyens en faits, qui oblige l`ONU a la sous- pretence. A son tour, la sous-pretence releve de nouveau la question de la neutralite.

- le structure et le fonctionnement du Conseil de Securite ne reflete plus la situation actuelle

- la discrimination: pourquoi la Somalie et pas le Sudan ? etc. Est-il vrai que le droit a l'intervention humanitaire est un droit a geometrie variable?

- le "do-something" sindrome: sous la pression de medias et, implicite, celle de l`opinion publique, les interventions sont faites en hate, sans une definition precise des objectifs et des moyens.

- la tentative d'imposer des modeles, au lieu des principes, dans l'administration, la politique, etc.

On peut alors conclure que ce ne sont pas les diagnostics qui manquent. Mais il faut trouver les traitements adequates.

Quelles solutions?

Resumons-les:

- le besoin d'un mandat clair. Il ne faut pas melanger l'hummanitaire et le militaire. Mais en partout de ce point, les optiques commence a etre divergentes.

a) certains plaident pour une succesion. Premiere phase: l'ONU delegue les competences a une grande puissance qui offre des forces speciales pour contenir la crise. Deuxieme phase: les forces speciales se retirent laissant la place au forces pour maintien de la paix.

b) renoncer tout simplement au recours a la force

c) il ne faut pas renoncer au militaire mais l'utiliser seulement pour assurer des zones humanitaires dans lesquelles les ONG peuvent agir avec efficacite.

- doter l'ONU de ses propres forces militaires. Les critiques sur cette proposition ne vise seulement la cote idealiste qui puisse imaginer que des super-puissances vont offrir des moyens militaires et financiers qui echappent a leur controle, mais aussi le secretaire general, qui comme fonctionaire, ne peut pas monopoliser une force d'une telle importance.

- utiliser l'OTAN comme le bras arme de l'ONU. Mais comment va reagir la Russie, par exemple? Et comment repondre la question de la neutralite et du monopole de la force?

- de tout facon, les forces d'intervention doivent devenir plus souples, plus flexibles, avec des posibilites d'action rapide.

- agir seulement apres une reflexion approfondie de l'opportunite. Un conflit doit etre leisse arriver a son terme (meme si ca peut paraitre cinque), car si on l'interromp on ne fait que l'eterniser.

- l'ONU doit trouver un autre paradigme economique et sociale, imposer des politiques structurelles, a long terme.

Car comme disait Leonardo da Vinci,"quand un bateau est en peril, il n'y a plus de femmes et dès hommes, de riches et de pauvres, d'enfants et de vieux- seulement des passage qui doivent mettre en commun toutes leurs connaisances et leurs forces, afin d'eviter la naufrage".

II. RATRAPPER LES SCIENCES EXACTES

Quand on discute des possibilites de faire face aux defis planetaires, on oublie souvent de regarder dans les "cours" voisines: celle de sciences exactes, par exemple. On peut toujurs apprendre quelque chose. Parce que la crise de la mondialisation et de la disparition de la bipolarite peut-etre mieux approche si on regarde comment ont ete resolues les crises qui ont ebranle la geometrie classique, euclideene, ou la phisique clasique, newtonienne.

"Par un point exterieure a une ligne on ne peut tracer qu'une seule parallele a cette ligne", disait Euclid. Assez evident, non ? on a entendu pendant des siecles. Mais non, on dit les non-euclideens. "On peut tracer un infinite des lignes". A la condition de sortir de l'espace classique, telle comme on le concevait jusqu'alors.

Et puis le temp s'ecoule uniforme, disaient les phisiciens et pas seulement eux. On a du attendre Einstein pour apprendre que le temps va plus ou moins vite, au-dela d'un seuil, quand la vision sur le monde change. Et qu'une partente peut-etre en meme temps onde et corpuscule. Etc, etc.

Pourquoi toutes ces rappels scientifiques ennuyeux ?

Eh, bien, pour s'appercevoir d'une cote que le manicheisme que la logique "commune" impose a nos esprits doit etre depasse que "tertium non datur" peut-etre contredit. Et de l'autre cote, qu'il faut abandonner la pretention d'avoir un systeme (ou bien une grille de lecture du monde) qui couvre tout, qui solutionne ou explique tout. C'est la voie la plus sur pour tomber dans l'utopie contredite inevitablement par les realites changeantes, ce qui mene a la description qui aboutit a la crise de confiance.

Il faut apprendre la modestie de penser un systeme qui fonctionne entre certaines limites, entre lesquels il explique assez bien les realites et peut intervenir avec une certaine efficacite. Mais pas au-dela.

Quand on a defini les deux mondes (celui des Etats et celui trans- ou internationalise) on a de meme precise que l'ONU a ete concue pour le premiere monde. Mais qu'est-ce que l'ONU peut faire pour girer le deuxieme qui, en quelque sort, menace le premier ? Parce qu'il suffit de regarder autour de nous, pas seulement au phenomenes comme la mondialisation de macro-trafic ou le commerce d'armes, mais aussi et surtout a la mondialisation d'une economie et d'un systeme financier qui grace a l'ere optotronique et au logique des societes trans-nationales-echappent a tout controle et meme a tout pretention de controle, pour se rendre compte de l'importance et la gravite du probleme.

Des solutions palliatives

On peut, biensur, proposer et, en derniere instance reussir a imposer un changement de la Charte de l'ONU, pour rendre plus proche des nouvelles donnees.

On peut aussi resteindre l'utilisation de la force militaire seulement pour assurer les zones hummanitaires et laisser faire les organisations non-gouvernamentales, mais seulement apres la reflection d'opportunite.

De meme avec la developpement d'un diplomatie preventive qui, jusqu'au present n'a pas pu faire preuve d'une tres grande efficacite.

Et encore, on doit tenir compte des specificites culturelles qui agissent dans une crise ou une autre et ne pas chercher a imposer des modeles, mais de principes (Et pas imposer, mais proposer ou, plutot, persuader).

Et encore.

Mais tout ca ne represent que des solutions palliatives ou, pour rester dans le discours medieval, des traitements simptomatiques (on baisse la fievre ou la tension arterielle) mais pas du tout ethiologiques (pourquoi la fievre ? et pourquoi la tension ?).

Car il faut aller jusqu'au racines du mal pour guerir la malade si on veut pas se contenter de la maintenir tout simplement en vie.

Une solutions radicale

Du moment qu'on a defini les deux mondes et le fait que l'ONU ne trouve sa logique de fonctionement que par rapport au premier, la reponse a la question "qu'est-ce l'ONU peut faire pour controler la deuxieme?" est une seule: rien.

Il faut donner a Cesar ce qu'appartient a Cesar et a Dieu ce qu'appartient a Dieu.

Au monde interetatique une ONU moins chargee de bureaucratie, plus ciblee sur ce qu'elle peut vraiment faire, au dela de toute demagogie (la question des limites desquelles on a deja parle).

Mais a l'autre ? Au monde globalisant et plutot para-etatique ?

Une seule reponse possible aussi: il faut penser d'une autre organisation, un autre modalite d'organisation, surtout. Car si le deuxieme monde echappe a la logique binaire, classique, dans laquelle "tertium non datur", il faut necessairement que l'organisation qui veut avoir la pretention de la gerer, y echappe elle aussi.

Le deuxieme monde est-il non-pyramidal (non-hierarchise), mais reticulaire, avec multiples poles de decision interchangeables qui se reglent l'un par l'autre dans la logique du feed-back ? Eh, bien, la nouveau organisation doit refleter avec fidelite cette structure.

Facile a parler quand on reste dans un plan purement theorique-on peut repliquer. Les difficultes vont commencer au monent on doit chercher les moyens concrets pour mettre tout ca en application.

Pas si difficile qu'on peut croire. Il suffit de regarder cette fois ci dans l'histoire. Purquoi une organisation mondiale pour le reglement du traffic aerien a-t-elle apparu ? A cause des volontes etatiques ? Non. A cause de la necessite. Et comment on a commence la longue marche vers l'Union Europeene ? Avec le charbon et l'aier, ce qui representait aussi, a ce temples, une necessite.

Il faut alors trouver les necesites "minimales" de ce deuxieme monde, si peu nombreuses puissent elle nous paraître, ou si peu significatives. Une fois definies, il faut tracer un cadre organisationel qui, evitant tout systeme hierarchise, laisse aux acteurs concernes la liberte de se structurer dans des reseaux imposes par la nature-meme d'un activite ou d'une autre. En quelque sorte, comme dans le cas des arbres ornementaux. On impose quelques limites, assez souples, et on laisse la nature s'occuper du reste. Ces reseaux vont sans doute se developper d'une facon qui pourrait paraître a la logique classique assez anarchique mais qui, en effet, poursuit une autre type de logique. Et puis elles vont commencer a interactioner par feed-back.

Mais ou est le controle des Etats sur ces organisations ? -on peut poser la question.

Nulle part, bien sur. Ou est le controle des Etats sur les reglementation du trafic aerien international ? Nulle part, et ca ne derange, pourtant, personne. Car il s'agit, rappellons-nous, des necessites imposees par la realite.

II. MARKETS, PEOPLE AND PLACES

TIMES AND DRESS
A CULTURAL APPROACH ON CONTEMPORARY BRITISH FASHION

SANDA TOMULETIU

ABSTRACT. Fashion, British fashion in particular, is being analyzed in the present paper from a socio-cultural perspective. Various accounts, given by fashion designers, art critics, and sociologists, are being considered with respect to the nexus fashion and the contemporary Zeitgeist.

"clothes are thoughts, beliefs and customs made visual"
(The Guardian, 26 November 1994)

Introduction

Since the thirteenth century, when fashion as it is understood today arose in Europe, clothes and style have constantly been an intrinsic part of any society; besides that, fashion has always provided an excellent standpoint for reading a particular time in a given geographical space. As cultural phenomenon, fashion has always been under the scrutiny of the cultural theorist or sociologist. It is the purpose of this paper to take a glimpse at this complex cultural phenomenon that is fashion, and try to understand it from a contemporary socio-cultural standpoint. Fashion as commodity or 'weapon' - either in the service of politics or feminism - will not be considered here, the relation under discussion in the present paper being that of fashion with thecontemporary Zeitgeist. Although nowadays, such a cultural phenomenon can no longer be confined to geographical boundaries, given worldwide communication, and the worldwide market, the focus of this paper will be the British fashion, generalizing only where trends surpass the borders of the UK.

Therefore, section one will attempt at defining fashion as socio-cultural phenomenon, giving what are in my opinion its basic characteristics. The aim of section two will be to survey some of the main social significances that have been attached to fashion from its 'debut' to the emergence of counter-cultural fashions, event of major importance to the evolution of British fashion. The last section will focus on contemporary fashion, providing a closer insight into the fashion-Zeitgeist nexus, showing against the particularity of British fashion that, by "bringing together as it does art and the body," fashion is but "a field upon which a whole variety of arts and discourses meet". (Wilson, 1990: 21)

Defining fashion

As cultural component of a society, fashion cannot escape the grip of social determination that loads it with clusters of meanings which, in their turn, "produce a social identity for the people involved". (Fiske, 1992: 1) These meanings have been consistent with a concept of fashion seen as a system of 'signs,' 'languages,' or 'discourses,' the reading of which has proved to be rather challenging considering the ambiguity ascribed to fashion: "it is simultaneously about advertising, about marketing, about the fashionable consensus, and about our construction of our public selves. For the consumption of everyday goods also involves the consumption of social signs; we construct our identities from "borrowed ready-mades lifted from the catalogue of urban life" Del Sapio)" (Chambers, 1993: 54).

In trying to understand the complexity of the social and cultural discourses intermingling in fashion, one has to acknowledge the three aspects inherent to fashion, namely its provisionality, its social constructedness, and its natural dependence on the body. By its very nature, fashion is temporary, ephemeral, passing, and it is so due to its tight bond to its temporal and spatial, hence social determination: it constitutes but one of the many cultural 'mirrors' held to a particular society in time, such as music or film ('the 50s', 'the 60s', 'the 90s' are but labels that stand as living proof of the socially-constructed existence of fashion). Finally, fashion would not be what it is, were it not for its connection to the body, connection that places a border between fashion, on the one hand, and art or any ornamental commodity that may serve in one's immediate surroundings (i.e. home, garden), on the other hand. The failure to see the boundary between fashion and art, set by the different functions of the two - by its very definition fashion requiring the addition of functionality to the artistic purity of art devoid of any finality - has made weird designs appear on the catwalk in the name of fashion (Vivienne Westwood's designs have been more than once called "unwearable").

Although loaded with social significances, fashion is nonetheless rather personal, for even if "All language systems relate the user to the social order and thus to others who share their use by each person" (Fiske, ibid.: 35) The interplay of the social and the individual in fashion is ensured by the interplay of style - that relates to the social order and identifies group membership - and taste - that "talks of the individual inflection of the social," differentiating and constructing the individual (ibid.: 36).

All the above aspects with regard to fashion should make any interpreter of fashion aware of the multiplicity of the socio-cultural discourses that are liable to occur in the so familiar aspect of our modern existence that is fashion. It is imperative, therefore, that fashion be 'read' from an interdisciplinary perspective, the most likely to offer a deeper insight into the relations being at work between society and the individual in the artistic performances of fashion.

Fashion - from haute couture to counter-cultures

There are not many aspects of social life that follow the path of change so faithfully as fashion does. However, in its obstinate pursuit of the 'new', fashion has always had its look turned towards the 'old', in the hope of renewal through

constant if subtle adjustment of its old appearance to the new society. It is this intimate and constant relation of fashion with its past that justifies the attention given in the following lines to a diachronical survey of fashion as social topos.

Starting as haute couture, hence as a privilege of class, fashion 'read' at its beginnings *individuality*, being attached to a well-defined sense of class. With the development of technology, mass-production was preparing the way for the inclusion of the middle and the working classes in the so-far forbidden realm of fashion. This was made possible with the 19th century industrialization and urbanization when the idea of 'status' came to define fashion in addition to that of *class*.

Along with the spread of mass fashion, the 20th century witnessed new social significances conveyed by clothes; fashion becomes now "an expansion of elaborate self-definitions and group affiliations - individual and collective identities". (Wilson, ibid.: 211) The showbiz associated now with fashion can be traced back to these times, when the increasing importance of mass media made 'performance' gradually become an indispensable asset of the catwalk presentations of fashion collections. The catwalk performances brought forth now-consecrated names such as Paul Poiret, Coco Chanel, Jean Patou that created the 'modern woman' of the 1920s, years known for their 'classless' fashion that came to be identified with two words: 'modernism' and 'democracy' (ibid.: 212).

Moving further into the twentieth century, the 1960s come - roughly - as the following relevant point in time with respect to fashion generally, and definitory for British fashion, in particular. Consistent with the rise of Pop Art, performance art 'happenings' and psychedelic imagery and motifs, the counter-cultural fashions of the 60s substituted "self presentation and performance... for any lingering notion of the sartorial as good manners". Aiming at "dispelling the conformity of correct dress," the fashion of the 60s came to be associated with "rock music, radicalism and alternative lifestyles" (ibid.: 215, 216 passim). Or, as one contemporary commentator put it, "The teddy boys, the mods, the hippies and the punks are, after all, the legends of our half-century, a pantheon of anti-gods and goddesses who prove that in the gray twilight of late capitalism, rebellion is still a potent force" (The Guardian, 1994, 26 Nov: 64). The "apotheosis of counter-cultural fashion" was Punk, started as, and continuing as such, a British phenomenon. As Elisabeth Wilson has it summed up, Punk began by questioning "every canon of good taste", as well as "the nature of femininity". The importance of Punk, so far as contemporary British fashion is concerned, rests in its prefiguration of postmodern manifestations in fashion, where boundaries between life and art, couture and street dress are merging, and fashion becomes "a walking art object and performance" (Wilson, ibid.:216).

Fashion in the postmodern city

From the mark of class through that of status, then identity and rebellion, fashion has been, consciously or unconsciously, but "the costuming of the daily theatries of social life" (ibid.: 221). Its social constructedness is even more evident in the 1990s, when fashion openly includes in its 'discourse' its own critique, playing with notions of style, art, past or present concepts of fashion. As Wilson put

it when discussing the relation between fashion and postmodernism, "all fashion has become 'stagy', self-conscious about its own status as a discourse, about its irrationality, about its message" (ibid.: 222).

The natural, hence perfect setting for fashion as 'contemporary artistic performance' is the city, where the blurring of distinctions between life and art, 'high' and 'low' fashion reaches sometimes extreme postmodern aesthetic expressions not merely by exposing "what was previously subordinate and hidden,"(Chambers, 1993: 193) - as designer Vivienne Westwood does in her latest collections by exposing so-far 'ignored' (by fashion) parts of the human body, - but by challenging all previous ideas of style, taste or culture and subjecting them to an often times programmatic eclecticism, as theorist Iain Chambers rightly noticed:

> Today the simple distinctions between low and high culture, between good and bad taste, between the profound and the superficial, between avant-garde and mass-culture, are increasingly swamped by a wave of metropolitan connections, suggestions and sense. Different tastes, different artifacts, distinct forms and practices, coexist in the intertextual spaces of networks that permit both the recognition of connection and difference (ibid.).

With creativity and commercialism still at its core, British fashion manifests this eclecticism - "part of its postmodern-ness" together with its "oscillation" between styles (Wilson, ibid.: 223) - in an astounding diversity, worthy of the envy of Paris and Milan couture houses which cannot but admit the supremacy of London. Given its renowned club culture and its eccentricity, British fashion leads the way in the glamorous albeit confused world of fashion with names such as Vivienne Westwood, Paul Smith, John Galliano, Katherine Hamnett, Bellville Sassoon, to name but a few, to which there follow the 'new generation' or the so-called 'intellectuals': Hussein Chalayan, Alexander McQueen, Abe Hamilton. What all of the designers above-mentioned have in common is the performative dimension of their work, what distinguishes them being their different understanding of the function of fashion, and the personal appropriation of that function to accommodate their own world-views. All this is happening against the broader landscape of the postmodern metropolis with its noisy social life.

Except for the 'new generation', whose approaches are entirely ideational (that do not enter the scope of the present paper), British fashion owes its supremacy in the fashion world to the street, youth culture making its way up to the catwalk and bringing a substantial contribution to eccentric, shock-aimed dress. According to Angela McRobbie, today "fashion designers play a much less central role in setting fashion trends than is commonly imagined" some going as far as to declare the 'death of the designer', "since the main impetus for changes in fashion and in contemporary consumer culture,... comes from below" (1995: 153). Always true for the UK is the statement one critic made, "High fashion may grab the glossy covers, but Britain leads the world in 'street style' " the later being described as "a huge, bubbling well-spring of ideas which few big -name, international designers

can resist dipping into to inject into their collections" (The Guardian, 1994, 1 Feb: 10).

Besides being 'show-imperatives', for designers like Vivienne Westwood - the "original architect of punk street style" - the nothing-to-hide aesthetics connected with a preference for "mockery, obliqueness and caricature" seem to be in perfect tune with her personal life - the other side of her confused and confusing eclecticism in fashion; an interview with her can be rather relevant with regard to the nexus between the life and art of an award-wining fashion designer:

> maybe I'm completely reckless. Some people think I'm mad. ... women are the most gorgeous animals on this planet. They stand on two legs. They have a bottom. Their hands and their brains are free... Human beings should strive to be beautiful, but the most valuable commodity is intelligence, through how people talk. I read a lot. All ideas are in books. I can't have a conversation with people who don't read. Russell said that... But... Look at Proust... I want my children to have a sense of pride. A sense of contempt. Yes. Contempt, contempt, contempt.

And the comment follows, "With her outrageous clothes and her jarring assemblage of other people's intellectual credos, Westwood is in flight from ordinariness" (The Observer, 1995, 22 Jan: 14) If Westwood's latest obsession is the bottom - as can be seen in her show, 'Erotic Zones', with a little pad or a small cage over the model's buttocks - Courney Love, lead singer of the pop group Hole, undoubtedly having some emotional disorders, to say the least, seems to be the model for a new fashion trend: the 'kinderwhore', or the Lolita of fashion:

> In a recent issue, Elle magazine ran a picture of her alongside an article on trends of the 1990s. Above the caption 'Courtney Love, Hole role model', the grunge widow was shown wearing white, in one of her trademark little-girl dresses, all frills and bows and pink ribbon sash with a baby-blue knitted toy hanging from her waist. Her mouth, by contrast, was lipstick red, and a word had been scrawled in the same bright colour on each pale forearm: 'witch' on the right, 'slut' on the left (The Guardian, 1994, 24 September: 52).

An opinion such as that of Hebdige (1982, cited in Chambers, 1993: 54), who argues that "the forbidden iconography of marginal womanhood ('vulgar' cosmetics, skimpy clothing, leather, the 'bold look') can be recycled to produce a challenge to male judgement and a refusal to be sentenced by that gaze" sounds rather unconvincing in real life. The city is increasingly witnessing such fashionable expressions of the self, and the question of meaning breaks into this no man's land of contemporary streetstyle: do we read 'identity', 'rebellion', 'social reform' in these personal yet widely copied fashion statements? Apparently there are two different answers: the one given by Ted Polhemus in his book Streetstyle,

in the 1990s there is no counter-cultural dress;... streetstyle today is just a postmodern supermarket of style, with the young creating a bricolage style from elements of different 'uniforms' - mixing New Age traveler, Goth and punk, for example, or switching totally from one to the other literally at the drop of a hat: a new generation so knowing that it consciously recycles pop history, divesting the styles of their original hotly defended meaning (The Guardian, 1994, 26 Nov: 64).

position supported by others as well: "Street Style reaches a conclusion, which is that there is now, in postmodern dress sense, a 'supermarket of style'. How ironic, how aware, one's choice of clothing has to be" (The Observer, 1994, 27 Nov: 12). To this "Pick what you want, no style's the limit"-view of street fashion Elisabeth Wilson replies: "Nor...do I believe that, even in an age of mass marketing and mass culture, style is just a supermarket pick and mix. On the contrary, it becomes even more important as an affirmation of meaning" (The Guardian, ibid.), when all that Wilson can bring in support of her plea for meaning in street fashion is, "So long as there's something to rebel about, people will rebel"(ibid.). Other theorists interpret the contemporary "sartorial bohemia" (The Guardian, 1994, 5 Nov: 46) in psychoanalytical terms, arguing that, "when the harsh realities of life have become a little too grim to bear, women tend to turn to glamour fashion as a bright and shiny therapy-treatment to real life" (The Guardian, 1994, 29 Oct: 50). Whether this is true or not, British designer John Galliano celebrates this "confusion and conflict" in fashion, putting his hopes in the new version of glamour "built solely on revivalism and cliches" (ibid.). Galliano's celebration is but a reflection in fashion of the postmodern perspective on present socio-cultural realities, succinctly described by Chambers as follows,

With electronic reproduction offering the spectacle of gestures, images, styles and cultures in a perpetual collage of disintegration and reintegration, the 'new' disappears into a permanent present. And with the end of the 'new' - a concept connected to linearity, to the serial prospects of 'progress', to 'modernism' - we move into a perpetual recycling of quotations, styles and fashions; an uninterrupted montage of the 'now' (ibid.: 190).

and consistently exemplified in punk's no future fashions: "the true genius of the punk revivalists is that, while acknowledging the legacy of the past, and bravely fixing their gaze on the future, they have realized an essential truth: there is no time like the present" (The Guardian, 1994, 22 Jan: 28). Following the novelties of the street dress (Paul Smith and Catharine Hamnett taking up the original tailored Crombie and the mod parka, as Clark A. records in his article "Coats with attitude" in The Guardian, 1994, 12 Nov), British designers jump "from the Forties to the Fifties and to the Sixties and back again," says Cooper, co-owner of the Covent garden-based second-hand store (The Guardian, 1994, 24 Dec: 26).

This restless move from progress to nostalgia is best translated in the celebration of the 'now' of cultural pluralism. The street version - labeled as "global

grunge" - is welcomed by those who believe that "at its best, it injects new energy into the clothes we wear and conjures up an optimistic sense of the world as a global village" (The Observer, 1994, 16 Jan: 32). For others the cross-cultural fashion is but "an uneasy mixture of cosmetic style and diluted conviction," a mere 'badge' of ethnic awareness (The Guardian, 1994, 8 Jan: 14). The catwalk correspondent of 'global grunge' is the 'pick'n'mix collections', thought by their designers to reflect the times, labeled by the Women's Wear Daily, the American trade paper, the 'international ethno-chic', and exemplified, among others, by British designer Rifat Ozbek (The Observer, ibid.).

After having reviewed some of the ways British eccentricity is reflected in postmodern dress and thinking that an 'anything goes' postmodern fashion leaves little room for counter-cultural dress in the 1990s, there still remains the question: "When everyone else looks madly eccentric, what does a rebel do?" The answer is given by the frump:

> The frump, in her knee-length skirt, sensible cardigan and American tan tights, looks as though she has never been touched by anything as frivolous as fashion. Her appearance is penny plain, prudish, her dress style chaste, buttoned up... the antithesis of the culture mixers that currently populate the street... Frumpishness is a logical reaction to the extremes of recent fashion... maybe... the only rebellious gesture left is to appear boring. (The Guardian, 1994, 10 Sep: 40)

Conclusions

After merely scratching the surface of such a vast subject as fashion, I will conclude by saying that most contemporary British expressions of fashion can be read as an answer to British designer Paul Smith's rhetorical question: "Eccentricity is an essential part of being British, so why shouldn't it be part of the business world?" (The Observer, 1995, 19 Mar: 76). It is this eccentricity that connected with a strong club culture gave rise to the much-envied British fashion.

In the postmodern cultural landscape, London is eyewitness of the changes undergone by dress under the impact of contemporary thought and social change. Eclecticism, cross-cultural fashions, playfulness, self-consciousness seem to follow the "big brash Eighties" (The Guardian, 1994, 18 Jun: 32), leaving behind the more aggressive counter cultures that had something to say to a changing society. Now, 'no-style' street fashions or 'pick'n mix' ones can hardly mask the crisis of meaning and identity behind the melting pot of social and cultural discourses.

As for the future, some think it will look "neat and eclectic. Flashed to a vision of street clothing for 2045, we discover that kilts and teacosies will be worn, fashioned from skins 'genetically mixed' and fur that has been 'grown in vats'." (The Observer, 1994, 27 Nov: 12)

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THE CHALLENGE OF THE EUROPEAN INTEGRATION
THE EUROPEAN MARKETING MODEL

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The Single European Market with its 15 countries is a reality of our times. The firms develop their activity on "Internal Market" of over 370 million consumers, face a harsh competition and, in this context, they have to adjust their market strategy by relating them to the new dimensions of our times.

The firms do no have to consider anymore their operational market as being limited by geographical boundaries. The competition on this new market can arise from any part of the U.E. (in fact, from any part of the world) and, consequently, the managers need a large prospective when considering their domain of interest.

The Single European Market helps the European firms to become more competitive by creating the larger industrialised market from the world. Thus, opportunities needed to realise an increased production and a developed economy of scale are created and the access to U. E. contracts supported (financed) by the government becomes real. These facts will help firms to cut down on their costs hence the new advantages - lower prices for the European consumers. The firms also benefit from their increased power to efficiently compete, on the global market, with their American and Japanese rivals.

On this market with 370 million consumers the argument used the most is "big is the best". There also are some "niches" that can be identified, and the small firms focus on them. The pressure of their larger rivals who benefit from the economy of scale and the outcomes of price competition deals, more resources needed from product development, larger marketing networks and larger advertising and promotion budgets. In this context, the marketing activity within the firms arrives to new levels of development. Marketing is not a simple activity which involves selling goods and services. Philip Kotler defines marketing as: "a social and managerial process by which individuals and groups obtain what they need and want through creating, offering and exchanging products of value with others".

The marketing activity aims at gaining and maintaining the consumers and the clients respectively by meeting as close as possible their needs. Another question circulating within professional circles is "Can we talk about a European marketing model?". In other words: "Is Euromarketing a reality?"

This question targets specifically the actual differences in the marketing practice from the USA and Japan on one side and the U.E. on the other side. Numerous another authors have given different answers and the main idea is that

there are differences by not in terms of "concept" or "method" but rather in terms of "priorities" and "complexity".

Prof. Jean-Jacques Lambin (Catholic University of Lovanio) considers that these differences originate from three factors: the challenge of the European integration, the European cultural plurality and the attention paid to social responsibilities.

The Single European Market is probably the greater economic integration project that has ever developed. It is "the foundation" needed for the next stage of the European integration, the Monetary and Economic Union (M.E.U.) The creation of the Single European Market through the suppression of tariffary and mostly nontariffary barriers which have been in place for centuries, turns into an unseen challenge in the European economic history. The firms operating on this market benefit from its enlargement but they also have to face a harsher competition. This involves the redefinition of the targeted market as well as the revaluation of its strengths and weaknesses on this new market. Thus, the need for strategy and organising structure revaluation shows up. The redefinition of the marketing strategy plays a key role in the successful activity of these firms. The four elements of the mix marketing, i.e. product, price, distribution and promotion have to be redefined, in the context of the newly targeted market.

1. Product Policy

By suppressing the boundaries between countries the free circulation of goods, services and capital is favorised. Thus, consumers face a larger scale of products. Now the firms deal with European standards and benefit from the advantages of the economy of scale (price related advantages and not only).

The main decision the firms have to take in relation to their product policy is whether to adopt a product standardisation for the pan-European market or to adjust their products for each and every market (for each country). Both cases have their advantages and disadvantages which makes the decision a difficult one to take. From the point of view of a global approach of the product, with a sole trade mark to meet the common needs of consumers from many markets, this fact guarantees the firm a high potential for an economy of scale at the level of different business functions. Research, market development, distribution, services and promotion can be all realised more efficiently by standardising the efforts.

The so-called "global trade" marks also have a certain adjustment degree in order to meet the needs of local consumers. This is the case of Coca-Cola and Pepsi firms that produce sweeter drinks in some countries, as a result of consumer preference for sweet beverages, in these countries.

There are products that can be subjected to a standardisation strategy, namely those approaching a market - segment large enough for the cultural differences not to need an adjustment.

The such adjustment strategy, the products are created for each country, this leading to a double effort to develop the products, the production, the

distribution and the promotion. By creating products for the distinctive needs of each market, the firm increases its performances on these markets as they are related to meeting the local consumer preferences and its strategy is much more cultural differences aware.

An example can be found in the case of dishes: it is said that the Italian buy classical forms (white or black china), larger plates in order to serve "pasta" and large soup bowls; the Dutch buy small cups to drink chocolate and are the main buyers of coloured ceramics, the Germans also like big, large plates to serve cakes and the Spaniards are interested in soup bowls to such an extend that they base their choice when buying an entire set of plates, on that particular item.

The decision for standardisation or adjustment implies a cost-benefices evaluation for each country in particular.

A series of elements are based on this decision:

- the nature of the product: it is well know the fact that industrial products are easier to standardise than mass consumption goods. "Non-durable" goods need a greater adjustment in comparison with durable goods which are influenced to a larger extend by the cultural differences that make each country and consumer behaviour different.

- the legal requests - product standardisation (including their physical nature, packaging, labelling and content) is bound by the licence, local rule, tariff and tax law which is different for each country. All those lead "coerce" a certain degree of product adjustment.

- physical request - the product have to be often adjusted to provide for differences between countries, such as: the climate, the living conditions, the local resources and the industrial equipment compatibility.

- the competition - the market competition level will influence the differential or adjustment levels. As the competition varies from one market to another, each type needs a different approach and has to be analysed according to the size and the nature of the actual competitive environment.

- the market development - the concept of product life cycle says that products pass through different development stages: launching, growth, maturity and decline. Each one of these four stages has its own marketing strategy. The firm has to make sure that a certain strategy is not for a certain country on the sole reason that it has been successful in another country, because the product can be in different stages of its life cycles and, consequently, the implementation of the same strategy is not justified.

It is interesting to note the contrast between Procter&Gamble and Unilever. The latter has developed by progressively buying local factories and it commercialises its detergents using 11 different trade marks on the European market. Procter&Gamble commercialises only one trade mark: Ariel, present in 60 countries. Unilever has adopted a standardising strategy in order to become competitive on the international market.

The trade mark and the promotion standardisation is considered an independent decision, in most of the cases. Sandler and Shani (1991) consider

that the decisions regarding trade mark and promotion are not related and different combinations may appear. These are illustrate in figure 1.

Figure 1.

	Standard international promotion	Non-standard international promotion
The same trade mark	Strategy 1 Global trade mark and promotion	Strategy 2 Global trade mark, local promotion
Different trade mark	Strategy 3 Local trade mark, harmonised promotion	Strategy 4 Local trade mark and promotion

Strategy 1: *Global trade mark and promotion*

This strategy is adopted for an environment where local forces are weak and global forces are strong. Examples: Marlboro, Coca-Cola, Gillette, Sony Walkman, Levi's, Gucci, Ariel.

This choice implies national stereotypes: German quality for cars, French style and romanticism for perfumes, English classic taste for masculine clothing.

Strategy 2: *Global trade mark and local promotion*

This strategy is chosen in the case of the existence of both local and global forces on the international market. Examples: Bacardi, Volvo, Procter&Gamble (the shampoo "Wash&Go" launched in 60 countries under 6 different trade marks: the " two in one" concept is always the same for each market while the commercial messages vary).

By using a global trade mark and a local promotion, the firm considers the local culture and sensibility. Carlsberg has always resorted to a global promotion. As a beer culture varies from one country to another Carlsberg has redefined its promotions by using local publicity actions.

Strategy 3: *Local trade mark, standard global promotion.*

This strategy involves harmonised promotion and maintenance of local trade mark. Examples: Unilever (that has detergents called "Kajoline" in France, "Coccolino" in Italy, "Kuschelweich" in Germany, "Mimosin" in Spain, but it uses the same little teddy-bear for the promotion and on the package of the product from each country) and Kraft General Food, that combined European level centralised marketing with local trade marks. On the coffee market, it does not commercialise a unique trade mark at a European level but 12 trade marks for different European countries, each one holding the top position in its country. The people involved say

that this strategy is "the cause of the growth process, realised through progressive buying, the respective enterprises controlling the local markets".

In Europe, the dominant strategy seems to be: **"local trade mark, adjusted global promotion"**, which suits the best the administration of European diversity.

In the USA the dominant strategy is: **"global trade mark, local promotion"**.

Strategy 4: Local trade mark and promotion.

This is the dominant market strategy of the past. Local particularity adjustment takes place when the cultural factors are dominant and the global forces are weak (see the case of the food sector). Unilever has recently adopted a complete adjustment strategy (Omo, Persil, Skip, All). In what concerns the European trade mark policy, the word is rather **"harmonisation"** than "standardisation".

The actual problem is how to obtain advantages from the increase generated by standardising and centralising the marketing activity to an economy of scale offered by the new European market but, at he same time, respecting the social and cultural diversity of each country.

This depends on the firms capacity of **"thinking global at a European level"** and adjusting its own marketing strategy to it.

2. Price Policy

From the marketing point of view, the price is an amount of money the buyer accepts and is ready to give to the seller in exchange for a product of a service. The price plays an important role in positioning the product, as a "value" indicator for the buyer. This contradicts the traditional economic approach, according to which the price is given by the production cost plus a profit margin.

The unseen side of the price make the relation between price and product more complex. The buyers often regard the price as a quality indicator. A high price means high quality and a low price implies a low quality within an acceptable scale of values.

There is a top and a bottom limit beyond and under which the buyers cease to see the price as an acceptable one. The prices going beyond the top limit are considered "over-priced". If the price is under the bottom limit, the buyers fear that the quality of the product is so low that it is not worthy to be bought.

As an important component of mix marketing, price involves a series of aspects specific for the European integration context. For the time being, the same product presents important price differences from one E.U. country to another. These differences can be explained by resorting to: tax diversity, inflation rate, exchange rate, distribution expenses as well as to the positioning strategy the firm

has chosen, strategy that supports the product distribution in relation to different stages of the product life cycle on different markets.

The implementation of the single currency - Euro - on January 1st 1999, the tax harmonisation and the development of price information will all lead to a decrease in differences (without their complete elimination). The firms will keep on looking for different positioning for their products through the demanded prices.

The firms can adopt a series of pricing strategies on the European market: penetration pricing, skimming pricing and market share pricing.

In the case of penetration pricing, the respective firms resorts to prices lower that those of its competitors in order to access the market through "buying market share". This strategy is used for products with great demand elasticity when compared to the price, this meaning that a slight price cut down will lead to an increase in demand.

Skimming pricing means that the firm resorts to prices higher than those of its competitors in order to "gather" large profits from market with low elasticity in demand. This is the case of such products as: oil or luxury merchandise. We talk here about Porsche when the difference between the price of series models and that of luxury models is over 100%. The consumer are ready to pay this difference as a consequence of the prestige associated with this luxury car.

In the case of market share pricing, the firm establishes its price in relation to that of its competitors in order to be able to defend its market segments. In some of the cases, this means a decrease in the margin profit in order to maintain its customers. A small profitability can be accepted only on a short term because this leads to the diminution of the basis for future investments.

Market share pricing is a strategy used on the Single Market, as the firms fight to be able to keep up with an ever increasing competition. The firms have extended their activity to the dimension of the new "internal" market and each market is exposed to the products (and thus, to the prices) of another markets, this leading to a decrease in prices which converge on the smallest level. The firms that aim at penetrating the Single European Market will pressure for lower prices (penetration prices).

Parallel imports

The price decreasing trend is also due to parallel imports, a practice presently encouraged by the Commission in its attempts to cathalize low prices and, consequently, to help the E.U. consumers. The parallel trade involves market intermediaries who buy all merchandise from one market (where the price is low) and sell the merchandise on other markets (where prices are high). This leads the producers to pass from different prices on different markets and to explore those markets where price elasticity is lower and the consumers are ready to pay high prices. This can done on markets with a great need for the respective products or where the general value of the market is high and the competitors have adopted lower prices (aggressive competition prices). The producers that come from these intermediaries who realise parallel imports are at a disadvantage. Dudley (1990) underlines a few of these disadvantages: average selling prices are lower this leading to a low profitability for the producers regardless of them selling products in

the E.U. or not; the price the buyers are ready to pay for the intangible characteristic of the products is diminished in favour of local competitors who can damage the image and the market positioning of the product; the producers loose the control over the place their products are sold and over the people selling them who can also damage the image of the product (it may be sold in places that do not fit with the image of the product and with its market positioning); the usual market intermediaries loose trust in the producers when they see their services avoided; the marketing costs become mare difficult to direct as the investment directioning is distorted by the parallel imports. For instance, a firm can increase its investments from a certain sector and, after that it can find out that it competes with its own products.

While producers can feel frustrated by these practices, the Commission intends to promote them; Article 85 of the Treaty of Rome allows the Commission to take measures against any firm that tries to prevent intermediaries from realising parallel imports. The general benefices of the E.U. are: a cut down in prices at a general level from which the consumers have to gain and a price convergence that helps to the creation of the concept "level playing field".

As the firms standardise their prices at a E.U. level, there is a threat at least on short term, that the competition level on certain market will decrease. In some countries, the standardisation will imply a price increase which will have a negative effect on the market. On other markets standardisation will involve a cut down on prices, possibly under the profitability level. In order to survive to these adjustments the firms have to focus on improving their basic costs and their technical efficiency.

The price competition

Once the competition has increased on the Single European Market, the mutual influence of the firms that establish the market price and react at changes, is critical. This competition growth threatens not only to lead towards a price diminution but also to trigger dramatic price wars that could potentially ruin the profit industry for all player involved.

Not all firms aim at imposing market prices and influencing the nature of the market. Many of them limit at following the industry trends and adopting a reactionary position against all changes. Thus, the price diminution of the leader are followed by other firms which leads to a general price diminution until the weakest competitor on the market is not able anymore to compete in a profitable manner.

The dominant firms in an industry, usually setting the standards, play an important role in making sure that the price competition does not turn into a price war. By adopting a non-aggressive position and choosing other competing factors than the price, those firms can set an example for the reactionary firms. For instance, increasing the promotion costs, the labour efforts or the after-sale services can protect the respective market segment without tampering with the price balance.

The firms can try to prevent price wars through preventive actions influencing the nature of the competition by other factors than the price. Low

production costs due to modern equipment investments, product characteristic improvement, promotion cost increase, distribution improvements and new service levels in support of the product can bring a plus in the sales level and the firm profitability.

A constant homogenous price on the market plays a part in choosing the same distribution channels, defining and protecting the trade mark image.

An over-increased price may be perceived in a negative manner and may trigger a cognitive distortion in the client when the image the product reflects does not match the perceived image. If the price for the same product varies from one country to another, a distributor can consider buying for a low price country and re-selling in a high price country. Thus, he competes with the producer who sells his own products through different channels. A standard European price involves a series of problems and, as a strategy, it is difficult to put into practice entirely. Such a strategy can face some obstacles, such as: a different purchasing power, different consumption usage, the image of the product, the intensity of the competition, the legal environment - all these varying from one country to another.

3. Distribution policy

Now that physical barriers throughout Europe have disappear the firms are chiefly interested in moving their merchandise within the E.U. thus expanding their distribution channels. The firms that spread their business at a European level for the first time, face, now, new dimensions as they products reach markets from geometric distances.

The new dimension the firms consider when they dispatch their product involves new changes in the logistic management. The logistic concerns merchandise and component circulation between the producer and the marketing channels up to the final user or the consumer , respectively. The systems aiming at optimising the service level and minimising the costs for the firm have to take decision concerning the cost of the newly offered services and that of the business lost because of the base service elimination.

The actual distribution costs are tightly connected to production and share-holders location. The cost of the transportation from the manufacturer or the deposit to the final consumer increase with the geographic distance. The European firms that have extra-costs from the production centralisation fight against the rationalisation of manufacturing operation and for one manufacturing unit. The process rationalisation will involve the setting of "main" regional manufacturing locations chosen so as to serve several member countries, but not all of them.

Some of the firms will find it impossible to serve a 370 million consumers market only from their intern production as freight costs are huge. If these firms decide to sell their products on the E. U. market, the outside the country manufacturing will impose itself in order for the firm to expand its business.

The marketing channels give structures which the firm can use for distribution their products. In what concerns the channel structure, there are several options:

a) Traditional marketing channels - where the firms resort to the services of market intermediaries.

b) Administrated channels - a member channel has a great power over others as a result of some dominant elements, such as: size, cost, leadership, a better information system on the power monopoly.

c) Vertically integrated channels - the operators are integrated before or after other activity levels they control.

d) Horizontal marketing systems - the producers operate with several types of marketing channels.

The traditional of marketing channels are activated for the firms that expand their activity for the first time and that lack resources necessary for establishing their own facilities, thus connecting to the basic services of market intermediaries in order to dispatch their products. In the case of mass consumption goods, including the firms that choose to distribute their activities by themselves, the interaction with foreign sellers is an important part when making sure that the products are not given for sale to unwanted locations.

The firms acknowledge different level of "sophistication" of sales by retail all over the 15 E.U. countries. Even if the supermarkets and the great store-chains hold an important place in most of the European countries, the governmental restrictions from some of the E.U. countries aim at supporting the existence of local specialised stores. This is the case of Belgium and the Netherlands where the reglementations impose strict rules in what concerns the great store-chain development. The German producers who sell is supermarket chains, such as Sainsbury's or Asda from the UK can see their marginal profit shrunk by the dominant force of there sellers and consequently, they have to adjust their marketing efforts (price and promotion) in order to stay profitable.

Different development levels among sellers from different markets lead to the emergence of "European" intermediaries. The retail sellers from the UK, who are the most performant sellers from Europe, aim at expanding their activity to Europe - bringing along some developing business from their domestic operations. For some firms, the expansion to Europe can be realised through traditional sellers.

The administrated channels insure an increasing activity within the chains dominated by retail sellers. These powerful retailers aim at learning: who can be part of the channel, which is the sales level for each producer, what is the storage and distribution nature, the merchandise price and the "in-store" promotional activity. As a consequence of their importance and their intentions, they can supply critical access points in order to reach the consumers.

The greatest benefit coming from administered channel is the under-optimisation removal due to different members. By defining the nature of the

transaction, the administrator can make sure that each channel operator does not try to obtain "beyond normal" profits.

The exchanges between the E.U. countries intensify within the Single European Market . As a consequence of VAT and customs control suppression, as well as of the street traffic liberalisation, the actual merchandise distribution costs have diminished.

The distribution policy reaches new levels of development defined by the internationalisation of the distribution group (connected to the product and service internationalisation). This is the case of IKEA, Aldi, Harrods, Intermarche.

Another interesting example of internationalisation of a distribution enterprise is Aldi. Its native country is West Germany. Meanwhile, Aldi has been internationalised, making important changes in its form and content. Thus, for several years, it has been acting in the Netherlands, Austria, the USA and Denmark. In 1990, Aldi has entered an the French market with 200 sales points and, after a while, in the UK.

The internationalisation process continues to develop in Europe at the level of acquisition and distribution groups, by creating potential European acquisition centres, Eurocenters, that re-gather the acquisitions of great distributors coming from different countries. This is the case of the Associated Marketing Services (in Switzerland) whose members are: Alkauf (Denmark), Ahold (UK), Casino (France), ICA (Sweden), La Renascence (Italy).

The international distribution is favorised by a series of evaluative elements: the trade-mark development (the trade mark symbol), the emergence of new international concepts (franchising international), the development of remote sales and of telecommunication systems.

4. Communication Policy

The communication policy is an important element of the marketing actions for the firms approaching the European market. At a European level, this policy aims at the development of Euro-trade marks and the internationalisation of audio-video communication media.

To communicate means the make information, ideas and attitudes known. The professionals consider that an exhaustive communication process has 9 elements which can be grouped in 3 main poles: communication partners (the source and the receiver); the communication vectors (decodifying, the answer and the feed-back and the last element: the perturbations.

The firms may adopt different communication strategies adjusted according to their own activity type, the approached market and, last but not least, the marketing targets of the firm aim and, within these targets, the aims of their communication policy.

The communication mix has four components: publicity, sales promotion, public relations and selling force.

Publicity

When publicity is involved, the problem of European standardisation or of its adjustment for every country arises. The pros and cons of each situation are offered by professionals but, in general, it is said that the strategy of the firm is within the two limits.

Coca-Cola is one of the firms that adopted the European standardisation strategy. According to some calculations, the cut down in publicity costs is about 15 million $ / year. Airway had adopted the same standardisation strategy, thus decreasing its marketing budget from 17% to 15%. Through the same strategy (promotion standardisation in 7 countries), Levi-Strauss decreased its costs with about 4 million $.

This evolution had an impact on publicity agencies and media that had to find the necessary alliances in order to meet the European consumer needs.

The mass media know new lines of development as publicity media. "The European" has not reached a large spreading, yet. "The Economist-European Edition" has gain popularity in the world of business and the evolved segments of the European market. Two European daily papers have increased their spreading, thus attracting the interest of European business people. This is the case of "Wall Street Journal-Europe", printed in the Netherlands and the UK, respectively the "International Herald Tribune" printed in France. In broadcasting world it is the case of the European channels: Euronews, Eurosport, TV5, Sky Television, BBC World Service.

Public Relation

Public relation have recently imposed as a promotion medium. These include: the pressdosier, conferences, seminaries, annual reports. It is said that there are two options in order to realise public relation programmes throughout Europe. First case is when a client can choose a consultant firm involved in public relations, firm that is present on every targeted market. This approach combines the co-ordination with language, clients and media knowledge. The second case is when the client works with different advisors for each country. The disadvantage in this case is the time spent for the action co-ordination. The so far unseen development of communication leads to the development of new public relations media: new video productions, video-conferences and via satellite conferences.

The Sales Promotion

In what concerns sales promotion, as a consequence of specific techniques that are now used (games, contests, lotteries, primes, samples, sold etc.), the problems that raise in front of the firms approaching the European market are connected to the legislation specific to each country - a uniformisation process is intended - as well as to the consumers behaviour vis-à-vis these manifestations (the choice of certain techniques over others varies from one country to another).

In what concerns the legislation of each countries, all the 15 E.U. countries allow "on-pack price reductions". As for the "banded offers premiums" and "multiple purchase offers" they are legal in the UK, Spain, Portugal, Italy, Greece, the other countries allowing them only if certain request are met. "Free product" is

legal in all countries except for Belgium where certain requests have to be met. "Free mail-ins" is not legal in Germany, the other countries allowing it. "Self-liquidation premiums" is not legal in Luxembourg and the Netherlands unless certain conditions are met, the other countries imposing no requests.

Selling Force

The selling force consists of the ensemble of people whose main mission is to sell the products of the firm through the agency of direct contracts with potential clients, distributors or prescriptors of these products. The specific techniques are: demonstrations, selling reunions, teleshopping, fairs, expositions etc.

In the context of the Single European Market that the firm presently approach, the task of the firm management is to organise the selling force that works on this market. Usually the firms are first presented on the foreign markets through an international division. In time they increase their activity and the number of those working outside their country is ever greater. An important element is the language from the respective foreign country. Thus, the French-speaking selling force will act in France and the Southern parts of Belgium while the Northern part of Belgium and the Netherlands will host the Dutch and German-speaking selling force (especially in the south-east of Belgium, the North of the Netherlands and Germany and Austria).

All the above try to be a first step towards identifying, knowing, understanding and using the European marketing practices. The subjects developed here can, each of them, become a separate subject in itself. Therefore this material tried to approach the most important aspects connected to the targeted subject, a more thorough study following in future presentations.

The European marketing model is a reality that must not be overlooked by the firms acting on the Single European Market. The correct and prompt usage of specific marketing techniques turns out to be a real gain for the respective firms.

THE RELATIONSHIP BETWEEN
THE EU AND THE MEDITERRANEAN COUNTRIES

DANA POP

INTRODUCTION

The trade between the EU and the Mediterranean countries constitutes a special part of EU's overall external trade. We will refer here at the MED 12 countries, namely: Algeria, Morocco, Tunisia, Egypt, Jordan, Lebanon, Syria, Israel, the Palestinian Territories, Cyprus, Malta and Turkey. For MED 12 the main commercial partner is the EU, due to the fact that about half of their exports are going to EU and the same share of the region's imports are coming from EU. The trade between the EU and the Mediterranean countries accounts for a much smaller share in EU's total external trade, around 9% (1995), but from the developing trading partners MED 12 is the most important one for EU.

It is nowadays largely admitted that if the region will not improve its performances within the coming years, it might lose in importance. This was one of the reasons for the development of the new type of partnership between EU and the Mediterranean, expressed in the **Barcelona process**. In order to understand the new particularities of this partnership, we will stress firstly the characteristics of the old agreements between EU and MED 12.

EU's policy towards the Mediterranean region (before the Barcelona process) was one of granting limited preferences for the access of agricultural products and free access for industrial ones, as well as consistent financial support. One can say that the main characteristics of EU-MED 12 trade relations under the older Mediterranean agreements are the following:

  (i)   a strong asymmetry with regard to market access;

  (ii)   preponderance of North-South trade, expressed by the strong dependence of the Mediterranean countries on EU markets, compared with very limited intraregional trade;

  (iii) insufficient export diversification on the side of the Mediterranean countries;

  (iv)   a continuing trade surplus of the EU.' (*European Economy,* p.40).

In addition, there is little evidence of any kind of regional integration in the Mediterranean due to the low level of intraregional trade.

The Central and Eastern European Countries (CEECs), namely Slovakia, Romania, Poland, Hungary, Czech Republic, Bulgaria and Albania represent a potential danger for MED 12 due to the following reasons:

- they have a relatively high level of industrialisation;

- CEECs do have a developed infrastructure;

- the labour force is highly educated in the Eastern and Central European region.

As a result the CEECs are the most dynamic partner of the EU at present. As Bensidoun& Chevalier put it:

Already in 1991 the CEECs overtook the Mediterranean countries as a source of manufactured imports and as a destination for foreign direct investment'(FDI).

(Bensidoun&Chevalier, 1996, p.42).

In order to attract FDI some requirements have to be completed, such as :

- economic and political stability;

- sufficient capital and human resources;

- a transparent regulatory framework;

- existence of prospects for growth and profits.

Taking into account these conditions, in comparison with other developing regions, the Mediterranean countries do not offer a favourable environment for the FDI. This is the main reason for the reorientation of EU's FDI , with negative effects for MED 12.

THE BARCELONA PROCESS

The importance of the countries of the southern and eastern shores of the Mediterranean for the security and social stability of the EU was stressed by the *European Council of Lisbon* in 1992. The conclusion was that EU and MED 12 should make efforts in order to achieve the following objectives:

1.   to speed up the rate of socio-economic development;

2.   to improve the living conditions in order to reduce the North-South prosperity gap;

3.   to co-operate and to establish regional integration.

The Euro-Mediterranean partnership was launched officially in November 1995, at the *Barcelona Conference*. The participants at the conference were the 15 EU member states and the 12 Mediterranean countries. The main topics covered by the **Barcelona Declaration** are:

1. political and security partnership for an space of stability and peace;

2. economic and financial partnership in order to realise a zone of prosperity, especially by the mean of free trade;

3. increasing the exchanges between the civil societies of the countries involved through an social, human and cultural partnership.

One can easily observe that the new partnership was intended to be based on a new type of association agreements and to give way to a multilateral dialogue- political, economic and social.

The aim of the Barcelona process is to establish a **Europe-Mediterranean economic area** with the *EU-Mediterranean free trade area* as its central part. The main objectives of the integration of the MED 12 into the emerging pan-European free trade network are to:

(i)   streamline the regulatory and economic policy framework;

(ii)   raise the long-term competitiveness of the Mediterranean economies;

(iii)   attract more FDI, in particular from EU investors;

(iv)   accelerate sustainable economic and social development.'

(*European Economy,* p.49)

The **European Commission Communication** 'Strengthening the Mediterranean policy of the European Union: Establishing a Euro-Mediterranean partnership', (COM(94) 427 final) points out why this process will be a difficult and complex challenge for the Maghreb and Mashreq countries. The main reasons stressed by the Commission are:

1. the overall level of development of these countries is low;

2. their high population growth aggravates the burden of existing high and structural underemployment and implies increasing social costs, such as for education and health systems;

3. a lack of sizeable well-trained labour force and a rate of illiteracy which is still high.

The EU-Mediterranean free trade area

Being considered the core of the economic and financial partnership between the EU and the Mediterranean countries, this free trade area would imply:

a) reciprocal free trade in manufactured goods;

b) for agricultural goods of interest for both parts a preferential and reciprocal access;

c) free trade among the Mediterranean countries.

In order to realise a free trade area the main instruments are the **Euro-Mediterranean association agreements (EMAs)**. An EMA usually has the following main elements:

1. political dialogue;

2. free movement of goods;

3. the right of establishment and supply of services (without any specific commitments);

4. competition, payments, capital and other different economic provisions;

5. economic, social and cultural co-operation;

6. financial co-operation.

Since the Mediterranean countries enjoy free access to EU markets for industrial products, the liberalisation will have to occur on their side and this will probably lead to increased imports from the EU. There are many specialists who believe that this will have important negative effects on the trade balance of the MED 12 with the EU. Impact studies of the EMAs on Morocco and Tunisia estimate that 'up to two thirds of industrial firms in those countries might not survive in competition with freely imported, competing European products.' (European Economy, p.49) In conclusion, far-reaching reforms should be implemented in the Mediterranean countries and marketing and technological improvements during the transition period are a must.

It is largely believed that the impact of tariff elimination on industrial goods on the domestic production of the Mediterranean will not be substantial. Such a measure will have, probably, two kind of effects: trade creation and trade diversion. *Trade creation* will consist in a switch from domestic production to EU producers/suppliers, as the tariffs on EU industrial goods will be lowered. As long as the biggest share of EU exports to the Mediterranean is represented by machinery and transport equipment and in this field EU producers are not in competition with domestic production, the impact on local producers will not be significant. Nevertheless, it will occur also trade diversion, in time. *Trade diversion* may affect the imports of MED 12 from other industrialised or newly industrialising countries. This could determine other countries to offer preferential access to MED 12 to their markets in exchange for similar access. Finally, liberalisation towards the EU could lead to a modernisation of the Mediterranean economies and to a improved competitiveness of their industries. If a fiscal reform will also be set in motion, a framework for a further feasible liberalisation towards the rest of the world could be created.

CONCLUSION

The Euro-Mediterranean association agreements will, almost certainly, have long-term benefits for the Mediterranean economies. The competitiveness of their industries can be improved by mean of adoption of EU standards, such as the competition rules, and by transfer of technology, financial and technical assistance from the EU. The later will help in the adjustment process and the creation of a

favourable investment climate. The final result should be an higher and sustainable economic growth.

'The overall aim of the European Union's Mediterranean free initiative is to create a free trade zone encompassing the EU, the CEECs and the Mediterranean countries. Therefore, a crucial element is that trade barriers among the Mediterranean countries are also eliminated. The EMAs provide an incentive for increased intraregional trade in so far as they include liberal rules of origin, which allow for cumulation in neighbouring Mediterranean countries so as to create linkages between these countries and enhance the potential for intraindustry trade' (Hoekman&Djankow, 1996, p.387-406, 400 in European Economy, p.50).

The future will show if these prospects of a whole integrated Europe, together with the Mediterranean countries are realistic. Anyway, my opinion is that this will be beneficial for all the partners involved and will help the economic development of the Mediterranean and CEECs.

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HOW CONCERNED SHOULD WE BE ABOUT THE SIZE OF THE SHADOW ECONOMY
- IMPLICATIONS OF THE INFORMAL SECTOR ON THE ROMANIAN ECONOMY -

DANA POPA

ABSTRACT. The Romanian shadow economy developed spectacularly after the social and political events of 1989, reaching, according to some estimates, the level of around 40% of GDP. Given its significant size, it creates a major source of concern for the economists. This paper provides an overview of the Romanian informal sector, in terms of its extent and implications. Thus, it examines the particular aspects related to the *forms* of the shadow economy that coexist with regular economic activities. It intends to evaluate the *dimensions* of this phenomenon and its possible *causes*, focusing on both inherited behavioural patterns (the tradition of "Balkan mentalities"), and the new opportunities stemming from a weak institutional framework of the market economy. Moral issues, related to the fairness and the asymmetry of the relationship between the individual and the State, and the structural flaws in the legislation are also considered as catalysts for economic fraud. Finally, the paper accounts for the *effects* and the *impact* of this sector on the economy as a whole, and, ultimately, on the Romanian society. The effects are examined not only in the traditional view, that considers irregular activities as a source of confusion when designing macroeconomic policies meant to solve the problems of inflation and unemployment, but also from a radical perspective, mostly connected with the neo-liberal thinking. Unsurprisingly, according to the radical view, the informal economy is correlated with positive effects, representing an indication of a rational economic choice (when facing the high costs of legality) aiming to increase efficiency and to handle variability and change in the economic system.

The Romanian shadow economy developed spectacularly after the social and political events of 1989[1]. In order to provide an overview of its dimensions and implications on the society, this paper will examine some aspects related to the *forms* of shadow economy that coexist with the regular activities in Romania. It intends to evaluate the *dimensions* of this phenomenon and its possible *causes*.

Finally, it will present some views on the *implications and impact* of this sector on the economy and on the society as a whole.

There are various approaches to the concept of "shadow economy"[2]. Definitions of the second economy have focused on legal criteria (too narrow), moral criteria (too relative), institutional criteria (too bureaucratic), quantitative criteria (too restrictive) (Thomas, 1992). A definition that we consider appropriate for our purposes argues that "*second economy includes all areas of economic activity which are officially viewed as inconsistent with the ideologically sanctioned dominant mode of economic organisation*" (Los, 1990). Still, these areas are not necessarily illegal in themselves (Thomas, 1992).

The major forms of the shadow economy, as derived from this definition, can be grouped in the following way (Thomas, 1992):

1. Tax evasion
2. Avoiding economic legislation
3. Avoiding bureaucracy
4. Social security fraud
5. Illegal immigration

There is no single item on this list that cannot be identified as pregnantly encompassing the actual state of the Romanian economy.

1. Tax evasion is, undoubtedly, the predominant form of irregular activity. The unstable fiscal environment, with continuously changing legislation gave way to vivid creativity in evading and/or avoiding the law[3]. The faults existing in legislation are widely speculated by the interested parts.

Obviously, the emerging forms of tax evasion are determined by the structure of the fiscal system. In Romania, statistics show that the main sources of

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[1] It is important to make a clear distinction between the shadow economy *before* and *after* 1989. The collapse of the communist ideology also caused the failure of planned economy, which resulted in a range off new opportunities for the informal economy. Therefore, the object and the forms of irregular activity differ drastically from the underground economy that existed before 1989.

[2] Also called informal, second, irregular, black, clandestine ,etc.

[3] There is a distinction between tax avoidance and tax evasion, as showed in Thomas (1992). Thus, tax avoidance is done with respect to the existent laws, by speculating their loopholes. In contrast, tax evasion takes place beyond the accepted legal framework, incurring indubitable criminal activity.

government's income are the income tax (out of direct taxes), and VAT (out of indirect taxes)[4].

Therefore, evasion on *direct taxes* mainly takes the form of underdeclaring the imposed income, which is practiced on a large scale, particularly by the self-employed. Also, there is a large number of people who work "off the books", receiving incomes that are not taxed.

As property rights are not yet clearly defined in Romania, and a complete legal framework for property taxation is not yet available[5], the state has little income flowing from property taxes, and evasion of property taxes is of little significance.

Regarding the *Indirect taxes*, the offences most likely to occur are connected with the avoidance of VAT payment (usually practised by small enterprises), as well as smuggling in order to "pilfer" the excise paying[6]. Copy right duties are also subjected to an increased challenge by the tax evaders' perspicacity[7].

2. Avoiding economic legislation is the common, undenyable feature of all forms of shadow economy. The broken law may relate either to fiscal regulations, to accountancy or labour rules.

3. Avoiding bureaucracy is, as well, a common irregular economic activity in Romania. Out of all forms of shadow economy, this could rank as the most "understandable", as the private enterprise is often discouraged by the great deal of regulations and formalities that have to be accomplished.

4. Compared with Western countries, social security frauds have particular features, due to structural differences. While in the developed countries the sector of services is predominant, Romania's economy is mainly an industrial one. Restructuring the economy upon the principle of competitiveness involves painful social costs, associated with high unemployment. A higher unemployment unsurprisingly involves higher social security frauds.

5. Unemployment and/or low payment lead, to some extent, to international labour migration. Illegal work of Romanian citizens in foreign countries affects both the Romanian economy, and the one of the destination country. That is why increasing

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[4] Statistics of summer 1996 show that income tax and VAT ensure above 1/3 of total government income (according to "Capital", a Romanian economic newspaper).

[5] Though IMF has conditioned its financial help on government providing a law of property taxation, regardless of the external pressures, the law hasn't been adopted yet.

[6] Very impressive newspaper "scoops" have reported about tobacco, coffee and alcohol smuggling (summer 1996). Smuggling involved perfectly organised transport networks, a good knowledge of accounting techniques and of document manipulation, as well as corruption and bribery on very high levels (including the Government).

[7] The adoption of Copy Right Law on Aug, 1st, 1996 initially generated a shock on consumer goods' market. Eventually, the black market (CDs, Computer software) has flourished.

customs control has been introduced by Western countries in order to prevent the illegal immigration of Romanian workers[8].

To sum up, there is a very large range of activities that compose the informal economic sector in Romania. However, it is extremely difficult to estimate its size, as it is not directly reflected in any form of national accounting.

In April 1995, Virgil Mă gureanu, the Director of the Romanian Information Service (SRI), declared that the estimated size of the Romanian underground economy ammounted to a shocking share of 42% of GDP[9]. This figure, though not officially confirmed afterwards by other statistics, enabled the masses to have a more accurate image about the real dimensions of this phenomenon. Whether accepted or despised, the shadow economy represents undoubtedly a *sector* of the economy, with multiple implications.

In order to achieve a broader perspective over this sector, it is highly important to understand the causes that generated such a "booming" of the informal sector. According to Smith, St. (1986: 24) "*understanding why tax evasion and benefit fraud occur is a first step to assessing the possible scale of such evasion and fraud, and to considering whether it might be more effectively controlled*".

Informal economies are often viewed as predetermined by the *cultural heritage* or historical experience of a country. From this point of view, "*the historical experience of the Romanian people (...) sheds light on the roots of the second economy.(...) People developed a deep attitude of distrust towards the institutions of government* " (N.B. As a legacy of Ottoman domination). "*The strong separation between the ruling class and ordinary citizens gave rise to corruption and bribery, which were seen as the informal means to achieve one's aspirations*" (Los, 1990: 76). Therefore, the Romanian society is allegedly outlined by some inherited behavioural patterns that resulted in irregular activities[10].

This tradition in "underground" economy has been greatly encouraged by the economic developments taking place after 1989. The transitional period, characterised by chaotic economic decisions, was perceived by the individuals as a succession of promising, but eventually deceiving attempts to reform the economy.

The *economic framework* in Romania is currently a mix of inherited socialist features (general ineffectiveness and bureaucratisation of the first economy, central regulation of prices, market unbalances), to which some "Western" issues have been added (high taxation, increased role of trade unions, recession) (Los 1990: 221). All of these are specific causes that explain, at least partly, the emergence of irregular activities.

Some economists argue that tax evasion is, in fact, a model of rational decision-making. Individuals are assumed to be *"amoral, risk averse, expected*

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[8] However defensive these laws are, nevertheless they affect deeply the Romanian citizens' right to free circulation.

[9] "Capital", nr. 11/1995.

[10] Authors describe these patterns as "Balkan Mentality" (Sampson, 1983, quoted by Los: 221).

utility maximisers" (Pyle, 1987, quoted by Thomas). During times of high incertitude (which is, obviously, the case in Romania), individuals tend to maximise their present utility and have no interest for the long-run perspective. Consequently, there is a strong incentive to cheat the state, particularly among the individuals with low incomes, as it was proved that the variety of taxes do not impinge in the same way on different income groups[11]. A particular position in Romania is that of the self-employed, whose incomes are very highly taxed[12]. Again, this segment has very strong incentives to avoid/evade the taxes, be it through underdeclaring the revenues or overestimating the expenses.

Structural faults in the *legal* framework (lack of legislation, inadequate or incomplete laws) increase the economic irregularities. Legal defaults are partly due to the strong link connecting the economic and political activities in Romania. Legal, as well as fiscal decisions were frequently taken either in order to gain the voter's support and increase the government's popularity, or to please some interest groups (e.g. trade unions).

The issue of interest groups immediately raises the question of *moral causes* of the shadow economy. Bribery and corruption on extremely high levels (another "inherited behavioural pattern") determined a dramatic decrease of trust in the efficiency and honesty of the political and economic system. Accordingly, the citizens do not feel a reciprocity between their contributions to the state and the services provided by the state. Consequently, the majority of population develops an egoiste feeling of "*sauve qui peut*" (Los, 1990: 77).

Briefly, the moral problem can be seen as a failed trade-off between the individual and the state: as the individual does not perceive any advantage coming from the state (the transitional process provides no improvement in his standard of life, as the system of social benefits constantly fails to reach the intended target), he has no motivation in "helping" the state by paying taxes. Moreover, as surveys show (Mille,1977, quoted by Smith), people's willingness to comply with taxes is strongly influenced by whether they think other people do so: "I don't see why I should pay all my taxes when the others don't" seems to be a very extended point of view in Romania, particularly among the self-employed.

Nevertheless, other studies (Grasmick and Scott 1982, in Thomas, J.), also reveal that moral feelings can also constitute powerful disincentives to cheating: for the group of subjects tested, the feelings of guilt were a stronger deterrent than the potential punishment. However, the Romanian society does not seem to have reached such a high degree of morality. There is a large-scale tolerance for tax evasion, as the majority of population agrees on the idea that taxes are too high[13] and, in some respects, unfair.

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[11] Thomas provides data to prove that tax evasion is most likely to occur among the people with lower incomes (Furnham and Lewis,1986).

[12] Liberal professions (barristers, notaries, private medical services), as well as small private enterprises, have income taxes mounting to 52% of their profit.

[13] As empirical proof, the last parliamentary elections (1996) were won by the political party that promised an average of 25% tax cut.

It is hard to judge whether this generalised tolerance for tax evasion and informal activities is a blameable fact inside the Romanian society. The reason for our doubts lies in a subjective approach towards the social culture. The majority of population has little *knowledge* and, consequently, *understanding, of the mechanisms of the market economy.* The fiscal system, the allocation of resources, the concept of budget planning, the laws of economic accumulation and development are unlikely to be fully understood at some levels of the society. This knowledge deficiency (which can be blamed on government's lack of initiative in "enlightning" the masses) transforms some of the tax evaders in amoral individuals, as they cannot be held responsible for their misbehaviour, since they are not entirely aware of the bad consequences resulting from it.

The debate over the effects of the informal sector on the economy as a whole has led to various "pros and cons". Not surprisingly, the *counter-arguments* are prevailing.

It is widely accepted that one of the most powerful negative effects of the informal sector is related to the *measurement* of economic activity. As the shadow economy is not directly reflected in any way in the national accounting, the macroeconomic indicators may be seriously deteriorated. Authors argue that "*economic growth may be in fact higher, and inflation and unemployment lower than the official statistics suggest*". (Smith, St, 1990: 3). Accordingly, they can generate confusion in designing the long run economic policy. A major consequence of the deffective national accounting could be a gradual loss of control over the money supply and over the real amount of unemployment. A serious "vicious circle" can appear, linking the irregular activities to inflation and unemployment.

Another source of concern is due to the *substitutional* effects between the formal and the informal economic sector. Some economists argue that the shadow economy is growing at the expense of the formal sector. In contrast, others infer that the existence of the informal sector is the result of inefficient patterns existing in the formal economy.

The question of the informal sector's *economic efficiency* generates opposite opinions as well. It is generally accepted that the irregular system negatively affects the mechanism of resource allocation. On the other hand, some radical economists infer that these irregularities can be considered evidence of discontent with the government's regulations, as well as a signal of the need to change the rules of the tax system, as the resources might be more efficiently allocated in the absence of taxes.

The effectiveness of the tax system is seen as a trade-off between the probability of being detected (which induces high costs of auditing and control, also supported by honest tax payers), and the rate of penalty taxation if detected. The penalty tax must be "finely tuned", as there must be a correlation between the gravity of offence and the potential punishment. Very severe penalties versus low probabilities of detection are not a viable choice for Romanian society, as tax evasion (if not practised on a large scale) is seen by the population as producing much lesser harm than other irregular activities. Moreover, the extent of corruption in Romania - which largely affects even the segment of financial tax auditers -

makes almost any appeal to social ethics ineffective, when linked to the fiscal duties. This result raises the question of *equity* of taxes. If many people are tax evaders, it means that there no longer exists equality between tax payers, neither on the horizontal, nor on the vertical line. In this respect, evasion of duties can be regarded not only as an offence against the state, but also against the honest individuals or companies (i.e. foreign companies investing in Romania[14]).

As mentioned before, there are some radical writers, nevertheless, who provide very strong arguments *in favour* of shadow economy. They state that the shadow economy represents an *indication* and a *response* of the market mechanisms to inefficient regulations that bear themselves efficiency costs. The informal economic activity is, accordingly, a rational economic choice facing the high costs of legality. Therefore, the society as a whole will gain from the underground activities.

Anthropologists view informal activities as a guarantee for *flexibility and variation*: "*In State systems, the informal economy is not only a barometer of variability and change, but of pluralism... In this framework, the concept of the informal activity is a heuristic device, designed to handle variability, pluralism and change in economic systems*" (Halperin and Studervant 1990: 333). From this perspective, shadow economy is seen as a sophisticated set of adaptations at various levels of local, regional and national economies.

In conclusion, it is very difficult to make absolute judgements regarding the dimensions and the effects of the shadow economy over the economy as a whole and over the social system. What is obvious, though, is that this sector has large scale dimensions in Romania. It represents not only a source of rumours, but a phenomenon of increasing importance. However, a decisive result on its positive or negative effects on the society is highly improbable, as many arguments occur for both, especially due to the many uncertainties of the transitional process.

Still, what can be inferred with certitude is that the underground economy is a result of large faults of information and social ethics within the masses. As discussed previously, as long as the individuals are not aware of the social consequences of their frauds, they are not entirely to blame. An 'enlightment campaign' is, therefore, necessary, to teach the people not only about their duties, but also about their rights and benefits resulted from the fiscal system. Ofcourse, this is feasible only if the fiscal system will improve, making possible an increase of trust at the social level.

If no improvement of the economic ethics will occur, the society can reach "*the point where tax is being evaded on such a massive scale, that an acceptance of tax evasion becomes the norm"* (Thomas, J.).

Ultimately, we can conclude that a complete analysis of the impact of the informal economic sector on the society is not only a matter of economic studies, but should also refer to moral, social and political considerations.

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[14] However, foreign companies' relative "loss" in their comparative advantage, due to honest tax paying, is fully compensated by the high competitiveness of their goods or services.

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TAXATION AND DIVIDEND POLICY. THE CLIENTELE EFFECT

FLORIN-SEBASTIAN DUMA

Dividend policy is often reported to the shareholders, but seldom explained to them. Choosing between reinvesting or/and distributing the profit is a hard decision for a company, with very important implications in the future; the dividend policy is a part of this complex process.

Taxation of incomes from dividends and capital gains is the purpose of our studies. If the tax level is the same the dividend policy could be consider almost neutral. We said almost neutral because, as we shall see later, the clientele effects and other special circumstances determine the shareholder to prefer one of the two possibilities (dividends or capital gains), even if the fiscal treatment applied is the same. When, however, these two income sources suffer differential taxation, then the dividend policy impact is obviously.

Basically, a lower level of taxation of capital gains versus a higher level of taxation of dividends encourages the reinvestment of the profit.

There are two significant groups of shareholders. Some shareholders like charitable institutions or pension funds that do not paying taxes will claim dividends.

Another category of shareholders are the individuals with very high income and they pay over 60% taxes for this, but only 30% on capital gains. This way, the first category will support the distribution of higher dividends, where as the later category will go in an opposite way. Given this situation, each firm should evaluate its shareholder-structure and observe the taxation rate on dividends, as well as capital gains and take account of these in elaborating its dividend policy.

When the taxation level on dividends is different than that on capital gains, everything is clear concerning the shareholders' options for either dividends or capital gain.

Let's see now what happens when the tax level is the same. Which will be the shareholders' choice? Usually, the dividend taxes must be paid immediately, where as the taxes on capital gains do not have to be paid until the shares had been sold. In the last case, the shareholder can choose the best moment to sell his shares and to pay the taxes. When the shares are being sold, the tax on capital gain applies on the difference between the selling price and the purchasing price. For instance, shares bought in 1996 for 15 USD and sold in 1999 for 25 USD will generate a capital gain of 10 USD/share, which will be taxed, let's say, with 28%

(the United State percentage after the 1968 fiscal reform)[1], so 2.8 USD tax for each share sold.

Assuming that the investor decides to postpone the selling with one year and the interest rate is 8% the present value of taxes in the condition of 2000 (so one-year later) droops to $\dfrac{2.80}{1.08}$ meaning 2.59 USD. So the tax rate is 25.9%. In conclusion, in these conditions, the longer the sale is postponed the lower the effective rate of tax on capital gains is.

In the unhappy event that the shareholder should die before the sale is conclude, the effective rate of taxes will drop to 0. Let's assume that the share price is still 25 USD when the shareholder dies. The heirs can sell at 25 USD without paying any taxes, because they can claim this price, 25 USD, as a purchasing price. So there aren't any taxes on this 10 USD capital gain. Also, there aren't taxes on capital gains when the stocks are donated for charitable purposes.

On these two grounds, the effective value of tax on capital gain is lower, of course), than on dividends, even if in the beginning the taxation rate was the same.

On the other hand, there are some that agree with dividends. We talking about individual investors who are looking for a current income. Also, companies who own shares on other companies and are tax exempt for their income as dividend (usually for 70%). In those countries where we have this regulation, firms are more than happy with dividends.

The Clientele Effects

The impact of personal income fiscality – incomes that may suffer alteration due to dividend policy – determine what we call "the clientele effect", which means that the investors' preferences might well be dictated by their personal tax position. A shareholder with a high marginal income tax rate might be attracted to shares in firms where dividend payout is low or there are no dividends but they get new shares instead. On the other hand, a person with a low marginal income tax rate or tax exempt is interested in shares in firms whose dividend payments are high.

The clientele effect may determine changes in the shareholders structure leading to the alteration of dividend policy. For the companies that are listed in the Stock Exchange, changes in the shareholders structure are possible by selling or redemption of shares in this institution. For the companies who are not listed in the Stock Exchange, these operations can be made on OTC Market (Over the Counter Market) like NASDAQ (National Association of securities Dealers Automatic Quotation), in the United States, or R.A.S.D.A.Q. in Romania. For encouraging the small investors to buy and to become shareholders, the board of companies may decide to distribute important dividends.

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[1] Richard A. Brealey, Stewart C. Myers, "Principles of Corporate Finance", Mc.Graw-Hill, Inc., 4th Edition, 1991.

The shareholders with a high marginal income tax rate would prefer small dividends or none at all. On the other hand, those investors with a low marginal income tax rate can be classified on three levels. In the first place we have the small investor (as an individual) who has a preference for high dividends, because of his desire to have a current income and due to his favorable tax position. Secondly, the pension funds who are not paying any taxes on dividends or capital gains; they will go for shares in a company whose dividend payments are high, if they need cash for payments to pensioners, otherwise they do not care if their profit as shareholders comes in the form of dividends or capital gain. Finally, we have the corporations who can exclude from taxes a part of their incomes as dividends for the shares they own in others companies (70% of this incomes is exclude in some countries), but they do not benefit of tax exemption for their incomes as capital gains. So it is obvious that these corporations will prefers shares with relatively high dividends, even if they are not interested in a current income.

Now, let's assume that 30% of investors prefers high dividends and 70% of them would like small dividends or none at all, but only 15% of firms pay high dividends while, the other 85% pay low dividends. In this case, the companies who pay high dividends cover only half the demand, so their market value will increase, while for the others who pays low dividends will decrease. This means that the dividend policy should be very flexible in order to meet the shareholders' expectations. In this example, we expect some firms who pay low dividends to increase these and as a result to maximize their market value.

"The clientele" might be structured this way:

The group	Prefer stock with…
Individuals with high income tax	0 dividends or very low
Tax exempt institutions (pension funds)	Medium dividends
Individuals with a low income tax	Medium and high dividends
Corporations (those tax exempt for a percentage of incomes as dividends)	High dividends

Should a firm develop a clientele? A study made in United States by Llewellen, Stanley, Lease and Schlarbaum, provides an answer to this question. Llewellen and the others authors considered the behavior of the 2.500 clients of an important broker and they got 914 answers from investors interested in 1869 different shares. The sheet[2] presented on the next page shows that the stock with high dividends seems to be attractive for individual investors in a low level of

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[2] W. Llewellen, K.L. Stanley, R.C. Lease and G.C. Schlarbaum, "Some direct Evidence on Dividend Clientele Phenomenon", "Journal of Finance", no.33,dec., 1978.

income tax. This sheet presents the relation between the dividend proportion and the income tax rate (which is between 36% and 41%).

The relation between the dividend proportion and the income tax rate

	The dividend proportion (%per year)	Income tax rate (%)
1.	7.9	36
2.	5.4	35
3.	4.4	38
4.	3.5	39
5.	2.7	38
6.	1.8	41
7.	0.6	40
8.	0.0	41
9.	0.0	42
10.	0.0	41

To conclude, regarding the dividend policy and taxation, we can say that:

1. the dividend policy must be very flexible in order to meet the shareholders' expectations and to maximize the firm's market value;

2. the firm should develop a clientele and not neglect it;

3. a firm should not issue new shares to pay dividends;

4. just because there are taxes on dividends this doesn't mean canceling the distribution of dividends.

For the moment, in Romania, we have taxes only on dividends (10%), but not on the capital gains. This means that, in theory, there should be a preference for capital gains. In practice, the situation is a little different. Because individual investors need a current income and because of some particularities of this transition period (low liquidity of stocks, the Bucharest Stock Exchange and R.A.S.D.A.Q. are at the beginning, very few investors, the preference for cash etc.) many shareholders ask for important dividends.

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III. EUROPEAN LAW: RIGHTS AND INSTITUTIONS

EST-CE QUE LA COMMISSION EST L`ORGANE EXÉCUTIF PRINCIPAL DE LA COMMUNAUTÉ EUROPÉENNE?

CARMEN LAZĂ R

RÉSUMÉ Le problème qui se pose est de savoir si la Commission est l`organe exécutif principal de la Communauté, sachant que, en vertu des stipulations du traité de base, le Conseil detient lui-aussi des attributions exécutives et sachant que la Commission les detient tant sur la base du traité, donc directement, que sur délégation du Conseil.Ce dernier est-il obligé ou non de déléguer, voilà une autre question. En plus, le Conseil peut assortir la délégation de diverses modalités d`exécution, y compris des comités ayant soit un rôle consultatif soit le rôle de déférer au Conseil le problème débattu. Par l`intermédiaire de ces comités, les attributions d`exécution des actes du Conseil retournent indirectement à ce dernier, ce qui affècte la répartition des pouvoirs entre les institutions. En plus, le Conseil peut, dans des cas spécifiques définis par celui-ci, se réserver l`exécution de ses actes, autre occasion d`empièter sur les compétences de la Commission.

Pour analyser correctement ce problème, il faut partir du fait que les compétences exécutives de la Commission se divisent en deux types: celles que la Commission exerce directement sur la base du traité - compétences propre[1] - et celles exercées sur délégation du Conseil[2], dans ce cas la Commission appliquant les actes de ce dernier, tant par des actes normatifs qu`individuels (jurisprudence de la Cour de Justice[3]). Concernant la première catégorie, on peut constater

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[1] Ph. Manin, "Les Communautés Européennes, l'Union Européeenne", Ed.Pedone, Paris, 1993, p.187-188; P.S.R.F. Mathijsen, "A guide to European Union law", Ed. Sweet&Maxwell, London, 1995, p. 73-74; Lasok&Bridge, "Law and institutions of the European Union", Ed.Butterworths, London, 1994, p.191-194.

[2] Ph. Manin, op.cit., p. 189-191; P.S.R.F. Mathijsen, op.cit., p. 75-76; Lasok&Bridge, op.cit., p.192.

[3] J. Boulouis, "Droit institutionnel de l'Union Européenne et des Communautés Européennes", Ed.Montchrestien, Paris, 1995, p. 144-145.

qu`elle ne couvre pas de domaines entiers mais certains objectifs[4]: mésures de sauvegarde (partiellement après Maastricht), mésures visant les entreprises publiques et celles ayant des droits spéciaux, mésures visant les aides des Etats, l`exécution du budget et la négotiation des accords que la Communauté conclut avec des tiers. Dans tous ces cas, la Commission adopte des actes individuels et non normatifs, s`agissant des mésures ponctuelles. Les problèmes peuvent se poser quand on parle de la deuxième catégorie; on a vu que le traité de base est ambigu: il ne résulte pas si le Conseil est obligé ou non de déléguer. La doctrine a interprété cette disposition dans le sens qu`il n`y a pas obligation de déléguer[5]. La pratique antérieure à l`Acte Unique est allée, pendant une première période, dans cette direction: les problèmes courants imposaient au Conseil la délégation, le volume des tâches accomplies en vertu des délégations du Conseil dépassant celles des tâches detenues en propre[6]. Il y a eu aussi une période pendant laquelle le Conseil avait la tendance de se réserver l`exécution de ses propres actes, notamment en ce qui concerne le marché intérieur et l`environnement[7]. C`est cela qui explique la Décision adoptée lors de la signature de l`Acte Unique, par les ministres des Affaires étrangères reunis au sein de la Coopération politique, dans le sens qu`"... il convient de faire plus fréquemment usage [...] des délégations de compétences à la Commission"[8]. Enfin, l`Acte Unique parle de la délégation *des* compétences et non de la délégation *de* compétences, d`où on pourrait déduire que le Conseil est obligé de le faire et que la Commission est l`organe "naturel" de la Communauté, c`est-à-dire principal[9]. Il est vrai, d`autre part, que toujours l`Acte Unique permet au Conseil de se réserver les compétences d`exécution dans des "cas spécifiques", ces derniers étant définis par le Conseil lui-même! Deuxièmement, l`Acte Unique lui permet de prévoir dans la délégation diverses modalités d`exécution, parmi lesquelles les fameux comités à caractère intergouvernemental de type consultatif, de gestion et de réglementation[10]. Les "cas spécifiques" et les comités font que les compétences exécutives retournent indirectement au Conseil, ce qui affècte l`équilibre institutionnel et l`ordre normal des pouvoirs. C`est surtout la pratique des comités qui a attiré des critiques: la décision "comitologie" de 1987, décision-cadre à laquelle doivent se conformer toutes les modalités d`exécution incluses dans une délégation concrète, prévoit les trois types mentionnés plus haut. Les comités consultatifs n`ont pas suscité de protestes, leur avis ne liant pas la Commission qui

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[4] Ph. Manin, op.cit., p. 187-188.

[5] J. Boulouis, op.cit., p. 162; Ph. Manin, op.cit., p. 189.

[6] J. de Ruyt, "L'Acte Unique Européen", Ed. de l'Université, Bruxelles, p. 139.

[7] Idem, p. 140.

[8] Voir Annexe no. 2 à l'Acte Unique, point III 2.4.

[9] J.de Ruyt, op.cit., p. 139; Ph.Manin, op.cit, p. 189; pour un point de vue opposé voir J.Boulouis, op.cit., p.163.

[10] J. de Ruyt, op. cit. p. 294-296 et 141-142; N.Nugent, "The government and politics of the European Union", Ed. Macmillan Press Ltd, London, p. 109-112.

reste maîtresse de la décision. En revanche, les comités de gestion et de réglementation ont un rôle beaucoup pesant dans l`activité de la Commission: leur avis negatif - exprès pour le premier, exprès ou implicite pour le second - a pour effet de déférer au Coseil le problème discuté, sans ou avec suspension de la mésure de la Commission; dans le cas du premier, le Conseil doit substituer sa propre mésure à celle de la Commission s`il veut que la dernière soit abrogée, n`étant suffisante son infirmation pure et simple; donc, s`il ne fait rien, la mésure de la Commission peut continuer à s`appliquer; dans le cas du second, le Conseil n`est plus obligé de prendre une autre mesure, pouvant infirmer celle de la Commission tout simplement par le fait de se prononcer contre elle, et encore avec une majorité plus reduite que celle qui aurait été nécessaire pour adopter une autre décision; il est vrai que, en cas de non-prononciation du Conseil, la Commission peut décider d`appliquer sa propre mesure. Ces trois types de comites n`ont pas de domaine limité (sauf, bien-sûr, le domaine des compétences exécutives propres de la Commission).

Ce qui est surprenant c`est que, malgré les déclarations des Etats[11] dans le sens d`une plus grande rapidité et efficacité du procéssus decisionnel et pour un rôle prédominant des comités consultatifs, en pratique ce sont les comités de gestion et de réglementation qui prédominent. Pourtant, il y a des voix qui sont optimistes quant à l`avenir de la Commission, en affirmant que la décision "comitologie" ne mène pas à la paralysie du système decisionnel dans la Communauté: il vaut mieux - disent-elles - donner aux administrations nationales des garanties qui resteront plutôt théoriques, pour éviter que le Conseil ne retienne pour lui les attributions exécutives faute de pouvoir utiliser les comités[12]. Or, le procéssus de réalisation du marché commun pourrait être mis en péril si la Commission cherchait à forcer une mésure contre la volonté des Etats[13].

En revenant a la délégation des compétences, la Cour de Justice a statué qu`il faut l`interpréter le plus largement possible, en accord avec l`esprit du traité et les exigences de la pratique[14] (c`est-à-dire en faveur de la Commission). On pourrait, dès lors, espérer que la Cour veillera aussi à ce que les "cas spécifiques" ne soient pas trop nombreux, même si pour cela elle devra recourir à un contrôle également de légalité et d`opportunité[15].

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[11] P.S.R.F.Mathijsen, op.cit., p.75 et suiv.

[12] J.de Ruyt, op.cit., p.294-296 et 297-298.

[13] ibidem; N.Nugent, op.cit, p.112-113.

[14] L.Cartou, "L'Union Européenne: Traité de Paris, Rome, Maastricht", Ed.Dalloz, Paris, 1004, p.100 et 115-117.

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DIE ABTRETUNG VON FORDERUNGEN AUS GEGENSEITIGEN VERTRAGEN NACH ALLGEMEINEN GRUNDSATZEN

HOREA BORA

Unter dem *gegenseitigen Vertrag* versteht man ein solcher Kontrak, der nicht schlechthin zur Leistung des Versprochenen, sondern vielmehr zur Leistung alles dessen verpflichten, was nach Treu und Glauben gefordert werden kann. Solche Vertrage gehoren im romischen Rechte zu den *negotta bonae fidei.*

Der gegenseitigen Vertrag wurde wegen der gegenseitigen Abhangigkeit der Leistungen auch *synallagmatischer Vertrag* genannt. Im gegenseitigen Vertrag sind beide Teile - weil Beide eine Leistung versprachen - Hauptverpflichtete und jeder kannte seine Anspruche durch ein actio directa geltend machen.

Im Burgerliches Gesetzbuch entsteht und besteht nur dann eine obligatorische Verpflichtung zur Leistung fur jeden Vertragsgenossen, wenn die entsprechende Verpflichtung des Gegners gultig begrundet ist. Also hat das BGB. an dieser juristischen Struktur nichts wesentliches geandert.

Im Gemeinen Recht treten schon - im Verhaltnis zu den fur alle Vertrage geltenden Vorschriften - gewisse Besonderheiten auf. Das Recht jedes Kontrahenten muss so selbstandiges sein, daß es auch selbstandig geltend gemacht werden konne. Jedoch hatte der Beklagte das Recht, dem Klager, der noch nicht erfullt hatte, eine exceptio non adimpleti contractus entgegenzusetzen und somit die Leistung bis zur Bewirkung der Gegenleistung zu verweigern.

Das hat sich das BGB. voll angeschlossen nur im Bezug der Verpflichtung zum gegenseitigen Austausch der Leistungen unterliegt es zwei Einschrankungen:

1. Die Verweigerung darf nicht gegen Treu und Glauben verstoβen. (320 Abs. BGB)

2. Durch Gesetz oder Abrede kann bestimmt werden, daβ der eine Teil vorzuleisten hat. (321.BGB.)

Sonderbestimmungen finden sich beim gegenseitigen Vertrage auch hinsichtlich der Vorschriften uber die Unmoglichkeit der Leistung. Ahnlich ist es, wenn ein Teil mit der ihm obliegenden Leistung in Verzug gerat. Zur Bewirkung der Gegenleistung ist er auch hier nicht verpflichtet. Hat die Erfullung des Vertrages fur

ihn kein Interesse, so stehen ihm alle diese Rechtezu, ohne daβ es einer Fristsetzung bedarf.(326 Abs. 2 BGB.)

Im BGB. aufgefuhrten Arten von Schuldverhaltnissen sind nur zum Teil gegenseitige Vertrage. Als solche sind im allgemeinen anzusehen: Kauf, Tausch, Miete, Pacht, Dienstvertrag, Werkvertrag, aber auch andere Vertrage konnen als gegenseitige Vertrage betrachten.

Im allgemeinen bestimmt sich jedenfalls die Gegenseitigkeit des Vertrags nicht so sehr nach einem bestimmten Vertragstypus als nach dem Inhalt der konkreten Vereinbarung.

ZUR RECHTLICHEN NATUR DER ZESSION

Das romische Recht jede *obligatio* als *juris vinculum* auffaβte, und so war der Eintritt eines Dritten in ein bestehendes Schuldverhaltnis in privater Weise nach dem romischen Rechtsempfinden ursprunglich undenkbar. Die einzige Moglichkeit, Glaubiger oder Schuldner durch eine dritte Person zu ersetzen bot sich durch die Novation.

Diese Moglichkeit ergab sich auch, zwar nicht durch Ersatz des Schuldners durch einen Dritten, also durch Schuldubernahme, sondern durch Wechsel des Glaubigers, also im Wege der *Zession*.

Da aber *der Forderungserwerber (Zessionar)* nur im Auftragsverhaltnis zu dem *Glaubiger (Zedent)* stand, so war er zwar verpflichtet, die Forderung einzuklagen, nicht aber auch dazu berechtigt. Der Glaubiger konnte anderseits den Auftrag einfach wiederrufen, auch erlosch dieser beim Tode des Glaubiger s oder des beauftragen ipso jure. Endlich konnte der Schuldner *(debitor cessus)* ohne weiteres noch an den ursprunglichen Glaubiger leisten. Erst wenn die Litiskontestation, d.h. die Aushandigung der auf den Namen des Zedentenlautenden Formel an den Zessionar erfolgt war, war das Recht des Zessionars gegen des debitor cessus unmittelbar und unentziehbar geworden.

Die Gewahrung der actio utilis schutzte den Zessionar jedoch nur gegen den Zedenten, nicht auch gegen den debitor cessus. Man gab daher dem Zessionar das Recht der denuntiatio gegenuber dem debitor cessus mit der Wirkung, daβ schon dadurch die Wirkungen der Litiskontestation herbeigefuhrt werden sollen. Der debitor cessus konnte somit nach Empfang der denuntiatio nicht mehr an den Zedenten leisten.

Nach BGB; "Eine Forderung kann von dem Glaubiger durch Vertrag mit einem andern auf diesen ubertragen werden (Abtretung). Mit dem Abschluβ des Vertrages tritt der neue Glaubiger an die Stelle des bisherigen Glaubigers". Damit ist ausdrucklich hervorgehoben, daβ es einer Einwillung oder Mitwirkung des

Schuldners nicht bedarf. Gleichfalls ist eine Denuntation des Zessionars an den debitor cessus nicht erforderlich.

Aber nicht alle Forderungen sind abtretbare. Eine Forderung kann nicht abgetreten werden, wenn die Leistung an einen anderen als den ursprunglichen Glaubiger nicht ohne Veranderung ihres Inhalts erfolgen kann, oder wenn die Abtretung duch Vereinbarung mit dem Gegner eingeschlossen ist.

Aber drei Arten des Forderungsuberganges kennen wir schon aus dem romischen Recht;

1, Durch einen Vertrag (Abtretung, cessio voluntaria)

2, Durch richterliche Uberweisung (cessio necessaria)

3, Durch Gesetz (cessio legis)

Auch die heutige Rechtsauffassung des Schuldverhaltnisses ist nicht mehr als juris vinculum im strengen romischrechtlichen Sinne.

Die ubrigen Gesetzvorschriften des BGB. entbehren bei der Abtretung der Forderungen aus gegenseitigen Vertragen des besonderen Interesses.Darum wird auch in dem folgenden Ausfuhrungen insbesondere die Frage, ob eine Denuntiation von seiten des Zessionars an den debitor cessus stattgefunden hat, unerortet bleiben.Ob einer solche erfolgt ist, ist ja an sich von groβer Bedeutung. Aber diese Bedeutung ist durchaus die gleiche, ob die abgetretene Forderung einem gegenseitigen oder irgendeinem anderen Vertrage entstammt.

DIE ABTRETBARKEIT VON FORDERUNGEN AUS GEGENSEITIGEN VERTRAGEN

Das Gemeine Recht kannte noch nicht einen Ubergang des Forderungsrechtes selbst, sondern nur eine Ubertragung seiner Ausubung auf den Zessionar. Man faβte damals den synallagmatischen Vertrag noch als eine derart geschlossene Einheit von Rechtsverhaltnissen auf, daβ die Abtretung einer einzelnen Forderung daraus nicht zulassig erschien.

Nach dem Reichsgericht erwirbt der Zessionar nicht bloβ einen Anspruch an den Kaufer auf Zahlung einer dem Kaufpreise gleichen Summe, sondern die kontraktlichen Rechte des Verkaufers.

Das BGB. regelt selbst die Frage dieser Zulassigkeit nicht. Man konnte nun aber annehmen, daβ eine Forderung aus einem gegenseitigen Vertrage durch Abtretung in Wesen und Inhalt verandert werden kann.

Es ist eben jede selbstandige Forderung abtretbar. Auch der Anspruch aus einem gegenseitigen Vertrage, denn die wechselseitige Abhangigkeit der Anspruche hindert nicht ihre getrennte Geltendmachung.

Der Zessionar erwirbt nur so den Anspruch, wie ihn der Zedent nach Maßgabe des Vertrages hatte. Die Anspruche des Zedenten -eine Ubertragung des korrespondierenden Pflichtteile- braucht nicht ubernommen zu werden.

Jedenfalls hangt dieser Vertrag mit dem Abtretungsvertrag gar nicht zusammmen, und ein Abtretungsvertrag braucht keineswegs einen Schulduberhahmenvertrag im Gefolge zu haben. Eine Einwilliung des Schuldners ist bei der Abtretung von Forderungen aus gegenseitigen Vertragen ebensowenig erforderlich wie bei der Abtretung jeder anderen Forderung.

Wichtig ist noch, ob Teilabtretungen zulassig sind. Nach dem Rechte des BGB.; die Forderung aus einem gegenseitigen Vertrage abgetreten werden kann, wenn diese Forderung nach dem Vertragsinhalte teilbar ist, und auch Teilabtretungen derselben zulassig sind.

Wohl aber gibt es gegenseitige Vertrage, deren Leistungen wenigstens zum Teil so hochstpersonliche sind, daß die Anspruche auf sie nicht ubertragbar sind. Einen solchen Vertragstypus stellt vor allem der Dienstvertrag dar. Keinesfalls kann der Dienstberechtigte seine Anspruche auf Dienstleistunggegen der Dienstverpflichteten an einen Dritten abtreten.

Auch Mietsvertrage konnen haufig so hochstpersonlicher Natur sein, daß man eine Abtretung des dem Mieter zustehenden Anspruchs, die vermietete Sache wahrend der Mietszeitzu gebrauchen, nicht immer fur zulassig erachten konnte.

Daß eine Abtretung von Forderungen aus gegenseitigen Vertragen nicht erfolgen kann, wenn die Abtretung durch Vereinbarung mit dem Schuldner ausgeschlossen ist, bedarf wohl nicht die Hervorhebung.

DIE RECHTLICHE STELLUNG DES DEBITOR CESSUS

Die rechtliche Stellung des debitor cessus ist insofern verwickelt, als der debitor cessus nicht nur Schuldner, sondern auch Glaubiger ist. Er bleibt Glaubiger dem Zedenten gegenuber, als ob die Forderung nicht abgetreten ware. Es wird jedoch durch den Abtretungsvertrag Schuldner des Zessionars.

Aber damit der Zessionar seine Rechte nicht einfach geltend machen durfte, ohe daß der debitor cessus berechtigt sein solle, bestimmt das BGB. (404) daß der Schuldner dem neuen Glaubiger die Einwendung entgegengesetzen kann, die zur Zeit der Abtretung gegen den bisherigen Glaubiger begrundet waren. Es handelt sich nicht immer um die Einwendungen, die dem Schuldner gegenuber dem Zessionar zustehen, soweit der Zedent, oder sein Rechtsnachfolger der

Zessionar Glaubiger ist. Es kommt vielmehr auch darauf an, ob der Schuldner dem Zessionar auch die Einwendungen entgegensetzen darf, die sich daraus ergeben, daß der Zedent Schuldner ist.

Dem debitor cessus stehen nur Einwendungen zu. Soweit er selbststandige Gegenrechte gegen den Zedenten hat, wie den Anspruch auf Erfullung aus dem gegenseitigen Vertragsverhaltnis, kann er diese nur gegen den Zedenten geltend machen.

Eine der wesentlichen Einwendungen, die dem debitor cessus zustehen, ist die Einrede des nicht erfullten Vertrages. Das BGB. bestimmt nur allgemein, daß, wer aus einem gegenseitigen Vertrage verpflichtet sei, die ihm obliegende Leistung bis zur Bewirkung der Gegenleistung verweigern konne. Der Schuldner hat ein Leistungsverweigerungsrecht gegenuber dem klagenden Glaubiger in Form einer Einrede.

Aber alle Einreden -die der Schuldner gegen den Zedenten hat- stehen auch gegenuber dem Zessionar zu. Klagt also der Zesionar auf Leistung, ehe der Zedent erfullt hat, so wird man die Zulassigkeit der Geltendmachung der exceptio non adimpleti contractus von Seiten des Beklagten debitor cessus gegenuber dem Zessionar nicht in Abrede stellen konnen.Gleichgultig ist bei alledem, ob es sich um eine exceptio non adimpleti cotractus oder eine exceptio non rite adimpleti contractus handelt.

Von Erheblichkeit ist fur alle diese Klagen die Frage der Beweislast. Die exceptio non (bzw. non rite) adimpleti contractus ist keine Einrede im zivilprozessualen Sinne, so daß der Beklagte fur sie beweispflichtig ware. Der debitor cessus muss also beweisen, daß die Leistung dem Vertrage nicht entsprochen habe.

Die gleiche Wirkung wie durch diese exceptio erreicht der Schuldner, in dem er sein Zuruckbehaltungsrecht (273 BGB.) geltend macht.

Die exceptiones und in gleicher Weise das Zuruckbehaltungsrecht stehen jedoch dem debitor cessus nur dann zu, wenn uber die Frage, ob welcher Teil zur Vorleistung verpflichtet ware, eine Abmachung nicht getroffen ist. Ist jedoch der debitor cessus vorleistungspflichtig, so befreien ihn weder die exceptiones noch das Zuruckbehaltungsrecht von der Verpflichtung, den Zessionar zu befriedigen

Besonders geregelt ist im BGB. die Geltendmachung der Aufrechnung. Nach den 387, 388 BGB. kann die Aufrechnungserklarung nur dann von dem einen Teil dem anderen gegenuber abgegeben werden, wenn zwei Personen einander Leistungen schulden. Wenn auch dem Schuldner gegenuber dem Zessionar der Schutz des 404 in weitester Ausdehnung zur Seite steht, so schließen doch die strengen Vorschriften der 387, 388 BGB. seine Anwendungsmoglichkeit beim Eintritt eines Dritten in ein bestehendes Schuldverhaltnis dem Dritten gegenuber aus.Somit berechtigt die nach Abtretung der Forderung eingetretene Tatsache, daß der Schuldner seine Forderungen

gegen den bisherigen Glaubiger erworben hat, nicht zu einer Aufrechnungseinrede gegen den neuen Glaubiger schon gemaβ.

Wenn der debitor cessus sich durch Vertrag mit dem Zedenten den Rucktritt vorbehalten hat, so kann er in gleicher Weise wie gegenuber dem Zedenten auch dem Zessionar gegenuber zurucktreten.

Die Falle der Unmoglichkeit der Leistung sind von selben Wichtigkeit. Wird dem Zedenten die ihm obliegende Leistung unmoglich infolge eines Umstandes, den er zu vertreten hat, so kann der debitor cessus vom Vertrage zurucktreten oder Schadenersatz verlangen.

DIE RECHTLICHE STELLUNG DES ZESSIONARS

Aus der Tatsache, daβ der Zessionar in die Glaubigerstellung des Zedenten sukzediert, folgt zunachst zweierlei; der Zessionar muss sich die Einreden gefallen lassen, die dem debitor cessus gegenuber dem Zedenten zustehen.

Der Zessionar muss sich nicht nur die zur Zeit des Abtretungsvertrages bestehenden Einwendungen entgegenhalten lassen, sondern alle diejenigen, die sich erst aus der spateren Entwicklung des Vertragsverhaltnisses ergeben. Er -um seinen Anspruch zu verwirklichen- wird stets ein Interesse daran haben, daβ der Zedent, soweit er Schuldner ist, den debitor cessus befriedigt.

Die andere Folge der Sukzession des Zessionars in die Glaubigerstellung des Zedenten ist die Tatsache, daβ den Zessionar auch die gleichen Glaubigerrechte zustehen wie dem Zedenten.

Der Zessionar kann keineswegs vom debitor cessus Erfullung verlangen oder vom Zedenten fordern, daβ er ihn zu ihr instand setze, selbst wenn der Verzug erst nach der Abtretung eingetreten ist.

Der Zessionar gewahrt das Rucktrittsrecht nur, wenn er vom Zedenten zum Rucktritt durch unwiederrufliche Vollmacht ermachtigt worden ist.

Auch hier sind von erheblicher Bedeutung die Falle der Unmoglichkeit der Leistung.Der haufigste fall ist wohl der, daβ dem debitor cessus die ihm obliegende Leistung unmoglich wird. Der Zessionar kann also Schadenersatz wegen Nichterfullung verlangen oder vom Vertrage Zurucktreten.

DIE RECHTLICHE STELLUNG DES ZEDENTEN

Ist der debitor cessus Schuldner und Glaubiger zugleich, der Zessionar nur Glaubiger, so ist der Zedent hingegen lediglich Schuldner. Seiner Glaubigerrechte hat er sich durch den Abtretungsvertrag begeben. Da der Zessionar in jeder Beziehung in die Glaubigerstellung des Zedenten sukzediert ist, so kann der Zedent keine Glaubigerrechte mehr geltend machen. Tate er es doch, wollte er also den debitor cessus auf Leistung in Anspruch nehmen, so konnte ihm mit Recht die Einrede der mangelnden Aktivlegitimation entgegengesetzt werden, und eine Klage wurde daher abzuweisen sein. Der Zedent ist also lediglich Schuldner.

Ist der Zedent dann berechtigt, gegenuber dem debitor cessus die exceptio non adimpleti contractus geltend zu machen ? Das BGB. sagt; "Wer aus einem gegenseitigen Vertrage verpflichtet ist, kann die ihm obliegende Leistung bis zur Bewirkung der Gegenleistung verweigern" (320). An wen die gegenleistung bewirken ist, ist also nicht gesagt. Daraus folgt, daβ, solange die Gegenleistung uberhaupt nicht bewirkt ist, der Verpflichtete seine Leistung verweigern darf. Nur wenn der Zedent vorzuleisten verpflichtet ist, bleibt, ihm die exceptio non adimpleti contractus versagt.

Auf verschiedene Rechte des Zedenten sollen wir nochmals betonen, daβ der Zedent jedes Recht und jede Forderung aus einem gegenseitigen Vertrage ohne Genehmigung des debitors cessus abtreten darf.

Wird dem Zedenten die ihm obliegende Leistung aus einem Umstande, den er zu vertreten hat, unmoglich, so kann der debitor cessus Schadenersatz wegen Nichterfullung verlangen oder vom Vertrage zurucktreten. Hat der debitor cessus den die Unmoglichkeit herbeifuhrenden Umstand zu vertreten, so wird der Zedent fei. Das gleiche gilt, wenn weder Zedent noch Zessionar noch debitor cessus diesen Umstand zu vertreten.

THE RIGHT TO FREELY CHOOSE THE AFFILIATION
TO AN ETHNIC MINORITY

CIPRIAN PĂ UN

Beginning with the Middle Ages, the affiliation of an individual to an ethnic group constituted a political issue, as assuming an ethnic identity could bring benefits or bad turns. The repressive actions against "the evil doers", "the unfaithful", "the schismatic" Romanians started in Transilvania beginning with the early Middle Ages, culminating with the setting up of "Unio Trium Nationum"[1]. "Tolerated" and subject to different discrimination, the Romanians were indirectly forced to deny their ethnic identity. The situation perpetuated over the centuries, the Romanian people reintegrating within their natural boundaries on December 1, 1918. The Resolution of the National Assembly at Alba-Iulia stipulates a large variety of rights for minorities. Most of them have never been fully applied.

The communist regime, especially the national communism of N. Ceaușescu, started a strong offensive against the ethnic minorities[2].

We tried to draw the prerequisites of the inherited ethnic identity rejection in certain historical periods, due to the historical and political framework.

The Europe of the end of the 20th century brings the citizen in the political and legislative foreground, as his/her own interests' arbitrator.

Referring to minorities, on an international scale, a series of attempts at defining the ethnic minorities have failed, due to the complexity and diversity of the conceptualizations existing at European and global level. We find it interesting to mention the European Council's trial, through the Recommendation 1201, endorsed by the Parliamentary Assembly on February 1, 1993, that defines the national minority as a group of people that:

1. Live on the territory of that state and are its citizens;
2. Maintain solid, long, dependable and permanent links with that state;
3. Show ethnic, cultural, religious and linguistic characteristics;
4. Are representative enough, although they count for a lower number, in comparison with the rest of the population of a state, or of a region of the state;
5. Are motivated by their preoccupation to preserve that which constitutes their common identity, including their culture, traditions, religion or languages.

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[1] Details about the discrimination of Romanian in Transilvania in Ion-Aurel Pop, *Naț iunea român ă medievală* , chapter Români "fă că tori de rele" și "rebeli".

[2] See Denis Deletant, *România sub regimul comunist*, Fundaț ia Academia Civică , București, 1997.

We consider, in an erroneous manner, that the individual pertaining to an ethnic minority can be considered the one that fulfills the above mentioned conditions. We said "erroneous" because these conditions belong to the group and we cannot presume its uniformity.

Both the Recommendation 1201, art. 2, line 1, and the Charter of the European Union's Citizenship and Minorities Rights, art. 14, stipulate that "being a member of a minority is a personal choice and every individual must have the right to express, preserve and develop his/her national, religious, ethnic, linguistic or cultural identity in complete freedom, and enjoy it individually, or in association with others, all these rights being guaranteed by law and being legal".

The individual has the right to freely choose his/her ethnic identity, whether he/she fulfils or not some ethnic characteristics (language, religion etc.). The decision of assuming his/her own ethnic identity is a manifestation of the individual's will, who exerts the right of freely choosing the ethnic identity, in front of a public authority.

Through two bills concerning the national minority law, the National Minority Council stipulates, in art. 7, that:

(1) All the Romanian citizens have the unobstructed right to choose their mother tongue and to declare their nationality, such a choice or declaration bringing no harm.
(2) The public authorities have the obligation to accept as such, without any limitation, influence, conditioning or coercion the choice of the mother tongue, as well as the declaration regarding the nationality, any investigation to find out the latter, conducted by the public authorities being forbidden[3].
(3) The last part of the art. 7, line 2 restates ad literam the text of Art. No. 2, law 86/1945 concerning the statute of the national minorities.

The text of art. 7 is restated in art. 9 of the bill initiated by the national minority parliamentary group, no. 68/1994 and from art. 13 of the bill initiated by the parliamentary group of U.D.M.R.

Art. 3 of the bill initiated by the German Democratic Forum stipulates in line 2 that:
"Each national minority organizations can recognize the affiliation of a citizen to that minority with respect to the elements and data foreseen in their statute. The organizations have the right to request documents which prove the affiliation to that minority"[4].

The Treaty between Romania and the Federal Republic of Germany, art. 15 stipulates:
"The affiliation to the German minority of Romania depends on each individual's decision and from such an option cannot result any disadvantage.

Taken into consideration the legal reason, we consider that the representative organizations of the minorities cannot establish minority hierarchies, based on discriminating criteria.

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[3] *România și minorită ț ile* – culegere de documente, pg. 169, Editura Pro Europa, 1997.
[4] *Ibidem*, pg. 213.

Let us take the case of a student of a German specialization in a faculty, who declares in the registration form his German origin. The German organization asks for evidence regarding his ethnic affiliation. If the student could not prove his parents' affiliation to an ethnic group, the copy of the registration form would constitute evidence in this respect.

We consider the demand of the organization to prove the affiliation to an ethnic group by identifying certain relatives in that ethnic group abusive, because the affiliation to an ethnic minority cannot be obtained by the natural fact of birth. It must be declared by the individual's unilateral will, in writing. Giving up ones ethnic affiliation is done by means of an unilateral will, too.

As Romanian society is in a transition process, it undergoes interesting identity processes. One of these is identified in the sociological literature as "identity negotiation by certain minority groups". Some Roms assume an identity or another, with respect to the political and social context. Therefore, many times, when their actions have a penal nature, it is better to declare themselves Romanian or Hungarian, due to some prejudices of the order authorities'. When it comes to aid distribution, the revert to the Rom identity occurs immediately. We expect that if the U.D.M.R. proposal to introduce double citizenship for the Hungarian minority becomes a reality, the phenomenon will amplify.

The European society is based on the civic spirit, which requires the freedom to assume a certain group affiliation. We find Miroslav Kusy's[5] opinions very eloquent:

"As a citizen I am also a member of the most diverse identification groups, that defend their collective rights. The multitude of these groups is characteristic to the pluralist democracy, and their number is directly proportional with its level of development. Referring to my identification as nationality or nation affiliation, it is the number one priority when the existence of this nation as an entity is jeopardized or when it is oppressed or humiliated by another nation"[6].

The native speakers do not declare themselves automatically part of the ethnic community. For example, with the occasion of the population census in January 5th, 1977, 1.712.853 declared to be Hungarian, representing 7.94 %, 348.747 German, i.e. 1,62 %, while 1.720.630, i.e. 7.97 %, declared to be Hungarian native speakers and 346.747, i.e. 1.61 %, to be German native speakers.

The loss of Roma identity was shown by the difference between the 227.398, i.e. 1.05 %, of Roma ethnic identity and only 77.373 Romanes speakers, i.e. 0.36 %.

In conclusion, we can define the individual affiliated to an ethnic minority as the individual who, on the basis of personal considerations, assumes unilaterally an ethnic identity. In order to be opposable to the third party, the will demonstration must be written or made public in a group of individuals, formally. An individual cannot have at the same time more than one ethnic affiliation.

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[5] **M.K**., (born 1931), member of the first federal parliament of Czechia, rector of Comenius University, chief counselor of President Vaclav Havel, author of 14 books and 600 papers and essays.
[6] Miroslav Kusy, *Drepturile colective ale minorită ț ilor*, in Altera no. 3, year II, 1996.

IV. INFORMATION SOCIETY

SYMBOLIC COMPUTATION SYSTEMS

ALINA ANDREICA[*]

ABSTRACT. Symbolic Computation Systems. The paper explains the utility of symbolic computations and the importance of symbolic computation systems as mathematical computation instruments for various scientific domains which require formula processing. It is revealed the impact on the mathematical and computer science world produced by the development of symbolic computation systems capable to manipulate domains of abstract objects.

1. What does symbolic computation mean?

After the early success of computer science in implementing numerical algorithms for solving problems belonging to various scientific domains and in processing large amounts of data, parallel with the development of artificial intelligence concepts, there appeared the necessity of developing a different style in tackling scientific problems, focused on the formal, symbolic aspect. Up to then, algebraic computations were performed manually (Delaunay needed ten years in order to calculate the orbit of the Moon and another ten years to verify it) because computers performed mainly numerical computations, insufficient to solve a good deal of problems. Moreover, some numerical computations (for example, meteorological long term prognosis) were rather complex and could take from a few hours to a few days to be performed even on a powerful computer [17].

It seems that symbolic computations were suggested for the first time by the famous in computer science Lady Ada Lovelace [23], one century and a half ago. First attempts to automatically implement symbolic computations (1953) referred to symbolic differentiation and belonged to Kahramanian and Nolan [17]. They revealed the utility of constructing automatic systems for algebraic processing, which would allow to represent non-numerical data, to use a language for their processing and a library for basic operations. These research directions soon gave birth to a new scientific discipline: symbolic computation, which appeared in the '60s, with the synonym names of symbolic and algebraic computation, computer algebra, symbolic algebra.

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Computer algebra generates algebraic algorithms specified formally and accurately and studies aspects related to their efficiency and (hard, but mostly soft) implementation. Therefore, *computer algebra* or *symbolic computation* can be defined as the part of computer science that designs, analyses and applies algebraic algorithms. These algorithms have simple formal specifications since algebraic objects can be accurately represented in the computer's memory.

Symbolic computation does not use numerical approximation methods (unless all other possibilities are exhausted), but studies systematically the sources of inefficiency and looks for algebraic alternative methods in order to improve or replace non-convenient algorithms. Taking into account these principles, together with the fact that algebraic objects are exactly represented in the computer's memory, it can be deduced that there is no loss of precision during algebraic computations.

Since algebraic algorithms are implemented in software systems which allow inputs and outputs in algebraic symbolic form, they can be widely used. These software products are named *symbolic computation systems* (SCS) and represent the instrument that applies the theory of symbolic computation in various scientific domains which require mathematical formulae processing.

2. Widely used symbolic computation systems

First SCS only treated operations within the integer set, the polynomials with integer and rational coefficients and their fraction fields, symbolic matrices (with elements in these latter fields). Later, modular arithmetic has been added for factorization, distributed polynomials - for Gröbner bases, univariate polynomials with rational function coefficients - for integration. REDUCE introduces a global approach for constant domains ($\mathbb{R}$, $\mathbb{R}[x_1, x_2, \ldots, x_n]$, the fraction field $\mathbb{R}(x_1, x_2, \ldots, x_n)$, matrices with elements over this field) [18].

The main mathematical facilities provided by commonly used SCS are presented in paragraph 3. But these systems manipulate only constant, built-in domains, without having the possibility of generically specifying other computation domains. This disadvantage began to be solved when SCRATCHPAD II appeared, as the first SCS able to process abstract domains (see paragraph 5).

The classification and evolution of SCS can be found in [6]. The most widely used systems for automatic algebraic manipulations are: MACSYMA, REDUCE, DERIVE, MAPLE, MATHEMATICA, which solve similar mathematical problems and are designed on the same general principles, for interactive use, as self-contained computational systems. They provide a friendly interface and a programming language with specific syntax for describing the desired computations. We shall further present the above mentioned systems.

The development of **MACSYMA** system [35] (implementing Project MAC'S Symbolic Manipulator) began at MIT in July 1969 and was concluded in 1982; it was commercialized in the mid '70s. It has big dimensions, evolved in successive phases and was written in MACLISP by Engelman, Martin and Moses. They

describe MACSYMA as a system useful for a wide range of users, without loosing too much of its efficiency (measured in answering time and memory space). The system contains a large number of built-in functions and responds to all users' requirements, from those who have small problems and wish to solve them with built-in tools to those who have complex problems and are interested in the optimization of answering time and memory space.

In 1969, many basic symbolic algorithms were not general enough or were inefficient (i. e. factorization). That's why the MACSYMA group (successfully) concentrated on improving these algorithms and developing a new algorithmic direction.

In May 1972, MACSYMA is available on the ARPA Net.

MACSYMA's facilities include: operations with numbers (big integers, prime integers, factorizations, rational and real numbers), operations with polynomials (substitutions, expansions, factorizations, square free decompositions, divisions, greatest common divisor - *gcd* -, finding the coefficient of a given degree) and rational functions (substitutions, expansions, simplifications), elimination of variables between two equations, operations with explicitly declared matrices, having one of the following types: diagonal, symmetric, anti-symmetric, general or with the elements defined by a function of their indexes (transposition, selections of lines or columns, arithmetic operations, computing the determinant and the characteristic polynomial, solving a linear system), partial and total differentiation (with the possibility of explicitly declaring the dependencies), Taylor series, applying operators upon expressions, simplification, indefinite and definite integrations, including direct and inverse Laplace transforms (which allow solving some integral equations). Interesting applications related to these facilities can be found in [17].

MACSYMA's users have access to a powerful library; for designing user defined functions it is recommended - as being more efficient - to adopt LISP's functional style (applying functions upon arguments) rather than the Fortran-like procedural one.

During the '70s there were used many versions of MACSYMA, available on minicomputers.

The ***REDUCE*** system [27], which became well-known very soon, is written in LISP. It was created by Anthony C. Hearn and distributed by Rand Corporation in 1970. It was designed as a command system for solving quantum electrodynamics problems but it soon spreaded, under various operating systems, as a general purpose system. Although it has a relatively small number of built-in functions, the user can easily define new functions.

The system encodes polynomials and expressions considered as sums of products, named nuclei. The concept of "nucleus" was generalized, allowing the user to define its own functions or only to specify them with the corresponding name.

The general purpose facilities introduced by REDUCE had a considerable cost in the system's efficiency.

REDUCE consists of a hierarchy of modules; "on top" there is an algebraic module, which can be used with a simple language, a structured subset of LISP. This standard LISP proved to be very important for the system's portability; therefore REDUCE became a widely used software tool.

It was implemented both on minicomputers, and on PC type microcomputers. Extended versions contain packages for: integration, computing gcd, solving ordinary differential equations, integral equations, real number arithmetic in arbitrary precision, rare matrices.

The **DERIVE** system [44], operational under DOS, is a successor of MuMATH as a SCS for microcomputers but has better performances and a very accessible interface, based on menus. It is a small system, whose facilities pursue those of a general purpose system but are not very sophisticated.

MuMATH and DERIVE were overpowered by MAPLE, created by W. Gentleman's group, at the University of Waterloo (Canada). This system initiates the development of efficient SCS for microcomputers, which also include the MATHEMATICA system.

MAPLE System. A group formed by Bruce W. Char, Keith O. Geddes, William Morven Gentleman and Gaston H. Gonnet began the design of MAPLE in December 1980, at the University of Waterloo, Canada. First version of MAPLE was available in 1983; since then, the system was developed in successive versions, becoming one of the most popular SCS. Its kernel is written in C and, in order to obtain a more efficient code generation, it is used a macroprocessor which also translates into C. The system is interactive - the latest Windows versions have a good user interface - and becomes operational by using the MAPLE programming language, which also provides the means of writing procedures.

It was created as a portable SCS, with complex computation facilities, accessible to a wide range of users - operable on an ordinary computer. SCS that existed in the early 80's did not combine both characteristics: MACSYMA, for example, was a powerful but demanding system from the physical resources point of view whereas MuMATH was available on microcomputers but perfectible from the capabilities point of view.

In designing the system [15], the authors tried to adopt syntax and semantics which are natural for symbolic mathematical computations. The syntax of MAPLE language is similar to Algol's. Inputs are unidimensional sequences of characters, the way of specifying computations is similar to the mathematical one and outputs are generated in bidimensional form.

For programming in MAPLE, besides a powerful set of primitives which perform typical symbolic operations, there can be used common procedural alternative and loop structures and routines.

A complete recursive evaluation procedure is applied to all expressions in order to obtain the result in the simplest form. The system uses very efficient internal representation mechanisms [15].

MAPLE's compiled kernel is very compact (around 100K); it includes only basic facilities: the interpreter, basic arithmetic operations (comprising polynomial ones), operations with arrays and tables, bidimensional displaying / printing routines, common simplifications and built-in functions, and other functions which are only referred in the kernel and are automatically loaded from an external routine library. This library contains complete definitions for higher level mathematical operations (i.e. computing gcd, integration, solving systems of

equations) which are loaded only when they are called. MAPLE's library, which provides complex symbolic capabilities, is also written in MAPLE. This structure proved to be highly efficient.

The system is portable, relatively independent of certain operating systems and improved in successive versions.

MATHEMATICA symbolic computation system [49] was developed during the 80's (was released in 1988) by a group led by Stephen Wolfram, as a successor of SMP [6]. The system was designed in C and is available on computers under various operating systems: MS-DOS, UNIX, Windows 3.1, Windows 95, even MacIntosh.

As MATHEMATICA contains capabilities to solve various problems, it can be considered a general purpose system. It is efficient and flexible, with a relatively small kernel (compared to giants as MACSYMA) and an easily extendible set of application packages.

MATHEMATICA contains a wide range of built-in functions which tackle the following problems: numerical calculations in arbitrary precision and symbolic computations, expression simplification, sum and product computation, series and limits, differentiation and integration, symbolic or numerical equation solving (including ordinary differential equations), list processing, vectors and matrices, bidimensional graphics, contour and density graphics, high quality tridimensional graphics (including parametric representations), file operations (read, search, write), generating Fortran, C and TeX expressions, communication with external programs (MathLink allows external programs to call and to be called by MATHEMATICA). High mathematics computations can de performed due to the objects that are implemented in the system; the range of available operations is considerably extended by the application packages.

MATHEMATICA can be considered a software system which executes numerical and symbolic computations and function visualizing. In the same time, it is a high level programming language for various applications, a system which represents knowledge from different domains and a software platform where specific application packages can be executed. The system can create interactive documents which incorporate texts, (possibly animated) graphics and sounds, with formulae. MATHEMATICA includes capabilities of controlling external programs (and can be called by them).

The system's design pursued a small number of general principles applied both to processing and representation (for example, all kinds of expressions are represented following the same general pattern).

User defined functions can be easily implemented. For programming there are available functions which define conditional and loop structures, blocks and modules - with different philosophies regarding local and global variables [49].

Evaluation is the fundamental operation executed by MATHEMATICA: when an expression is introduced, it is evaluated and the result is returned. MATHEMATICA is an (infinite) evaluation system, which uses the implemented definitions until there are no suitable ones or the result modifies no more (by using the existing definitions).Then, the (numerical or symbolic) result that is obtained will be returned to the user.

One of the most important facilities of MATHEMATICA is the possibility to expand the system with new packages of notions and functions (usually, a package solves problems from a particular domain) which can be added to the MATHEMATICA kernel and to the original system of application packages.

L. Bernardin compares in [8] an important group of general purpose SCS from a point of view consisting in giving a symbolic solution for a set of 80 *specific* problems [8] containing equations and systems of equations and inequations, which included: radical quantities, exponential and logarithmic functions, trigonometric functions, particular complex numbers. After a rigorous evaluation, that took into account not only correct and incorrect solutions, but also partial solutions and improvable forms of the solution, the author concluded that: MAPLE V R4 solved 82.19% of the problems, DERIVE 3.06 - 31.87%, REDUCE 3.6 - 30.62%, MACSYMA 420 - 30% and MATHEMATICA 2.2 - 16.87%.

One of the directions aiming to improve SCS would be creating a link with the field of artificial intelligence (AI), particularly with expert systems and the direction of representing and processing knowledge in knowledge bases [34]. This merging would create intelligent SCS, capable to process various types of mathematical knowledge.

J. Calmet proposes in 1988 [13] to include SCRATHPAD in this category of SCS, capable to manipulate different types of mathematical objects; by analogy, all other systems based on type theory (see paragraph 5) could be considered intelligent systems.

Another direction of developing SCS adopted from AI could be introducing new inference and learning strategies [34] and, therefore, creating high performance automatic demonstrators [28].

All SCS must be designed as open systems that could be easily extended with new facilities according to particular users' necessities.

3. Basic mathematical capabilities of SCS

Symbolic computations performed by the most widely used SCS belong to the following domains [23]: basic algebra, mathematical analysis operations, solving equations and systems of equations, matrices and vectorial algebra. From the user's point of view, the way of introducing inputs and the form of the displayed outputs are also important.

3.1. Basic algebra

Algebraic operations provided by SCS can be classified in the following domains [23]:

(1) *Arithmetic* includes problems related to the representation of numbers in order to obtain arbitrary precision for integers (for example, MAPLE calculates *200!*) or a certain user specified precision for reals (for example, *N[Pi,40]* in MATHEMATICA), arithmetic operations with "big" integers (having arbitrary dimension), computing the greatest common divisor for integers, operations with fractions of integers or algebraic expressions.

(2) *Polynomial algebra* is a basic SCS facility and includes manipulating multivariate polynomials in: arithmetic operations, simplifications, finding common factors, computing various equivalent forms (canonical, factored, Horner, etc.), factorization (over Q, C or finite fields).

(3) *Using previous results* simplifies step by step calculus; inputs and outputs are numbered and a certain output (or simply the last one) can be specified according to this number. Other selections are possible using the cursor and interactive block operations.

(4) *Special functions* that can be computed include: trigonometric functions, logarithmic and exponential functions, hyperbolic functions and their inverses, gamma and polygamma functions, error functions, Bessel functions, families of orthogonal polynomials. In function evaluation, special arguments may appear (for example, $sin(\pi)$), simplifications based on functions' properties can be performed and differentiations or integrals could also be insolved.

(5) *Complex algebra* implemented in SCS operates with complex expressions and represents the symbol *I*; these capabilities are useful for various physics, engineering and mathematics applications. Determining the real and imaginary parts of a complex expression reduces to separating terms which explicitly contain *I* as factor.

(6) *Simplification* is a very important and, in the same time, well developed part of SCS (see [2]). The way of applying simplification rules differs from one system to another. REDUCE uses logical variables to indicate the rules to be applied in a certain moment and DERIVE allows the desired type of simplification to be specified using options from the menu. MAPLE and MATHEMATICA contain a large variety of simplification functions which can be explicitly called [15], [50]; moreover, any expression (even including radicals or trigonometric functions) can be transformed into equivalent forms (simplified, factored, expanded, by grouping some of the variables, etc.).

(7) *Defining new rules* is an important facility in most of the SCS. It can be declarative (global rules are specified - for example, in REDUCE), procedural (procedures are written - for example, in Maple) or imperative (rules are explicitly applied - for example, in MATHEMATICA).

3.2. Mathematical analysis operations

Among the symbolic operations performed by SCS there are also the ones that are characteristic to mathematical analysis [23]:

(1) *Differentiation* is performed by introducing the elementary derivatives and the differetiation rules for sums, subtractions, products, divisions into SCS. A few elementary ways of implementing these rules can be found in the Lisp system for processing expressions [1] and in a study of anti-commutative domains [4]. SCS compute both partial derivatives (including mix and high order ones) and

total derivatives, using a convenient form. For the cases in which the dependence between the function and some variables is not obvious, MACSYMA and REDUCE accept an explicit declaration of dependency. Anyway, all systems recognize the mathematical notation for dependency *f(x,y)*. In REDUCE the user will supplementary specify that the name *f* is an operator and not a function.

Wester and Steinberg showed (1984) that MACSYMA, REDUCE and early MAPLE versions gave incorrect results when calculating a derivative for a *f(x,y(x))*-like function because they did not posses a notation capable of representing non-ambiguously the partial derivative $\dfrac{\partial f}{\partial x}$ and the total derivative $\dfrac{\mathrm{d}f}{\mathrm{d}x}$, i. e. $\dfrac{\partial f}{\partial x} + \dfrac{\partial f}{\partial y}\dfrac{\partial y}{\partial x}$. MATHEMATICA and latest MAPLE versions recognize the concept of differentiation as an operator which acts upon a function and generate non-ambiguous notations for both derivatives. For example, in MATHEMATICA $\dfrac{\partial f}{\partial x}$ has the internal form *Derivative[1,0][f][x,y[x]]* whereas $\dfrac{\mathrm{d}f}{\mathrm{d}x}$ - *Derivative[1,0][f][x,y[x]] + Derivative[1][y][x] Derivative[0,1][f][x,y[x]]*; the *m*-th derivative of the function *f* in respect with the first argument and *n*-th derivative in respect with the second will be internally represented by the head *Derivative[m,n][f]*. Internal forms for MATHEMATICA expressions were thoroughly studied for the applications presented in [4] and [5].

(2) *Integration* is a problem that appears very often in various scientific fields. All SCS can integrate polynomial and simple transcendental functions; tackling more complicated integrals depends on the specific implemented algorithms, among which there is the famous Risch algorithm (see [2]). An indefinite integral can be calculated by: substituting limits in the previously computed primitive - this method is not convenient when the integral is not bounded on the given interval, expressing the integral by an exact algebraic form (for example, $\int_0^\infty e^{-(ax)^2}\,dx = \dfrac{\sqrt{\pi}}{2|a|}$) or applying a numerical quadrature method which will generate an approximate value (for example, in cases such as $\int_0^\pi sin(sin\,x)\,dx$). Some SCS will return a finite value even for some non-convergent integrals (for example $\int_1^3 \dfrac{dx}{(-2+x)^2}$) [23] since they do not verify boundness and continuity.

SCS do not include facilities for directly calculating contour integrals $\oint f(z)\,dz$ [23], i. e. integrals for complex functions over a path in the complex plan (the most difficult problem is to choose the proper path for evaluation, which must exclude singular points).

(3) *Solving differential equations* is necessary for modelling a considerable number of practical problems. MACSYMA and MATHEMATICA can solve a wide range of first degree ordinary differential equations, including non-linear differential equations (for example $\left(\dfrac{dy}{dx}\right)^2 - y^2 - 2xy = x^2$) [23] and a few simple types of higher degree ordinary differential equations, as non-homogenous linear equations. If an exact solution is not available, the result will be approximated using series. There can not be solved, using the above mentioned SCS, general non-linear differential equations (for example $\dfrac{d^2 f}{dx^2} + (a - 2k\cos x)f = 0$) and any type of partial differential equations (which contain partial derivatives). This is a huge disadvantage in many physics applications, such as fluid mechanics [3].

　　SCS can solve some types of simultaneous differential equations (systems of equations) using techniques as Laplace transforms.

(4) *Limit calculations* can be performed using some of the above mentioned SCS (MACSYMA, MAPLE, MATHEMATICA, DERIVE); in fact, they implement l'Hôpital and substitution ($x\to1/y$ for reducing $x\to\infty$ to $y\to0$) type rules. Most SCS allow approaching limits from both directions (left, right) [23].

(5) *Sums and products* over a finite domain of integers can be computed by all SCS. Some of them have more sophisticated evaluation for sums over indefinite intervals ($\displaystyle\sum_{n=1}^{N} n^k$, $\displaystyle\sum_{n=0}^{\infty} \dfrac{x^n}{n!}$). Within general sums only elementary simplifications can be performed. Products of sequences appear seldom and can be automatically computed only over finite domains of integers.

(6) *Taylor series expansions* can be computed in most SCS [24] for a given point and a specified number of terms. Some systems can also compute Laurent series.

(7) *Integral transforms* (Fourier, Laplace) provide techniques to solve problems from various domains of applied mathematics; for example, Laplace transforms are used in solving differential equations. Most SCS compute the Laplace transform of an expression either directly evaluating the transform, as a definite integral, *f(s) = L(F(t))*$=\int_0^\infty F(t)e^{-st}\,dt$, or decomposing the expression into terms whose transforms can be found in mathematical tables.

3.3. Solving algebraic equations

　　SCS implement methods for solving some types of equations and simultaneous equations [23]:

(1) *Finding polynomial roots* is done by exact methods up to degree IV, for algebraic, numerical or mixed coefficients, in all SCS. For higher degree equations rational roots are easily determined or special methods for finding all roots are applied [17]. Some SCS contain numerical facilities for solving equations.

(2) *Linear simultaneous equations* can be automatically solved by a *Solve*-type command, whose arguments are the set of equations and the set of unknown variables. The simplest case consists in *n* linear simultaneous independent equations with *n* unknown variables. SCS contain facilities for eliminating one variable from a set of equations and simplifying a set of equations, including all possible solutions; these methods can also be used in non-linear cases.

(3) *Non-linear simultaneous equations* are solvable only in special cases; SCS can find partial solutions or can generate sets of simplified equations, which should easier lead to the solution. Reducing a set of equations is done in some SCS (MAPLE) by computing the Gröbner basis of the set [10], which can be obtained by eliminating variables between equations, similarly to Gauss method [23]. The Gröbner basis can sometimes be larger than the initial set but equations will be simpler.

3.4. Matrices and vectorial algebra

Matrices and vectorial algebra operations can be classified in the following domains [23]:

(1) *Matrix representation*. All SCS allow the user to create and process vectors and matrices whose elements can have the most general form of algebraic expressions. Declaring dimensions, initializing and accessing elements are similar to the ones used in programming languages. MAPLE recognizes rare (with a small number of non-zero elements) and symmetric matrices [14]; rare matrices with big dimensions can be processed since only non-zero elements will be retained.

(2) *Elementary matrix algebra* is implemented in all SCS, with the well-known elementary algebraic operations (sum, subtraction, multiplication, power), in common syntax. Except REDUCE, the other mentioned SCS use another symbol for multiplication than*, since this one is commutative: *.* in MATHEMATICA (for example, *c:=a.b*), *&** in MAPLE, supplementary applying the function corresponding to matrix algebra (for example, *c:=evalm(a &* b)*). In REDUCE, expressions that contain symbols referring to matrices can be evaluated by declaring the multiplicative operator as non-commutative [23].

Some systems also have other matrix algebra capabilities: rank calculation, hessian matrix computation of a function, Hilbert matrix $H_n(x)$, whose *(i,j)* element is *1/(i+j-x)*.

(3) *Matrix inversion* with both numerical and symbolic coefficients can be performed in all above mentioned SCS, although they imply complicated operations in the case of algebraic elements. For big dimension matrices, there is necessary a large amount of memory (in extreme cases, internal memory may be insufficient), and even time. The operation can be specified using a command (MATHEMATICA) or an algebraic notation (*1/A*, for the matrix *A*, in REDUCE).

(4) *Determinants and eigenvalues* are computed by all widely used SCS, with built-in corresponding functions.

(5) *Vectorial and tensorial calculus* is available in three dimensions in all SCS described in paragraph 2, using common algebraic notation. Vectors are considered column matrices. Vectorial calculus operations include: vectorial product, vectorial differential operators and gradient (which generates a vectorial field from a scalar one). MACSYMA can perform computations in general orthogonal curvilinear coordinates, useful for physics and engineering applications (fluid mechanics, electromagnetic fields). In MATHEMATICA, these operations, including cylindrical and spherical coordinates definitions and laplacian calculation, are available in the vectorial analysis package.

Tensorial algebra in arbitrary dimensions is very complex: it requires time consuming algebraic and differential computations. Even tensor display is a non-trivial problem. Therefore, only few general purpose SCS (MACSYMA, DERIVE from the above mentioned ones) provide a limited range of tensorial operations and there exist specialized systems for this field.

3.5. Inputs and outputs

Input-output and interface capabilities are very important for both trained and non-trained users of SCS. These facilities include [23]:

(1) *Bidimensional display* of results is a convenient and efficient method for viewing the expressions in a form that is close to mathematical notation, on a character-based terminal. This technique is adopted by most SCS, since it can be easily implemented.

(2) *Interactive use* of SCS is very important for the user; the result of given commands will immediately appear on screen as the system acts like an interpreter. In DERIVE, the operations to be executed will be specified using the menu but the other systems require knowledge about the syntax of their language.

(3) *Input from files* is allowed in all SCS, therefore, more than one definition can be loaded by only one command. If certain operations require a large amount of time and the operating system implements a multitasking mechanism, it is recommended that they would be introduced into a file and executed in background.

(4) *Output into files* is also allowed in all SCS; the saved format is either the bidimensional display-type one or a format accepted as an input for the SCS.

(5) *Fortran and C type outputs* enable the results generated by SCS to be processed with numerical routines written in Fortran or C. Some SCS can generate optimized Fortran code, where common subexpressions are extracted and previously calculated. GENTRAN numerical calculus package [22], available for REDUCE and MACSYMA, supports translations of REDUCE or MACSYMA programs into Fortran or C code.

(6) *Outputs for document processors* with formula manipulation capabilities, such as *TeX* or *eqn*, prevent the user from manually transferring and formatting formulae.

(7) *Curves and surfaces graphics* are executed by SCS directly from algebraic representations. The first system with graphical capabilities was MACSYMA but the best graphical capabilities are offered by MATHEMATICA (since 1988) and MAPLE, which create quality 2D and 3D graphics, with shadowing, perspective, realistic texture. Previously, special packages had to be loaded for plotting graphics.

4. Domains in which symbolic computation systems are used

Practical applications had an important role in developing SCS; sometimes they even generated systems specially designed to solve a certain class of problems.

SCS have the smallest number of remarkable applications in biology and chemistry [12]; for organic chemistry SCS process information that describe different substances and possibilities to synthesize new ones (mathematically, these problems require the integration of a differential equations system).

The most numerous *physics* applications belong to high energy physics, celestial mechanics and general relativity [12].

For *high energy physics* problems (strong and weak interaction theory, quantum electrodynamics) there were used SCS capable of implementing computations in Dirac algebra, pattern matching, polynomial operations (REDUCE, MACSYMA, MATHEMATICA, etc.).

Objects that appear in *celestial mechanics* studies can be expressed as Poisson series. Specialized and general purpose SCS (see [6]) proved to be a basic instrument for these computations by generating results related to artificial satellites orbit precession and physically modelling the gravitational field of the Earth.

Systems used in *general relativity* computations are usually general purpose ones; they must solve matrix and tensorial problems and simultaneous equations.

Although not so extensively, SCS were also applied to other fields of physics: *electronic optics* (for example, computing the equation for the general trajectory of an electron in a cavity, under electric and magnetic field influences by solving a second degree homogenous differential equation), *molecular physics* (calculating the structure factor of ionic solutions with a dominant ion - an integration problem); *electric engineering* (symbolic analysis of electric nets, modelling Kirkhoff's laws); *plasma physics* (ordinary differential equations), *fluid mechanics* (modelling Navier-Stokes equation, see also [3]), *mechanical* and *aeronautical industries* (flight simulation problems).

In *mathematics*, the most frequently approached domains are [12]: number theory and polynomial operations, projective and computational geometry, special functions, integration and ordinary differential equations, computations in algebraic structures (finite algebras, finite fields, rings, fields, etc.).

SCS are important research tools for various *number theory* problems (infinite real fractions, operations in different algebraic domains, generating a Galois group for an equation).

Primality tests for numbers and *polynomials* were improved, Euclid's algorithm was generalized, polynomial algorithms were developed - a famous example is factorization - as these researches aimed an efficient automatic implementation of algorithms. Bruno Buchberger introduced Gröbner bases method [10], of enormous importance for symbolic computation since it was used to solve problems from extremely various domains, by applying it mainly in solving systems of polynomial equations.

Projective geometry applications developed mainly at Bergen University; where Padé approximates and their numerous applications were studied. A new qualitative stage was achieved in *computational geometry* by introducing Gröbner bases method [11], which simplified theorem demonstration.

Special functions - recurrence relations, hypergeometric functions, which are to be reduced to elementary and special functions, transcendental functions - require pattern matching and solving systems of linear equations.

Solving ordinary *differential equations* is completed by packages based on integration algorithms, implemented in various SCS.

The new direction of SCS which manipulate abstract algebraic domains (see 5.) will provide a platform for performing automatically *modern algebra* operations and for developing generic algorithms, valid for many data domains. The results of these new SCS are spectacular for the qualitative development of symbolic computation, which can be compared with the transition from numerical computations to symbolic ones.

Many methods and results of symbolic computation were used in other fields of *computer science*. Therefore, Chinese remainder theorem was applied in computing direct Fourier transform (Good), codification theory (cryptographic keys) and polynomial factorization [12]. SCS were used to implement (REDUCE) interactive testing systems for programs, based on inductive assertions.

SCS design developed specification methods for abstract data types and methods for conceiving algorithms (generic algorithms, valid for various data types). Since computer algebra algorithms must be efficient - have good response

time in returning the result, one of the most important field of symbolic computation is developing algorithms. These researches proved to be very fruitful and many computer algebra algorithms were adopted by other computer science fields.

SCS were used in linear programming applications (a test of consistency for simultaneous linear inequations was implemented in MACSYMA) and in studying semi-Markov processes (computer performance) [12].

Results obtained in symbolic computation were also applied in automatic demonstration problems [28], an AI field, and in robot movement studies (Gröbner bases - [11]).

SCS implicitly developed numerical analysis, where interesting results concerning symbolic generation of finite differences have been obtained (Keller, Pereyra).

5. Symbolic computation systems based on type theory

During last 30 years, symbolic algorithms and techniques for manipulating mathematical objects / entities developed considerably, becoming accessible to more and more users by the means of symbolic computation systems (SCS), which constantly improved their capabilities. Nevertheless, the data structures and algorithms of most widely used SCS can be only applied for common algebraic domains and are not easily expandable for other algebraic structures or mathematical domains, such as: groups, rings, fields, spaces of functions. Moreover, many of these systems were developed in successive phases (MACSYMA, REDUCE), without constantly pursuing global design principles and acquired a non-systematic, inefficient structure. It has been noticed, for example, that MACSYMA implemented six different Gauss elimination algorithms; even if some of them processed different types of data, the method was not convenient.

During the 80's, a new branch of computer algebra developed; it was dedicated to the study and implementation of abstract structure types as a more general context of computation. This direction theoretically originates in the category theory of Herrlich and Strecker (1972), is motivated by the insufficient capabilities of SCS that operated in common algebraic domains and sustained by the programming language theory of data types. The transition to abstract domain computations is a qualitative leap in symbolic computation. These systems offer a global vision upon common domains and computation algorithms that can be compared with what modern algebraic structure theory means to algebra or, metaphorically, with general philosophical principles which can find particularizations in different sciences.

5.1. Theoretical aspects

Powerful SCS which operate with abstract domain types appeared in the late 80's - early 90's (they are represented by AXIOM), when the theory of type systems borrowed concepts from *object oriented programming* (OOP) [42]. This new programming technique introduces the notion of *abstract data type* or *class*, which includes ("encapsulates") both data, and their specific operations (methods,

algorithms), unlike usual (procedural) programming, which separated data and algorithms. An abstract data type (class) implies that elements contained in the type (usually data) are accessible only to its specific type methods; this concept is named *protection*. For example, the complex data type contains real and imaginary parts as data and operations like sum, subtraction, mutiplication, module, etc. - as methods; it would be absurd if real and imaginary parts would be accessible, for example, to typical character operations. A *polymorphic* function has different forms for manipulating different types of data; the appropriate one will be chosen when called. *Objects* are elements of classes and they are also named *instances* of the classes. A class can borrow, from another class, its components (intuitively - its properties and behaviour), and add supplemental elements, similar to the way real objects are composed; the process is named *inheritance*. Therefore, there can be created hierarchies of classes which describe the relations among them. For example, the algebraic structures (semigroup, monoid, group, etc.) [43] form such a hierarchy. Within a class hierarchy, the inheritance relation introduces a dependence that names a subordinate class a *subclass* of the one it is derived from and names the basic class - *metaclass* for the subordinate class. If a subclass derives from a single class, the inheritance is *simple*, otherwise is *multiple*.

Scratchpad II [30], [19] and Axiom [32], [21] systems can be characterized as object oriented because they implement classes, multiple inheritance and parametrized abstract data types. The terms of *categories* and *domains* are basic for symbolic computation type theory and were borrowed from algebra for concepts similar to OOP metaclasses, respectively classes. Classes define the structure and behaviour of their instances (instances for metaclasses).

Members of a class/metaclass (for example, *Ring*) will be its instances (for example, *Polynom*, *Matrix*, *Integer* classes are instances of the *Ring* class). Therefore appears the notion of category. Simple and multiple inheritance is also suitable for algebraic structures [46]: a *Ring(+,*)* class inherits *'+'* operation from a *Abelian_group(+)* class and the relation *'*'* from a *Monoid(*)* class.

SCS which operate with abstract domains are based on the notions of object, domain and category. A complete type theory is presented in [7].

The **object** concept was borrowed in symbolic computation from object oriented languages since many symbolic operations imply operating, by means of functions or methods, upon some objects and returning another object, with a new internal state. The object's internal state and the hidden functions which operate upon it are protected according to OOP concepts.

The object oriented point of view is also useful in defining subtypes [7].

Domains and categories

According to algebraic modelling, *categories* correspond to algebras and *domains*, more particular, to sets of values with common representation and functionality [19]. So domains represent algebraic structures and categories specify collections of domains with common operations and certain mathematical operations [14].

Domains are collections of objects based on the same mathematical characteristics (for example, Z, Q, Q[x], R, C). During computations, it is important what domain a certain object belongs to.

Introducing the notion of **category** brings the advantage of a generic approach relative to mathematical properties; for example, it can be referred a global property of univariate or multivariate polynomials, with different types of coefficients, because all these domains belong to the same category [19]. Moreover, there can exist functional operations (functors) defined on categories which construct new objects belonging to a category (a domain). These theoretical advantages can be exploited in automatic implementations: an algorithm can be valid for different types of data. For example, a sorting algorithm for the ordered set category will be valid for all types belonging to it.

The utility of introducing categories in order to describe algorithms is obvious when speaking about factorization - there can be defined a category characterized by unique factorization which would include as many domains as possible - and the related Euclid algorithm problem (for computing gcd) [19], [20], [41].

The above described principles for hierarchical descriptions of algebraic structures are applied by many authors in designing SCS (see 5.2.); a notable systematization is conceived by Davenport [19], [21].

5.2. Abstract domain SCS

Type theory was implemented in SCS capable of solving representation problems and complex processings in various algebraic structures or even to demonstrate theorems or properties (NUPRL system). We shall characterize below the following systems: SCRATCHPAD II, AXIOM, SML, ALGBENCH, WEYL, HASKELL language. Another direction of research developed within symbolic computation consists in creating flexible extensions which would implement a type system within an efficient and widely used SCS for usual computations. Such an extension is GAUSS system [41] for MAPLE. REDUCE was also extended with a domain theory [9]. There are a few research centers in abstract domains but two of them have particularly notable accomplishments - those ones represented by the American IBM group led by R. Jenks and R. Sutor, which created SCRATCHPAD II and AXIOM and the group from Zürich Federal Technical Institute (ETHZ), where ALGBENCH, GAUSS, SYMO2 and λA were quasi-independently developed.

SCRATCHPAD II [31] is a language and an interactive system based on abstract data types, conceived and developed by Richard Jenks, Robert Sutor, Stephen Watt și B. Tragger (Computer Algebra Group, Mathematical Sciences Department - IBM Thomas J. Watson Research Center) along the 80's. It is the successor of former SCRATCHPAD system, created by Richard Jenks since mid 70's. The system provides the possibility to represent various objects and data structures and performs symbolic integrations, differentiations, factorizations, equation solving, linear algebra calculus. The system is modular și generates efficient program code, using polymorphic function packages which can create

data types. By implementing categories, its facilities become general applicable: polymorphic algorithms can be expressed naturally, independently of data representation.

SCRATCHPAD II is a general purpose programming language whose compiler translates library programs into executable form - a way of extending initial system's capabilities; finally, execution is performed by an interpreter.

As a programming language, SCRATCHPAD II has a powerful type system which enables formal description of algorithms; it can also be considered a powerful instrument for creating abstract types libraries. As a SCS, it was designed both for trained and non-trained users.

SCRATCHPAD's library consists of parametrized modules (abstract data types) which can be tools for creating new facilities. Modules define data types for classical computations (integers, polynomials, matrices, fractions) and data structures (lists, sets, strings, tables of symbols, balanced binary trees). These modules can be used to create any new domain by combining the existing types (for example: matrices, polynomial matrices) [31]. The advantages resulted from SCRATCHPAD's design are: modularity, generality, easy operability and expandability.

More details concerning the design of SCRATCHPAD II can be found in [7].

AXIOM is a successor of SCRATCHPAD II which implements abstract type theory in computer algebra; it is considered the most important representative of abstract domains SCS. It was created in Lisp by the same R. Jenks and R. Sutor in the late 80's [32] and afterwards extended with a new language [49].

Like MAPLE, AXIOM consists of a kernel (of bigger dimensions, because of the type system) and a set of modules which can be loaded at any moment and define system's algebraic facilities. While MAPLE modules are interpreted, fact that induces small dimension and fast loading but a low performance, AXIOM modules are compiled into machine code in order to increase execution speed (similar to REDUCE and MACSYMA) and to facilitate type analysis and building data bases with system information [21]. Because of these design characteristics, MAPLE is faster than AXIOM for the operations it was designed for, performed by kernel primitives, whereas AXIOM is faster for special computations (for example, group theory, which is implemented in MAPLE as a - not too efficient - package).

In designing AXIOM it was pursued the principle to be generally valid for all kinds of symbolic computations and not for specific algebraic calculi. Therefore, a large range of data structures was implemented: big integers, lists, vectors, sets, trees, etc., without much care for efficient compilation of real, floating point operations [21]. A special file retains the list of system's compiled algebra files, algebraic objects contained by them and the specification if they are accessible or not to the user (for example, polynomials and their operations are accessible).

The complexity of necessary algebraic facilities (see functions of library modules below) required better type mechanisms than Lisp ones. AXIOM's type system eludes the disadvantages of MACSYMA (a small number of types, each one related to the others) and REDUCE (the global, command-like way of

specifying a desired domain for the following computations require a perfect modular processing, without any interferences) [21].

Objects' types can be easily viewed since they implicitly appear. The type system has two levels, with simple inheritance for types/domains and multiple inheritance for meta-types/categories. So basic Axiom "types" are *domains* and *categories*.

A ***domain*** is a (possibly infinite) set of values and operations that can be performed upon them [21]. One can notice that the concept corresponds to data types in programming languages. Domains represent both types for execution values and packages which include definitions for other values. Each AXIOM object belongs to a single domain that can be explicitly specified by the user.

The domain hierarchy implemented in AXIOM contains subdomain relations; conversions from subdomains to larger domains are natural and can be performed by the interpreter. Explicit conversions may be specified by the user.

AXIOM's library defines domain types or second order types, named ***categories***. A category specification includes its direct predecessors, supplemental specific operations (inheritance mechanisms also apply for categories) and (supplemental) axioms to be satisfied by the operations [32].

The basic category in AXIOM is *SetCategory*, principle adopted by most type theory applications from the last years. From the set category, all algebraic structures (ordered set, semigroup, monoid, group, etc.) can be derived [21]. For example, in order to define the abelian semigroup category, a new binary operator, verifying the associativity and commutativity axioms is introduced, the abelian monoid has a supplemental null operator with the well-known axiom, etc. Categories specify values defined by domains, and form hierarchies of specifications.

AXIOM domains and categories are implemented using its own object oriented language; the algorithms are later compiled into a lower level language.

AXIOM's facilities [32] include:

1. *an interpreter* for interactive use and *a compiler* which enables the user to create data types and executes a strict type checking. These components establish the interface with AXIOM library and perform type inference, interpret user defined functions and macros, control work spaces and windows, provide compile and debug mechanisms, read input files and transform formulas into different formats (TeX, Fortran).
2. *a language* with a concise syntax, which provides alternative and loop structures, accepts procedural and functional programming styles and offers input-output facilities. Although the language is strongly typed, if uses powerful type inference techniques in order to minimize the necessity of declarations.
3. *UNIX and DOS specific capabilities* referring to: texts, mathematical output formatting, interactive graphics, executable and interactive commands, help, tutorial and on-line guide, browsing the hierarchical structure of the library, documentation for operations, attributes and constructors, run-time interrogations of the system.

4. *a library* which solves an extremely wide range of problems: operations with arbitrary precision integers, rational and real (floating point) numbers, partial and continued fractions, complex elementary and special functions, various operators, orthogonal polynomials; number and polynomial factorization; finding symbolic roots of polynomials and their rational or real approximations; Gröbner bases; matrices and vectors; eigenvalues, eigenvectors and orthonormal bases; symbolic differentiation and integration; Laplace transforms; power series (Taylor, Puiseux); limits; symbolic solutions of linear ordinary differential equations and power series solutions for nonlinear ordinary differential equations; indefinite integrals; computations in finite fields (modular arithmetic, prime fields); primary decomposition of polynomial ideals; computations in Galois groups; permutations and finite group theory; Clifford algebras; cartesian tensors; Padé approximants; computing number theory functions; operating upon various data structures (lists, stacks, tables, streams, strings, arrays); pattern matching and rewriting rules. The library design, based on an object oriented data types hierarchy which is conceived in Lisp, according to modern algebra principles, makes AXIOM an adequate system for developing advanced symbolic algorithms.

5. *graphics* (UNIX and DOS versions) - the system plots, in a window environment: 2D and 3D graphics for functions of one or two variables; curves, respectively parametric surfaces; 2D algebraic curves and 3D parametric curves; point lists, respectively polygon lists graphics. Graphics can be plotted in a selected coordinate system, can be processed with scale changings, translations and rotations (the latter - in 3D) and can be visualized in different modes, which contain colouring, variable illumination and changing perspective facilities (for 3D case). System's graphical facilities are oriented towards function representation but they can be easily extended according to current necessities.

SML was created by R. Milner, M. Tofte, R. W. Harper [37] as a system of modules and a functional programming language (Standard ML) and extended with subtype and inheritance mechanisms by J. C. Mitchell, S. Meldal, N. Madhav [40]. Further developments were performed by M. Tofte [48], X. Leroy [33], R. W Harper and M. D. Lillibridge [25], by defining higher order modules.

SML types belong to two universes: U_1, which includes types and U_2 - which includes modules [47]. This approach corresponds to Damas and Milner system (1982), which stated the existence of two types of expressions: monomorphical and polymorphical. Monotypes are arbitrary, basic types, type variables and types constructed from other monomorphical types by means of functions. Polytypes are more extensive than monotypes; the relation between monotypes and polytypes can be expressed by an injective function from U_1 to U_2.

It seems that the existence of the two SML universes is only theoretically motivated [47]. Obviously, there is a correspondence between SCS type constructions and those ones from type theories used in programming languages like SML. By the perspectives it reveals, this approach can contribute to the development of SCS.

ALGBENCH is a SCS created in the early 90's, at ETH Zürich, by Roman Maeder, Georgios Grivas and Stephan Missura to be used for the design, implementation and performance evaluation of symbolic algorithms; therefore, it has slightly different objectives than most SCS. The capability of easily implementing symbolic algorithms is very important for the study of their efficiency since this process requires solving all practical problems that arise from data representation and necessary algorithmic operations which, from the theoretical point of view, are often implicitly assumed. Algorithms are tested by interactive calls, test data can be easily created and results can be saved. Time measuring instruments, memory allocation tracing mechanisms and allocation statistics, browsing internal representations, evaluation and term rewriting tracings [36] are also provided.

ALGBENCH contains an interpreter for symbolic language and enables data type definition and algorithmic description for any computer algebra field. It was designed in (AT&T) C++, according to OOP principles [36], with conditional pattern matching and unification mechanisms [23] and it was extended with a type system [38]. Its characteristics are presented in [7].

HASKELL is a programming language created P. Hudak, S. Peyton-Jones and P. Wadler [29] which implements the type class concept. Variable types can be automatically deduced by means of type classes; an implicit function parametrization is allowed.

NUPRL is a theorem demonstrator based on predicative logic, created during the 80's by a group coordinated by R. L. Constable [16]. The system enables direct demonstration of theoretical abstract aspects. Interesting is the fact that propositions can be viewed as types, therefore properties as associativity can be expressed and demonstrated at a categorical level; equality operations have a special treatment.

Another system in which propositions are viewed as types, in a purely formal way i. e. there is no interest in their truth value, but whether they can be demonstrated or not, is (experimentally) proposed by S. Missura [39]. Predicates or relations are functions which return a proposition.

WEYL is a SCS created by R. Zippel [51], designed to become a powerful component of software products by extending OOP with computer algebra techniques. In fact, the facilities offered by a Lisp environment (Common Lisp Object System - CLOS) are extended with a type system.

WEYL solves two problems noticed by its author in commonly used SCS. The first principle pursues the observation that it would be more efficient if, besides interactive SCS and their packages, there also existed symbolic libraries which could be incorporated into software products and linked with numerical and graphical existing libraries. Therefore, the area of computer algebra users would become wider. The second principle is the one that generated SCS based on abstract types and type theory: usual SCS have the disadvantage of performing computations within a fixed set of algebraic types, which could not be extended with a new domain unless complicated packages were written. For example, most

SCS allow multivariate polynomial operations but manipulating polynomials with coefficients of a different type (rationals, power series, Poisson series) would be quite difficult because it would imply to redefine elementary arithmetic operations for the new coefficient type.

WEYL acts like a powerful library routine, which uses basic language functions for arithmetic operations and processes not only the objects that are manipulated by usual SCS (polynomials, rational functions, matrices), but also domains [51].

Like all other SCS based on abstract types, WEYL implements the concept of domain; in this case, object oriented mechanism of CLOS are used. WEYL's users write programs in Common Lisp; they can use both usual facilities of the environment (interface and debug instruments, libraries) and the new types corresponding to algebraic objects and the new control structures.

The *extension* of *REDUCE* system, for manipulating algebraic objects in abstract domains, was accomplished by A. Hearn, A. Padget, E. Schrüfer [26]. Taking into account that previous extensions of REDUCE increased considerably its complexity, the new one was eventually designed as a new model, a platform for developing robust and compact programs, with natural, mathematical syntax and semantics.

The model is based on OOP principles adopted in symbolic computation: data abstractization, overloading operators, polymorphism, inheritance and, like REDUCE, was implemented in Lisp.

The evaluation strategy uses a dynamic type inference (when there is insufficient information for static one). The system is based on a rigorous semantic model, rather than heuristic approaches and formal algebraic specification methods. This principle is also valid for describing algorithms [26]; therefore, applying formal methods in testing programs becomes easier.

GAUSS is a SCS designed by Michel Monagan (ETH Zürich) [41] in the early 90's; it introduces domains and categories as parametrized types, respectively abstract parametrized types, fact that enables algorithm implementation in a generic context. For example, an algorithm which applies Gauss elimination method for the determinant of a system will have as a parameter the field in which the computations are performed, and all operation will refer to it (also from the syntactical point of view). When GAUSS is initialized (under MAPLE), built-in domains are Z and Q. GAUSS is written in MAPLE, operates under MAPLE system, and extends it with a type system. Algorithms written for GAUSS hierarchy categories are executed only if algorithms for built-in MAPLE objects cannot be applied. Therefore, its execution (under MAPLE) is efficient.

The author aimed to implement signature functions (reducing some computations to *modulo p* integers computations by randomly replacing variables with *modulo p* numbers) in a systematic manner. The starting point consisted in the observation that probabilistic algorithms and *modulo p* projections are very efficient for various symbolic computation problems and the fact that these algorithms are not commonly used in SCS (although in MAPLE testing the existence of a linear

system solution and testing the equality with 0 were implemented by these principles, they were not systematically pursued) [41].

Another important motivation for creating GAUSS, stated by its author, was the desire to create a smaller and more flexible system than AXIOM, in which major modifications of domains are very expensive (dependencies recompilation is very slow).

GAUSS' principles of design and implementation are further described in [7].

Other symbolic computation systems based on abstract types and object oriented programming

Ph. Santas (ETH Zürich) implemented his type theory ([46], [47]) in a SCS named λA. Previously, he created an object oriented experimental environment named **SYMO2** [45], which was implemented in different SCS (MAPLE, MATHEMATICA, SCHEME) in order to compare them by examining their behaviour for various knowledge representation techniques. SYMO2 is not a general purpose SCS, but is built as a collection of functions that extends programming and representation capabilities of the above mentioned SCS with object oriented characteristics as: object classes and metaclasses, multiple inheritance, data encapsulation, message sending, concurrent methods. These principles enable an efficient evaluation of data types, domains, properties and parallel execution of algorithms that are implemented in the studied systems. The ultimate goal is to improve the design of SCS by finding more efficient structures. Object oriented concepts borrowed by SYMO2 from object oriented languages as Smalltalk, CLOS, Miranda are implemented in MAPLE, MATHEMATICA and SCHEME, enabling a comparison between them when new data types, declarations and inheritance are introduced [45].

6. Conclusions

The theory of symbolic computation is applied in practice by symbolic computation systems (SCS), which automatically perform formal mathematical computations belonging to a wide range of problems (see 3). SCS capable of executing complex manipulations in abstract domains represent a qualitative leap in the theory of symbolic computation; they generically implement, both from the representation point of view, and from the algorithmical point of view, structures from modern algebra, for which usual computation domains represent particularizations.

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THE COMMON EU-CEECS[1] FORUMS ON THE INFORMATION SOCIETY

HOREA TODORAN

ABSTRACT. Since the first conference in Brussels (June 1995), the European Commission organises, every year, a common Forum with the CEECs on the Information Society. The representatives of the European Union industry and research meet their colleagues from the countries which have already signed or still negotiate association treaties at the EU, in order to discuss the implications of the Information Society and to identify the ways to ensure a full participation of the CEECs in the new industrial revolution generated by the development of the ICT[2]. The goal of this article is to present the main topics of the first three forums and to conclude on the importance of this kind of meetings.

The first Forum (Brussels, June 1995)

The first EU-CEECs common Forum on the Information Society has been initiated by the European Commission vice-president Martin Bangemann and took place as an one-day conference in Brussels (June 23, 1995). The participants included 90 representatives of the EU and 120 of the CEECs: Bulgaria, the Czech Republic, Estonia, Hungary, Letonia, Lithuania, Poland, Romania, Slovakia and Slovenia.

European Commissioner Bangemann opened the Conference by saying that the main priority is to establish and implement, across the whole Europe, *common principles on regulatory and competition policies* in the ICT field. This is a *sine qua non* condition for the CEECs in order to attract foreign direct investments in infrastructure and services and to promote industrial co-operation with the EU.

After this introductory part, the representatives of the CEECs were invited to describe their own national situation and to present their future plans of development. Standardisation, interoperability and interconnectivity of the national information infrastructures with the EU infrastructure were the main topics.

On the basis of a *Working Document*[3], the debate was split in two parallel thematic sessions.

The session "Regulatory Framework and Competitive Environment: the Expectations of Industry" was dedicated to policy issues such as harmonisation of

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[1] CEECs = Central and East European Countries.

[2] ICT = Information and Communication Technologies.

[3] The document is available at: http://www.ispo.cec.be/peco/workdoc.html

regulatory framework and competition policy, liberalisation of markets for information and communication equipment, services, infrastructure and audio-visual media, access to information networks (standardisation, interconnection, interoperability, generic services, access rights, telecom tariffs, frequency allocation), protection of industrial rights. The participants concluded that a continuous dialogue for the implementation of a common regulatory framework was needed, and that the liberalisation and harmonisation of the information infrastructures in the CEECs will "boost" the competitiveness of these countries.

The main topic of the session "R&D[4] Co-operation and its Concrete Applications" consisted in the importance of R&D co-operation for the harmonisation of the information infrastructures in the CEECs with those in the EU. The participants underlined the experience gained in common actions such as PECO 92/93, Copernicus 94, Eureka, ESPRIT, and discussed possible schemes for further co-operation (e.g. 'information days' on EU developments in the Information Society).

As the continuous exchange of information between EU and CEECs proved to be essential for both sides, the Conference established an European Information Society Forum to meet once a year. The next meeting was set up for June 1996[5] and the Commission was asked to co-ordinate four thematic panels. The panels should address the issues raised by the first Forum and prepare the work programme for the second Forum. Each theme is prepared by a leading country (from the CEECs) which will organise a Conference to present the final report, as follows:

    Panel 1: Infrastructure and Financing - Hungary;
    Panel 2: Standardisation and Technical Regulation - Poland;
    Panel 3: Legal and Institutional Framework - Slovakia;
    Panel 4: Co-operation in R&D - Slovenia[6].

The Conference held in Budapest (March 13-14, 1996) on *Finance and Infrastructure* was open by Commissioner Bangemann, who spoke about the "necessity of deploying private capital in expanding the telecommunications infrastructure quickly" in the CEECs. "I think this is not only inevitable but desirable because using private capital will enable public sources of capital to be used for other activities which could not attract private funds so easily. Privatisation of the telecom operator has been used in the Czech Republic not to get money for the government but to obtain funds for the operating company to invest. This is a very positive example [...]" said the European Commissioner. He also spoke about new technologies which could enable the infrastructure in the CEECs to develop in different ways from those of the Western countries and then concluded: "All these

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[4] R&D = Research and Development.

[5] Actually, it took place in September, as you can see from the next pages.

[6] The complete text of the final reports coming out from the four panels are available at: http://www.ispo.cec.be/peco/panels1.html.

things require bold policies from within and bold investment from wherever it can be found".

Dr. Károly Lotz, representing the Hungarian Government[7], asked the most important question that the panel tried to answer: How to finance the upgrading of the information infrastructure in countries where governments fight severe funding constraints? He pleaded both for the involvement of the national private sector and the creation of a friendly environment to attract foreign investments. "We have to understand the expectations of investors and must work to increase their desire to invest in the region"[8].

The recommendations of the Panel on *Legal and Institutional Framework* were presented during the Conference in Bratislava (March 7-8, 1996) and were structured on five main topics:

1. Establishing and Managing a Regulatory Authority;
2. Licensing Policy and Regulation;
3. Type Approval and Mutual Recognition of Conformity;
4. Tariff Structure and Cost Accounting;
5. Information Society and Harmonisation of Regulation[9].

During the Warsaw Conference (March 19-20, 1996) the Panel on *Standardisation and Technical Regulations* made important recommendations related to the modernisation of the legal framework for standards, certification and technical regulation, the establishment of the independence of CEECs' standardisation organisations and support to their integration into the European system, and the adoption of the corpus of European standards.

The experts also pleaded for the creation of an EU-CEEC information exchange system for draft technical regulations, for the application of standards in ICT, and for the establishment of conformity and interoperability testing laboratories to create a basis for mutual recognition of test reports and certificates[10].

The main conclusion of the Bled Conference (March 7-8, 1996) on *Cooperation in R&D* was that "R&D will be vital to the CEECs in their bid to achieve faster economic development and to establish their place in the global markets of the Information Society".

The governments of the CEECs have been strongly recommended to adopt national strategies, priorities and action plans related to IS issues, to enable dialogue between industry, academia, public authorities and social partners on IS topics, to strengthen the role of education and training in ICT field and to stimulate trans-European R&D co-operation[11].

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[7] Minister of Transport, Communications and Water Management.

[8] For further information on panels recommendations see the web site mentioned at 6.

[9] *Ibidem*.

[10] *Ibidem*.

[11] *Ibidem*.

The second Forum (Prague, September 1996)

On the basis of the recommendations made by the four panels, the representatives of the UE and the CEECs adopted, during the second common forum (Prague, September 13-14, 1996), the document "*Towards the Information Society in the CEECs: Thirty Ideas for European Initiatives – Action Plan*"[12].

The document stresses the importance of the *pilot projects* in the development of the Information Society. They increase the knowledge of users about the new technologies, accelerate the economic development and stimulate the creation of new information services. The results of research can be also tested using pilot projects.

As concerns CEECs, the pilot projects could increase the competitiveness of the companies (especially SMEs[13]), could bring important advances in the organisation of the public sector – decrease the counterproductive bureaucracy in administration and increase the quality of services for population. As a consequence, the Forum proposes an action plan based on thirty pilot projects[14] at trans-European level. These themes aim to complete the action plans included in the national strategies of the CEECs, and not to replace them. The flexibility of the process of developing the Information Society is very important; every country should define its own priorities.

The financing of the projects is an individual task for each of the CEECs. They have to identify the sources, to coordinate the funds in an efficient manner (using the facilities of the EU-CEEC Secretariat) and to ensure a wide dissemination of the results.

The important ideas coming out of the four panels initiated at the Brussels Conference, have been good enough reasons to initiate other working groups on the following topics:

Theme 1.   Policy and Strategy Formulation – Hungary;
Theme 2.   Implementation of the Action Plan – Slovenia;
Theme 3.   Education for the Information Society – Estonia;
Theme 4.   ICT in Public Administration – Czech Republic;

The purpose of the panel on *Policy and Strategy Formulation* was to examine how EU and CEEC policy making in the field of IS could be best co-ordinated, to consider the information needs of the governments, and to discuss related actions, including the need for statistical data on the IS. The working group led by Hungary presented its conclusions during the Conference in Budapest (June 12-13, 1997)[15].

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[12] The complete text is available at: http://www.mzt.si/med/peco002.html.

[13] SMEs = Small and Medium Enterprises.

[14] See Annex 1.

[15] Further information on panel's recommendations is available at: http://www.mav.hu.

The main conclusions of the panel on the *Implementation of the Action Plan* (Portoroz, September 10-11, 1997) were full of criticism. It is because the CEECs had not developed the appropriate structures to sustain the pilot projects proposed at the Prague Forum. The private sector participation had been almost inexistent, the transition towards the IS being led by the governments of the CEECs. These countries had not been able to identify either partners in the EU to cooperate with (except for the PHARE projects), or financing sources for the R&D projects. As a consequence, they lag far behind the EU member states in promoting and implementing the Information Society.

The group asked the business communities to lobby the CEECs governments to include business-oriented projects in their national strategies and to create a legislative framework to stimulate investments in the ICT field. It also stressed the importance of R&D activities dedicated to IS, asking for financing from national budgets[16].

The panel on *Education for the Information Society* met in Tallin (September 8-9, 1997). On the basis of the idea that IS will be a lifelong learning society, the participants recognized the key role of teachers in both preparing the students for the IS and integrating the ICT into their teaching activities. The training of teachers is therefore vital to the effective take-up of the ICT in education.

Co-operation between schools, universities, research centres, educational authorities, industry, financial institutions and public authorities is of great importance in relation to the development of the learning society. Integrating these institutions in a national network linked to the EU R&D networks is, therefore, a pre-requisite for further advances of the CEECs in this field.

The panel called upon the governments in the CEECs to urgently elaborate national education strategies for the IS and to devote important proportion of their budgets to promote the use of ICT in education. They also have to stimulate all bodies prepared to donate funds for the introduction of the ICT into schools and universities, and to provide teacher-training programmes (including distance education methods).

The *Chairman's conclusions* was presented to the participants at the Third Forum (and included in the final document of the meeting), as well as to the education ministers of the CEECs[17].

The members of the panel on *ICT in Public Administration* have been invited to present their ideas during the Prague Conference (September 18-20, 1997). The five thematic sessions organized at the conference dealt with the following important topics:

1. Access to Information and Standards for Accession of the CEECs to the EU;
2. Introducing Electronic Commerce into Public Administration;
3. Open Government – Information to the Citizen;
4. IS Applications for Public Administration with Europe-wide effects;
5. Abuse of Information – Protection of Citizen Privacy[18].

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[16] Further information available at: http://www.mzt.si/med/recomm.html.

[17] Further information available at: http://www.halo.ee/panel/tmeet.html.

The Third Forum (Brussels, October 1997)

The debate during the third common EU-CEEC Forum on the Information Society (Brussels, October 9-10, 1997) was built around the conclusions and recommendations coming from the first two Forums and the four panels initiated at the Prague Conference.

From the final document, *Chairman's conclusions*[19], we mention the following recommendations addressed to the CEEC governments, to the European Commission and to the business communities in the CEECs and EU.

The CEEC decision-makers were asked to create a National Office to co-ordinate the action plan attached to the National Strategy. The Office should install a server and build a network of public information centres to facilitate its activities and to provide useful information and services to the citizens.

The European Commission was invited to present to the European Parliament the advantages brought by the electronic interconnection with the Parliaments in the member states and CEECs. It was also asked to facilitate the access of CEEC and EU business communities to projects by shorter decision making and payment times.

The business communities in the EU and CEECs were called to contribute to the development of the national plans on the IS and to assist the state-funded R&D projects to be targeted towards the development of new products and services.

As concerns common EU-CEEC activities, the document stresses the opportunities offered by the Fifth Framework RTD Programme and by the multi-country PHARE programmes. An "Information Society Awareness Day" has been suggested to be organized at European scale in 1998 and a high-level common committee to supervise the implementation of the Forum recommendations.

Conclusions – on the importance of the common Forums

Obviously, the CEEC governments that show real political will for the implementation of the IS in their countries gain the most from participating in the common EU-CEEC Forums. Their representatives have the opportunity to learn from the *experience* shared by the colleagues in the EU, and then successfully participate in the development and implementation of their own national strategies and action plans.

The opening of projects funded by the EU to the CEECs provides important *financial resources* needed to develop and modernise information infrastructures in these countries. CEE governments also learn how to attract foreign and national private investments to increase the financial resources.

On the basis of the modern information infrastructures and efficient action plans, the actors in the CEECs - government, local authorities, business communities, educational institutions - could develop important *applications* to

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[18] Further information available at:.
[19] The complete text is available at: http://www.ispo.cec.be/peco/conc.html.

make the public central and local administration more flexible, to make the educational and health systems more effective, and to help their economies that, in some cases, are in a very poor condition.

For all of these to happen, we have to stress it again, *strong determination and real political will is required*. Otherwise, national strategies and action plans remain interesting, but not at all effective.

Taking into account the enormous and important economic, political, social and cultural consequences of the development of the IS, the European Commission has also gained an important tool to support the "renaissance" of Central and Eastern Europe. Nevertheless, the governments and business communities in the CEECs are expected to lead the process. The building of the IS is a *sine qua non* condition of their accession to the EU.

ANNEX 1 – "Thirty themes for European initiatives and actions"

AWARENESS

1. EU-CEEC Secretariat - MISAC
2. Global Inventory Project - GIP
3. Access to Data and Expertise in Europe - ADE
4. Awareness Week in the CEE countries 96/97
5. Infodays on EU R&D Programmes
6. Awareness seminars on Language and the Information Society
7. Fellow Members of the Community Innovation Relay Centres - FEMIRC

ECONOMY

8. European Strategic Initiative in Electronic Commerce - ESIEC
9. MARIS Activity in the Baltic Sea - MARIB
10. European Chambers of Commerce Network - ECCN
11. Multimedia Action Group Network - Magnet
12. Investigation into obstacles to investment in telecommunications
13. Multilingual support for the Information Society
14. ITEA Award
15. Telematics Applications for Freight Operations
16. Telematics Applications for the Environment

PUBLIC INTEREST

17. European Local Authorities Networks - ELAN
18. Euromethod pilot project in the CEE countries
19. European Geographical Information System - EGIS
20. Trans European Research Networks - TEN-34
21. Web for Schools in Europe -WFSE
22. Videolecturing in European Universities - VILEC
23. European Computer Driving Licence - ECDL
24. Telemedicine Services delivered to the Point of Need - TEMEP
25. European Health Card - EHC
26. Crosscultural Education and Training TEL*LINGUA
27. Telematics for Teachers Training: REM, Trends, T3
28. National regulatory Authorities
29. Licensing Regulation and Procedures
30. Libraries in the Information Society – Know How, Awareness, Training - LISKAT

LA SOCIETE MEDIATISEE:
IDEOLOGIE ET INFORMATION TRANSMISE PAR LES MEDIAS

NICOLAE SERA

Le sujet de cette étude s'inscrit dans l'analyse sociologique des médias et de la société qui se définit comme "communication".

Si, auparavant, on définissait nos sociétés par rapport à la consommation, de nos jours, grâce aux nouvelles technologies qui tendent à être pléthoriques dans les domaines de l'audiovisuel, on définit les mêmes sociétés par référence à la communication.

Il semble que nous soyons parvenus à un point curieux et même inédit dans l'histoire de nos civilisations, en ce point limite où le spectacle qui se donne à voir, et qui suppose une distance entre le spectateur et la scène, nous inclut dans la scène même et nous pousse à croire en cette inclusion.

Dire que notre société est de communication, c'est évoquer un certain malaise et, à la fin, mesurer avec notre nostalgie le déclin d'une certaine qualité de liaison sociale. L'âge de la communication et l'empire de l'éphémère qu'elle instaure par le biais de médias éléctroniques, de même que la nature différente de la participation aux événements, sont autant d'éléments qui modifient les rapports sociaux entre les hommes.

En tant que composantes majeures de la communication, la représentation et l'expression étaient simultanées mais bien délimitées dans la communication traditionnelle, alors qu'avec l'âge de la télévision on croît être dans l'expression pure là où il s'agit exclusivement de montage et de mise en scène. C'est ce paradoxe qu'il nous faut analyser.

L'exemple du journalise suscite immédiatement une intense controverse: à l'information, le journaliste-représentant ajoute l'interprétation - dit commentaire - qui transforme le message jusqu'à lui donner une portée exactement inverse aux intentions de l'émetteur initial. En même temps que certaines commentaires qui expliquent et situent le sujet, on en rencontre d'autres plus pervers.

Quelle est la nature de la puissance médiatique aujourd'hui? On va essayer de répondre à cette question tout en adoptant une démarche sociologique et interdisciplinaire. Et si l'on va privilégier surtout les aspects négatifs voire pervers des médias, sans minimiser cependant leur rôle dans nos sociétés, c'est pour mieux répondre à un autre questionnement, à savoir: les médias constituent-ils un mécanisme eficace de contrôle des pouvoirs institutionnels, ou bien amplifient-ils leur déséquilibre relatif?

En admettant que la télévision est devenue le quatrième pouvoir, qu'on qualifierait de "médiatique", on va analyser la relation d'influence, de contrainte et de miroir qui s'établit entre les quatre pouvoirs, afin d'expliquer comment les médias peuvent-ils modifier le sens et le cours des démocraties.

On a fixé comme point de départ l'hypothèse que la télévision est devenue le média le plus adapté à la demande d'informations de la part des citoyens. L'influence dominante de l'image télévisuelle donne une nouvelle responsabilité à l'audiovisuel, qui se traduit dans la double fonction de l'image:

- fonction pédagogique, en tant que transmetteur de connaissances;
- fonction civique, dans la mesure où elle transmet l'ouverture au monde.

Même si principe fondamental de la démocratie, le pluralisme dans la communication audiovisuelle est entendu le plus souvent dans une acception restrictive et quantitative. Privilégiant les thèmes consensuels, les événements conjoncturels et spectaculaires, au détriment d'une actualité complexe, on arrive à la rediffusion des mêmes images sur la majorité des chaînes, à la standardisation de l'information et des points de vue, à labanalisation de l'événement.

Dans ce contexte, on va analyser les positions gouvernementales vis-à-vis des médias, pour arriver à délimiter les libertés et les contraintes des journalistes. Tout en usant de leur liberté "totale", les journalistes tombent dans l'extrême d'en abuser et de créer ce qu'on appelle les "médiamensonges". Les nouvelles techniques employés par les journalistes donnent l'illusion d'une transparence informationnelle extrême, mais ce qui en réalité ne sont que des "mythes", voire de la désinformation.

On a consacré un chapitre à l'analyse de l'information - désinformation, car informer c'est d'abord *former* l'esprit et l'information est avant tout un formateur, un pédagogue. Puisqu'il n'y pas d'image innocente, et que le fait brut n'existe pas à cause de la subjectivité qui intervient, on s'est demandé: faut-il tout dire? Doit-on admettre la censure? En tout cas, l'autocensure s'impose-t-elle parfois? Si insuffisante qu'elle soit, la réponse trouvée est que cette affaire concerne le médiateur (le journaliste) et ssa conscience et que le problème n'est pas seulement de savoir s'il faut dire une vérité, mais si cette vérité est totale et comment elle sera reçue, comprise, assimilée.

Pour illustrer, on a choisi deux cas devenus classiques en matière de médiatisation, celui de la Guerre du Golfe et celui de l'"affaire" Timisoara pendant la révolution roumaine de 1989. Ces deux cas de médiatisations vont servir pour point de départ d'une nouvelle éthique du journalisme qui s'inscrit dans le cadre plus large de la géomorale de l'information.

Afin d'arriver à un nouveau journalisme de qualité, on va insiter sur le retour aux principes démocratiques, comme la neutralité de l'information, le pluralisme d'idées et des points de vue, l'honnêteté du journaliste et de l'information. On va analyser ces critères à travers deux textes déontologiques relativement récents, à savoir les principes d'éthique du journalisme proposés par l'équipe des journalistes de TF1 et la recommandation du Conseil de l'Europe concernant l'éthique du journalisme. Quelle éthique donc pour les journalistes? Comment éviter une "colonisation" des esprits? Autant de questions qui, même si

sasns réponse immédiate, nous proposent une réflexion future et à la fois très actuelle sur l'évolution de la démocratie.

"On peut, on doit dénoncer les dangers d'une communication généralisée, nouvelle religion mondiale qui prétend régler tous les problèmes de l'humanité, son bonheur, l'égalité entre les hommes, la fraternité, le développement économique, l'interaction sociale"[1].

LES MEDIAS - PRINCIPALE SOURCE D'INFORMATION

En tant que moyen de diffusion, de distribution ou de transmission de signaux porteurs de messages écrits, sonores ou visuels, les médias façonnent notre époque d'une manière directe. L'image, le son, la parole et l'écrit s'efforcent d'épouser le temps que nous vivons et de la déchiffrer le plus clairement possible. Mais comprendre le temps, son temps, demande aussi beaucoup de temps, voilà pourquoi le journaliste doit savoir être "dans le temps" et l'information doit pouvoir être donnée à temps. Soumis à un régime concurrentiel sévère, les différents médias cherchent à simplifier et à reccourcir leurs présentations pour ne pas faire perdre le temps à leurs utilisateurs.

Parmi tous les médias, celle qui sait mieux valoriser ce critère temporel c'est la télévision et sa soi-disant superiorité est due au fait qu'elle est d'un emploi rapide, qu'elle opère une grande diffusion simultanée et qu'elle restitue les éléments expressifs ou signifiants non-transmissibles par l'écrit, c'est-à-dire les gestes et les mimiques. Cela fait que la télévision savoure son triomphe, parce qu'en temps consacré et en fréquence, elle a l'avantage sur la lecture de la presse. Une confirmation éclatante en est donnée par le fait que 5% des Français ne regardent jamais la télévision, alors que 21% ne lisent jamais un quotidien.[2] Tous les chiffres et pourcentages du même sondage indiquent que l'attention est plutôt prêtée au média télévisuel.

Dans sa déclaration de politique générale, le Premier ministre de la France, M. Edouard BALLADUR, s'interroge sur les dérives culturelles inquiétantes de la crise de la lecture et la baisse de la fréquentation des salles de cinéma.

Les matériaux statistiques illustrent que chaque jour plusieurs millions de personnes s'informent au moyen des journaux télévisés, dont l'audience ne cesse d'augmenter, tandis que d'autres regardent, grâce au câble et aux antennes paraboliques, des chaînes d'information "en continu", comme Cable News Network (américaine), Skynews (britannique) ou Euronews (europénne).

Puisque le modèle télévisuel entraîne les autres médias dans son sillage, on se demande pourquoi acheter un quotidien qui ne fait que répéter, avec moins de force émotive, les informations télévisées. Dans notre société de communication, l'oeil doit pouvoir découvrir même dans la presse écrite une gratification immédiate par une approche globale et non analytique: dessins et

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[1] Cf. Lucien SFEZ, *Dictionnaire critique de la communication*, P.U.F., Paris, 1993, p. 5.

[2] Cf. Un sondage de la SOFRES pour "La Croix", "Télérama" et "Médiapouvoirs", efectué du 21 au 25 novembre 1992 sur un échantillon représentatif de mille personnes.

caricatures bien placés, titres provocants et pas forcément représentatifs du contenu de l'article, photos attractives, paragraphes aérés, etc. Ce de présentation qui se répand très vite, contracte le temps de la mémoire et fait vivre dans le temps de l'instantané. Cela fait que la presse écrite subit uneperte d'identité et de personnalité, tandis que la t'elévision augmente dans la hiérarchie des médias et répand son modèle.

Le choix de la télévision pour principale source d'information a un fort impact sur tout le sytème culturel de la société, mais aussi sur la mentalité collective qui est en pleine mutation. Le journal télévisé, gr^ace notamment à son idéologie collective du direct et du temps réel, a imposé peu à peu une conception radicalement différente de l'information. Informer de nos jours c'est montrer l'histoire en marche et faire assister - si possible en direct - à l'événement. Une des conséquences de cette mutation est le fait que l'image de l'événement prioritaire pour le téléspectateur est de regarder l'événement se produire sous ses yeux, c'est pourquoi le rôle du journaliste s'efface peu à peu dans ce face-à-face téléspectateur-histoire. S'etablit ainsi l'illusion que voir c'est comprendre et que tout événement doit présenter absolument unepartie visible, montrable, télévisable. Ce qui au niveau de la technique journalistique se réduit aux images d'emblême, réductrices de la signification par leur nature; ainsi, toute la portée des accords Israel-OLP a été réduite à une simple poignée de main RABIN-ARRAFAT et la r'esolution d'un conflit à l'image d'un débarquement des troupes américaines, comme on l'a vu dans le cas somalien.

Si le concept d'information a changé, celui d'actualité reçoit également autre signification grâce à l'influence de la télévision. Avec l'impact des images qu'elle montre, la télévision provoque le choc émotionnel au public et condamne à l'indifférence les événements sans images. Peu à peu s'établit dans les esprits l'idée que l'importance des événements est proportionnelle à leur richesse en images et qu'un événement qu'on peut montrer est plus intéressant, plus important que celui qui demeure invisible et dont l'importance est abstraite. C'est ainsi que dans le nouvel "empire" des médias les paroles ne valent pas des images.

Si le temps des médias est devenu celui de l'instantanéité, cela a des conséquences également sur la véracité de l'information, car on veut montrer beaucoup dans un temps limité et on se souvie peu si l'information - très imagée - est vraie ou fausse. Si à partir d'une image d'agence la télévision présente une nouvelle et ensuite la prese écrite reprend cette même nouvelle, cela suffit pour l'accréditer comme vraie. C'était le cas du "charnier" de Timisoara et des images de la guerre du Golfe, quand les médias ne savaient plus distinguer le vrai du faux.

A tous ces changgements et mutations s'ajoute un malentendu fondamental: beaucoup de citoyens estiment qu'en regardant le journal télévisé à base d'images fortes, violentes et spectaculaires, ils peuvent s'informer sérieusement. C'est une erreur, parce que le journal télévisé, structuré comme une fiction, n'est plus fait pour informer, mais plutôt pour distraire. La rapide succession de nouvelles brèves et fragmentées - on en voit une vingtaine par journal télévisé - produit un double effet négatif de surinformation, mais aussi de désinformation. Fascinés par la forme, on oublie le fond, c'est-à-dire le combat d'idées. Pour pouvoir être de son temps, il ne convient pas de confondre les images et les pages

d'écriture, le temps des pendules et celui des psychologies. Le temps des pendules est de plus en plus accéléré sur les écrans et l'image se déroule sans possibilité de retour. Du coup, le temps psychologique qui permet de s'attarder et de réagir, se trouve comprimé, ce qui favorise l'oubli. On peut affirmer avec George STEINER que dans le phénomème médiatique actuel, l'épistémologie et l'éthique sont au service d'une "temporalité douteuse":

> *"La dimension temporelle du journaliste est une simultanée nivélante. Tout a plus ou moins la même importance. Tout n'est que quotidien. /…/ La vision journalistique aiguise chaque événement, chaque situation individuelle ou collective, pour lui conférer une puissance de pénétration maximale; mais l'aiguisage est uniforme. L'énormité politique et le cirque, les bonds de l'athlète et ceux de la science, l'apocalypse et l'indigestion, reçoivent le même tranchant. Paradoxalement, cette urgence graphique, par son côté monotone, produit l'anesthésie. La beauté et la terreur extrêmes ne sont plus que lambeaux à la fin de la journée. Et nous nous retrouvons intacts dans l'attente, de l'édition du lendemain."*[3]

On observe une certaine simplification du discours des journalistes au moment où le monde, bouleversé par la fin de la guerre froide, s'est complexifié; cet écart entre le simplisme du journaliste et la complication de la politique internationale déroute les citoyens qui sont en quête des analyses plus fouillées que celles proposées par le journal télévisé. Et cela se passe quand la télévision - en quête de la hiérarchie des médias - tend à devenir le "quatrième pouvoir" qui, au lieu de rendre plus claires et plus compréhensibles les grandes questions de notre époque, arrive à banaliser l'information volontairement ou involontairement. Une nouvelle éthique du journalisme s'impose impérativement, surtout dans notre monde toujours plus difficile à comprendre et qui demande de la part de celui qui le déchiffre de l'humilité, du doute m'ethodique, beaucoup de travail et enquêtes soutenues.

LA BANALISATION CROISSANTE DE L'INFORMATION

Aujourd'hui encore, au sein des medias la notion de pluralisme des idées est entendue le plus souvent dans une acceptation restrictive et quantitative. L'accroissement du nombre des chaînes de télévision, les nouvelles technologies de traîtement de l'information n'ont pas eu pour résultat la diversification souhaitée de l'offre de l'information; toutes les chaînes publiques et privées, conformément aux impératifs d'audience, privilégient les thèmes consensuels, les événements

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[3] George Steiner, *Réelles présences*, Gallimard, Paris, 1993, p. 48.

conjonturels et spectaculaires, au détriment d'une actualité complexe, susceptible de susciter des débats de fond.

Ecartant d'emblée ce qui divise, ce qui est trop marqué, les journalistes choisissent leurs sujets en fonction de l'idée qu'ils se font de la demande des téléspectateurs. Or, cette demande restant mal connue, le choix opéré par les journalistes est fortement relatif et empreint de subjectivité. A cela s'ajoute le fait que les reportages à l'initiative des chaînes se font de plus en plus rares, faute de moyens financiers, ce qui aboutit à la rediffusion des mêmes images sur la majorité des chaînes, à la standardisation du traitement de l'information et des points de vue. Et quand on voit le même événement présenté sur toutes les chaînes, les discours identiques accompagnés par les mêmes images, même s'il s'git d'un événement majeur, on arrive à le percevoir comme si c'était un fait banal, un "produit de série", sans grande valeur.

Cette banalisation de l'information a été rendue possible non seulement par la rediffusion de mêmes contenus, mais aussi par la constitution d'impressionants groupes multimédias transnationaux. Ainsi, à partir de 1988, trois agences anglo-saxones d'actualité filmée dominenet le marché:

- VISNEWS - d'origine américaine et qui dispose d'un satellite de 400 stations de télévision dans 83 pays;
- WTN - qui regroupe des partenaires britanniques, américains et australiens, ayant 14 bureaux permanents dans ces pays;
- CBS - network américain qui dispose de plusieurs agences internationales, placées partout dans le monde.

On voit donc que la tendance est de constituer des empires de type nouveau et que les normes techniques commencent à se standardiser dans la perspective d'une télédiffusion de type planétaire. Avec la télédiffusion par satellite, qui remet en cause tous les usages professionnels des journalistes, et avec le recours croissant à des images américaines, on accentue l'uniformisation de l'information et, implicitement, de l'actualité. Partout, la télévision nationale perd de son caractère propre, à mesure que les émissions internationales envahissent l'antenne. Ainsi, le réseau d'information par câble CNN (Cable News Network), diffusant par satellite des nouvelles dans le monde entier 24 heures sur 24, a révolutionné notre conception du rythme de l'actualité et du métier de l'information. Par sa nature même, une entreprise de pareilles dimensios semble étouffer l'initiative individuelle, ce qui est le plus souvent à la source même du journalisme de qualité. Cependant, les responsables politiques tiennent compte du "facteur CNN", puisque en couvrant un événement, CNN est capable de lui donner un retentissement mondial, au moment même où il se produit. La diffusion de l'actualité immédiate, proche de saturation parce que trop chargée de commentaires, crée un cadre nouveau auquel la diplomatie doit se plier. On a vu en ce sens quel a été l'impact de la présence de CNN lors du débarquement des troupes américaines en Somalie et les efforts de laisser une image de marque sur l'armée américaine "libératrice".

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Cette rediffusion, sérielle presque, des images et des discours accompagnants, porte atteinte également au contenu des messages. La banalisation des informations est due à un grand nombre de stéréotypes, de modèles et de symboles que les médias véhiculent. L'existence des stéréotypes dans le journal télévisé produit le plus souvent une déformation du message initial de l'information. Dans la conception générale des émissions, il y a des stéréotypes nationaux : ainsi, en France, le commentaire est organisé autour d'une image de choc, tandis qu'à la télévisoin britannique les images servent d'ilustration et de complément au texte parlé. Un des stéréotypes qui a des effets de banalisation du contenu est, paradoxalement, la "védettisation"[4], c'est-à-dire la valorisation émotionnelle d'une personne par le public. La védettisation nous fait pénétrer déjà dans le domaine du symbole, car la personnalité du présentateur de l'émission peut agir comme un symbole, par exemple celui du savant ou du lettré. Le présentateur français Patrick POIVRE d'ARVOR, qui par sa voix et sa présence a gagné la confiance du public, passe aujourd'hui comme une "vedette" du journal télévisé diffusé sur TF1, ce qui l'a amené à manipuler par des images le public avec une fausse interview de Fidel CASTRO, le président cubanais. Védettisation donc, mais à la fois perte de confiance qui met en cause la nature et la fin ultime de l'information.

Finalement, ce processus de banalisation de l'information est dû également au fait que les techniques audiovisuelles modifient profondément la nature même du langage. La télévision favorise une certaine culture de l'image, voire même de l'imaginaire, où la parole n'est plus que l'adjuvant de la vision. On semble déboucher sur une nouvelle prédominance de l'oralité, mais fortement influencée par le style propre aux médias: syntaxe simplifiée, style direct et "télégraphique", répétition de mots - clefs, assertions stéréotypées du type slogan. A cela s'ajoute l'utilisation de grands mots, vidés de sens, qui font bonne impression, mais qui au niveau du contenu, appauvrissent le discours journalistique.

Cette banalisation croissante de l'information remet en cause la notion d'information et accentue en même temps la confusion entre information - communication. Si on va insister en ce qui suit sur les effets pervers de l'information, en tant qu'action menée par les journalistes, c'est pour illustrer que le résultat final de cette action est souvent une désinformation soigneusement mise au point.

Pour utiliser l'expression de Lucien SFEZ, on peut se demander si on n'aboutit pas de la sorte à la "désacralisation de la société"[5], si la télévision n'est-elle pas tournée entièrement vers le programme, le succès, la représentation machinique et si elle n'oublie pas la profondeur de ses anciennes vocations. On pourait remédier cette situation par le retour à un certain humanisme, par la

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[4] Terme employé par Jean Cazeneuve, *La société de l'ubicuité, Communication et diffusion*, Denouel-Gouthier, Paris, 1972, p. 227.

[5] cf. Lucien Sfez, *Critique de la communication*, Ed. du Seuil, Paris, 1990, p. 98.

limitation des automatismes et des déterminismes rigides et par de nouveaux jeux du langage.

IDEOLOGIE ET INFORMATION TRANSMISE

En sociologie, une idéologie est "un système (possédant sa logique et sa rigueur propres) de représentations (images, mythes, idées ou concepts selon le cas) doué d'une existence et d'un rôle historique au sein d'une société donnée"[6]. Cette définition a l'avantage de lier le concept d'idéologie à ceux d'image, de représentation et de mythe. Une idéologie comme système de représentations se distingue de la science, par le fait que la fonction practico-sociale l'emporte sur la fonction théorique ou de connaissance. Ce que suggère la définition ainsi complétée, c'est que l'idéologie, loin d'être une sorte d'abération ou de pathologie cognitive, elle fait partie de la totalité sociale dont elle constitue un niveau spécifique. Ainsi, elle est constitutive de l'espace dans lequel se pense une société.

Dans notre acception, l'idéologie concerne le rapport vécu des hommes à leur monde, les représentations que les sociétés s'en donnent, l'ensemble des discours dans lesquels les sociétés s'expriment et qui forment en somme, l'imaginaire social. Dans la terminologie proposée par L. ALTHUSSER, ce qui caractérise le processus idéologique, ce sont deux fonctions étroitement liées: une fonction de reconnaissance, ayant comme envers une fonction de méconnaissance. C'est le propre de l'idéologie de s'appuyer sur des évidences et de les imposer comme telles, ce que nous ne pouvons ne pas reconnaître. Ce qui est méconnu dans ce mécanisme de la reconnaisance, que L. ALTHUSSER qualifie de "spéculaire", c'est l'ensemble des relations sociales et la façon dont elle se situe par rapport à l'individu, de même que les conditions de production de leur discours.

Ce mécanisme de la reconnaissance fonctionne en effet comme un processus ayant comme finalité la création d'une opinion publique - en tant qu'émergence de la mentalité collective au niveau de l'actualité - et de l'information, il y a interaction constante entre le système culturel et le système politique.

On va analyser cette interaction des deux systèmes - culturel et politique - sous un double aspect: ce qui va nous intéresser d'abord ce sont le spositions gouvernementales, vis-à-vis les médias et les lignes majeures des politiques audiovisuelles. Ensuite, dans un second sous-chapitre on va analyser les libertés et les contraintes des journalistes et leur rôle essentiel dans l'information.

LES POSITIONS GOUVERNEMENTALES VIS-A-VIS DES MEDIAS

Depuis longtemps dans la plupart des sociétés, le savoir a été perçu comme un privilège et a été lié à une fonction de pouvoir. Il y avait toujours eu un

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[6] L. Althusser, *Pour Marx*, Ed. Maspero.

lien intime entre la circulation des connaissances, l'émancipation des esprits et la démocratisation des esprits. De nos jours, la circulation de l'information répond à des besoins que l'on ressent, partout, comme irrépressibles et, à la fois, cela élargit sans cesse le cercle des citoyens capables de choisir telle ou telle information. La circulation de l'information complique en même temps et toujours davantage la tâche de ceux qui voudraient faire des choix à la place des citoyens, portant atteinte aux principes démocratiques. C'est pourquoi la liberté d'informer et d'être tenu informé, indissociables à la liberté tout court, sont devenues un impératif catégorique.

A un premier niveau, l'interaction entre système politique et système culturel fonctionne à base d'une analogie: du point de vue du Pouvoir, celui-ci, quel qu'il soit, en tout temps et en tout lieu, conservateur ou progressiste, tend à persévérer dans son être, c'est-à-dire, à conserver le pouvoir. De même, toute civilisation tend à se perpétuer, à se garder de l'effondrement. Tenant compte de cet esprit conservateur des deux systèmes, le meuilleur usage de la télévision du point de vue du Pouvoir et de l'ordre existant est de convaincre le public que le Pouvoir doit être maintenu et que la civilisation doit subsister. Mais, en même temps, toute la politique actuelle est affectée par le fait que nous entendons les événements et que, avec l'aide de la télévision, nous voyons tout de suite les événements eux-mêmes.

Cette imbrication des deux systèmes repose en fait sur la dialectique de trois termes, à savoir l'éducation, propagande et liberté, car toute diffusion démocratique de l'information est un compromis entre les exigences de l'éducation, de la propagande et de la liberté.

> "Dans l'idéal, elle [l'information] serait éducative, mais si elle était trop éducative, elle deviendrait propagande. Si elle deviendrait propagande, elle cesserait d'être libre."[7]

On peut se demander donc que représente l'information aux yeux du Pouvoir dans une démocratie. Il y a au moins deux réponses concevables: ou bien les médias - à travers l'information - s'eforcent d'enseigner aux citoyens ce qu'il est nécessaire de savoir pour r'epondre raisonnablement aux questions qui leur sont posées; c'est la télévision éducative; ou bien les médias s'efforcent de dicter aux citoyens les réponses qu'ils doivent donner, soit en dissimulant certains éléments de l'information, soit en imposant une réponse unique; contrairement à la télévision éducative, dans ce deuxième cas il s'agit de la propagande.

Du point de vue du Pouvoir, idéalement, les médias démocratiques seraient objectifs dans l'information, scientifiques dans l'éducation et libres en matière de discussion. En fait, aucune information diffusée par les médias ne répond entièrement à ces exigences. Mais pour les atteindre, dans chaque pays

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[7] Raymond Aron, *La signification politique de la radiotélévision*, *Médiapouvoirs*, mars, 1987, p. 72.

démocratique il y a une organisation dont l'objectif est de limiter l'influence gouvernementale sur les médias, car plus le gouvernement intervient, plus l'aspect de propagande est acceentué. De même, toutes les organisations démocratiques de la radiodiffusion ont pour objet de garantir la pluralité des opinions. Aux yeux du Pouvoir, l'effort contre la propagande ne doit pas être dirigé exclusivement contre le gouvernement car dans l'optique officelle, il y a encore au moins deux sortes d'hommes qui sont censés en être suspects: les journalistes d'abord, car eux aussi sont animés par de passions politiques et par conséquent, leur information ne peut jamais être entièrement objective; et dans ce sens les hommes politiques font appel à une possible réforme de l'éthique des journalistes.

Une deuxième catégorie de suspects est représentée par les groupes d'intérêt ou, ce qu'on appelle en France le "puissances d'argent". Là où il y a plusieurs chaînes de télévision, possédées ou louées par des organisations économiques, ces propriétaires ou financiers sont susceptibles de peser sur les journalistes. L'indépendance à l'égard de l'Etat qui à première vue paraît apporter une solution facile au problème d'impartialité et du pluralisme, entraîne une dépendance à l'égard d'autres puisances qui n'ont pas nécessairement le souci de préserver les valeurs sur lesquelles repose la civilisation libérale. Dans les textes sur les médias on affirme le plus souvent qu'en Occident on ne fait pas de télévision pour informer ou cultiver, mais pour vendre des produits de consommation.

Même si on évite les cas extrêmes, on peut affirmer que toute diffusion d'informations par les médias comporte un danger de politisation. Parce que les positions gouvernementales sont différentes d'un pays à l'autre, on va prendre comme exemple trois pays représentatifs: la Grande Bretagne, les Etats-Unis et la France.

En Grande Bretagne la télévision est un service public qui jouit d'une large mesure d'indépendance par rapport au gouvernement. Dans ce pays, l'objectivité du journalisme repose sur le principe de la discrimination rigoureuse entre la nouvelle et le commentaire et cela fait que lorsqu'on présente les faits, on oublie autant que possible ses préférences, ses passions politiques. C'est ainsi que le système audiovisuel britannique aboutit à la neutralisation politique de l'information. La politique consiste surtout en information et le gouvernement se contente de diffuser un certain nombre de conférences pendant lesquelles même si les opinions sont divergentes, cette divergence ne dépasse pas une mesure raisonnable. Suivant une pareille présentation des événements, le téléspectateur britannique n'arrive pas à l'idée que tout s'arrange, mais plutôt à la conviction qu'avec de la bonne volonté un accord est possible.

Par contre, le système audiovisuel américain, démocratique, certes, n'est pas neutre. La démocratie americaine est un régime de compétition et grâce aux multiples chaînes, l'administration américaine peut utiliser la télévision, mais pas plus que les groupes privés. La problématique de cette organisation est double: d'une part, on peut se demander dans quelle mesure les groupes économiques, possesseurs des chaînes, imposent leur volonté aux journalistes et, d'autre part, il y a le risque de la répartition inégale de la possibilité de parole, puisqu'il faut acheter les heures à la télévision et les différents partis ou groupes sont

inégalement riches. Donc, même si du point de vue du Pouvoir - quel qu'il soit - la télévision américaine n'est pas neutre, elle joue sur le pluralisme et du simple fait qu'il y a puralité, un grand nombre de mensonges sont exclus.

Finalement, en France, le système audiovisuel n'est pas celui du pluralisme américain, ni celui du monopole britannique. Le choix français est plutôt en faveur du modèle britannique, mai avec des interventions du gouvernement qui limitent la neutralité. Car pour un journaliste français, la coloration de son récit avec ses préférences politiques - et le choix dans le paysage politique français est beaucoup plus vaste qu'en Grande Bretagne - ne paraît pas un manque d'objectivité, mais une manière d'animer le récit. Dans une société démocratique comme la France, le Pouvoir ne peut ne pas s'intéresser aux médias; il garantit sa liberté et son pluralisme par des lois et mesures diverses. En dépit des querelles politiques, il est évident que cette liberté existe et que, en ce qui concerne l'audiovisuel public, la création de la Haute Autorité constitue un progrès: elle est destinée à assurer le pluralisme et l'impartialité de l'information. En 1988 la Haute Autorité devient Conseil Supérieur de l'Audiovisuel qui veille sur les programmes diffusés en France.

Généralement, le Pouvoir considère que la soi-disant "société de communication" de l'heure électronique, qui porte en germe d'immenses possibilités d'échanges et d'interactivité, aboutit souvent à un appauvrissement des contenus politiques, à un efacement de la politique. Tout en affirmant le rôle essentiel des médias dans une société d'emocratique, les positions gouvernementales tendent à généraliser l'idée que la présentation de l'événement par la télévision veut plutôt réduire le respect du citoyen pour les hommes politiques, parce que ces hommes politiques ne sont pas des vedettes de la télévision. Vision donc plutôt négative des médias et quirenforce en même temps l'idée que la télévision tend à devenir une quatrième forme du Pouvoir.

Dans tous les Etats, les efforts destinés à diminuer le rôle de l'Etat ont abouti à une nouvelle forme de présence du politique dans la télévision. Les nouvelles politiques audiovisuelles ont généré des systèmes de régulation nouveaux qui ont entravé le profil des futurs gagnants et des futurs perdants. Cette règlementation est un pur produit du processus politique, et la France en fait la meilleure démonstration. Chaque changement de gouvernement a engendré un changement d'instance de régulation: en 1982, la Haute Autorité de la communication audiovisuelle, en 1986, la Commission Nationale de la communication et des libertés (C.N.C.L.), en 1989, le Conseil supérieur de l'Audiovisuel (C.S.A.). cette dernière réforme de 1989 visait à renforcer le contrôle sur les nouveaux acteurs, en donnant à l'instance de régulation des pouvoirs de sanction renforcés.

Politiquement parlant, le changement fondamental s'est produit par la transformation du rôle de l'Etat qui, d'organisateur es tdevenu régulateur. Traditionnellement, le caractère politique de l'audiovisuel européen était défini en référence à certains principes de base du domaine public. Le débat portait surtout sur l'aspect culturel de la mission de la télévision et sur le sens de sa fonction: informer et éduquer dans un souci d'équilibre, d'indépendance et de neutralité. La télévision était politiquement dans la mesure où elle était fondée sur les principes

de base du service public; cependant elle était dépolitisée, car le débat politique était neutralisé.

Une cause essentielle de la complexification de la politique audiovisuelle tient à l'interaction de plus en plus grande des politiques nationales et internationales. La difficulté à mettre sur pied une réglementation audiovisuelle européenne ou même mondiale provient de l'attitude ambivalente de plusieurs Etats. Si les Etats sont prêts à admettre que la télévision facilite la liberté des échanges de services, ils sont par contre très réticents à l'idée de renoncer à leur souveraineté vis-à-vis d'une composante si importante de leur politique culturelle.

Parce que le rôle de l'Etat est devenu de plus en plus régulateur et donc politisé, il y a la nécessité de redéfinir et de renforcer la mission d'information et d'éducation de la télévision dans un contexte différent sur le plan économique et politique. Le secteur de l'information et du journal télévisé n'échappe pas non plus à la logique marchande: les informations deviennent des produits à vendre et doivent répondre à des critères de commercialisation. On a essayé d'appliquer des concepts économiques aux médias: c'est ainsi que le "marketing politique" a vu le jour et veut désigner le fait que par rapport à d'autres acteurs de notre société de consommation, les hommes politiques sont nombreux à la recherche de la notoriété et de la popularité par des proclamations d'adhésion à un certain nombre d'idées dites consensuelles. Ce marketing de la demande qui cherche avant tout à repérer les thèmes, les formules ou les propositions qui ne changent pas, paraît assez largement responsable de la banalisation du discours de acteurs politiques, transmis si fidèlement par les médias[8].

Ainsi, les informations transmises et retransmises sur les chaînes européennes sont de plus en plus importées des Etats-Unis, ce qui devient une véritable entrave à la fidélisation du public, car les réseaux se remplissent avec des programmes de masse uniformes et stéréotypés.

Mais la communication institutionnelle publique ne se limite plus aujourd'hui à la communication politique. Le dialogue Etat - citoyens constitue l'enjeu de toute communication publique, que l'émetteur soit un ministère, une municipalité ou une entreprise. L'Etat annonceur soit en tant qu'informateur doit assumer des responsabilités particulières en s'adressant aux citoyens par le biais des médias: il doit l'informer, lui expliquer des décisions publiques, mais également le convaincre de la légitimité de son action. A part cette action complexe, l'Etat cherche aussi à impliquer le citoyen, le responsabiliser et le mobiliser dans un souci d'intérêt général. Ce sont autant de tâches qui font de la communication publique un outil pédagogique et, plus généralement, un vecteur essentiel de démocratie. Informé de telle façon, le citoyen serait plus apte à exercer ses droits et à se forger librement une opinion.

> *"La démocratie vraie c'est l'association intime, la*
> *fusion de l'Etat et du citoyen. Il n'y a pas de démocratie*

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[8] selon Claude Sales, *Pouvoir et journalistes: conflit ou compplicité*?, *Problèmes politiques et sociaux*, no. 620 / nov, 1989, p. 62.

> *véritable si l'opinion ne peut se former par la discussion et par la libre confrontation des idées, si elle est égarée par des informations insuffisantes, inexactes, partielles ou tendancieuses."*[9]

Parce qu'elle fait appel au registre de l'identité et de la mobilisation, le message reçu par le biais des médias doit être clair, explicite et doit, à la fois, permettre au citoyen de trouver ses marques dans un univers complexe. En ce sens, la difficulté qui se présente c'est que la communication est encore trop largement considérée comme simple diffusion d'un message vers l'extérieur. Clarifier et résoudre ce prblème est en quelque sorte la tâche des journalistes qui, grâce au développement des technologies peuvent et doivent modifier leurs méthodes de travail.

LIBERTES ET CONTRAINTES DES JOURNALISTES

De nos jours, grâce au développement technologique trop rapide et qu'on maîtrise souvent mal, le journalisme est entraîné dans un tourbillon, dans une accélération de mutations qui risquent non seulement d'accélérer sa perte de crédibilité, mais aussi de la transformer à un point qui le rendra méconnaissable à lui-même. Communiquer uniquement ce qui va dans le sens des intérêts de l'émetteur et pratiquer à discrétion un devoir de réserve sur les sujets délicats, la vision de l'information ainsi codifiée est si restrictive qu'elle transforme le métier de journaliste: les journalistes hésitent entre communication et information, les uns rechechent la crédibilité des messages et des images, les autres la vérité des informations, des faits.

Cependant, les sondages récents[10] témoignent que le public ne fait pas crédit aux journalistes, auxquels il reproche de s'immiscer indûment dans la vie de leurs contemporains et de se faire plus ou moins consciemment les complices des pouvoirs publics. La raison de ces résultats est que le journaliste est confondu avec la technique qu'il emploie et que les images, le rythme accéléré et la passion de l'instantané réduisent tout aux chiffres et aux performances, à la domination du "chronos" et de la projection.

Le journaliste, avant de s'affirmer comme reporter, est un homme de son temps, issu d'un milieu social, doté d'une formation intellectuelle et surgi d'une histoire. Il est aussi un individu ayant sa propre conscience, et le débat que le journaliste mène avec sa conscience est âpre et multiple, d'autant plus que son métier est plus flou, doté de moins de règles et pourvu d'une déontologie plus flottante que beaucoup d'autres. On peut comparer la condition du journaliste

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[9] Florence Dormoy, *Les "décideurs" publics et la communication*, *Médiapouvoirs*, no. 20/1990, p. 54.

[10] sondage de la SOFRES pour *La Croix, Télérama et Médiapouvoirs*, effectué du 21 au 25 / 11 / 1992 sur un échantillon représentatif de mille personnes, cf. *Libération*, 19/01/1993.

> *"à un missile téléguidé qui ignorerait aussi bien la nature de la mission que l'orientation du pilote, et qui serait programmé de telle façon, qu'il ne soit pointé ni en direction de la terre, pour éviter les accidents, ni en direction de la mer, pour prévenir la pollution."*[11]

A partir de ces données, le journaliste est un être libre et responsable, auquel il ne reste qu'à faire mieux éclairer ses contemporains sans tomber dans les extrêmes de la surinformation ou du mensonge. En apparence, l'objectif est clair: dire la vérité, rien que la vérité, et si possible, *toute* la vérité, une vérité complexe et démultipliée.

En rentrant de déportation, Léon BLUM, qui avait été longtemps journaliste, déclarait que la règle d'or de son métier n'était pas de ne dire que la vérité, ce qui est simple, mais de dire *toute* la vérité, ce qui est beaucoup plus difficile. Devant une pareille déclaration on peut se demander qu'est-ce que "toute la vérité", dans la mesure où il est possible de définir la vérité. Ce problème de la vérité a été posé encore une fois lors de la Révolution roumaine de décembre 1989 quand "la vérité" a été malmenée sous sa forme apparemment la plus simple, celle des chiffres. Intoxication concernant les chiffres, mais au niveau des images diffusées également, ce qui a déterminé une journaliste belge du quotidien "Le soir", Colette BRAEKMAN, d'affirmer: "Je n'ai rien vu à Timisoara!" Phrase jouant sur la liberté du journalisme, "Je n'ai rien vu" ne signifie pas "il ne s'est rien passé". A partir de cette formule se définit et fonctionne la conscience du journaliste, de même que le rapport entre le vrai et le vu, le véritable et le vérifié. Cette formule est également l'antithèse et le synonyme de "toute la vérité" de Léon BLUM, et elle joue sur la part de vérité dans l'information transmise par les médias.

Mais l'interrogation du journaliste ne porte pas seulement sur la part de vérité qui lui est accessible, mais aussi sur les méthodes pour y parvenir et sur la divulgation qui peut être faite. Le journaliste dit "d'investigation" est à l'ordre du jour et aujourd'hui dans cette branche tous les "coups" sont permis: le journaliste mène parfois un type d'enquête comparable à celle que pratique la police à l'encontre des terroristes ou des trafiquants de drogue. En d'autres cas, c'est la pratique de la rétention de l'information qui défie le plus la conscience du journaliste, c'est ce qui trace la frontière entre le communicable et l'indicible. Le journaliste se voit dans la posture du gardien d'intérêts supérieurs à l'information, ceux de causes tenues pour justes, étant à la fois sujet à des manipulations systématiques, mais bien dissimulées.

Ce pendant, la loi est claire: "rien que la vérité, *toute* la vérité"; mais il faut la compléter par la devise que le "New York Times" arbore en manchette: "All the news that's fit to print", c'est-à-dire, toutes les nouvelles dignes d'être imprimées. Cela esclut toutes les nouvelles "indignes", c'est-à-dire toute une espèce de journalisme qui porte sur la divulgation des événements qui pourraient porter atteinte à l'honorabilité de certaines personnes.

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[11] Jean Lacouture, *Le journaliste et sa conscience*.

Connaissant ces règles, le journaliste peut constater que son problème majeur n'est pas l'acquisition, mais la diffusion de la vérité. Entre les informations communicables et celles indicibles, la frontière est insaisissable et surtout mouvante, car cela diffère de cas à cas. Le filtre pour décider ce qu'il va transmettre, est sa conscience, seule. Et à tout cela s'ajoute le fait que les médias sont l'enjeu de multiples influences politiques. Dans un pays comme la Grande Bretagne, les médias dénoncent rarement le système du lobby, qui permet au gouvernement d'orchestrer la diffusion d'informations dont les journalistes ne sont pas autorisés à révéler la provenance.

Même l'intervention de l'Etat, qui en France est plus contraignant qu'ailleurs, ne présente pas de garantie efective quant à la qualité des contenus des programmes. Et si les nouvelles technologies permettent de faire coïncider davantage l'intérêt des médias et les attentes du public, elles n'ont pas conduit jusqu'à maintenant à une amélioration de la qualité des programmes.

Dans leur relation avec le Pouvoir, les journalistes se trouvent dans une situation étrange: réalisant leurs rubriques, entretenant des relations privilégiées avec les milieux et les groupes qu'ils couvrent, les journalistes finissent par être "institutionnalisés" et rentrer dans l'establishment. En usant trop de cette liberté, en jouant trop le jeu de cette symbiose, les journalistes et les hommes politiques arrivent à perdre le contact avec les citoyens, et donc leur liberté devient une entrave dont il est difficile de se débarrasser. Dans ce couple que forment les médias et les responsables politiques,

> "il y a entre le journaliste et le parlementaire un air de familiarité. Tout deux sont des transmetteurs d'un pouvoir qui leur échappe."[12]

Les responsables politiques travaillent toujours avec les mêmes interlocuteurs, ce qui à la longue débouche sur une intimité qui finit par limiter la marge de liberté du journaliste considérablement. Et le lecteur et le téléspectateur perçoit cette relation de couple, conflictuelle ou complice, qui s'instaure entre le journaliste et le groupe social dont il traite. Cette imbrication entre les médias et les divers groupes dont ils parlent n'est pas limitée à la politique; on le voit dans les domaines comme le sport, les variétés, etc.

L'univers journalistique se révèle ainsi comme morcelé et cette société éclatée est de moins en moins axée sur un discors basé sur le professionalisme; on découvre que le discours des journalistes repose sur une impossible neutralité, puisque l'information est par sa nature le domaine de la subjectivité. Quand le journaliste présente un événement plutôt qu'un autre, il efectue le plus souvent un choix subjectif plutôt par réflexe que par réflexion. Son acte est conditionné par ses goûts, sa compétence, sa culture, la nature du support qu'il emploie et l'environnement dans lequel il ait. L'information ainsi rédigée sera écartée ou retenue et diffusée en fonction de critères d'opportunité strictement objectifs.

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[12] Thierry Pfister, *Le charme discret du journalisme politique*, p. 136.

C'est ainsi que la réalité se decoupe en tranches pratiquement imperméables les unes aux autres et le journaliste a des difficultés pour traiter des sujets qui par leur nature ne répondent pas à la classification préétablie.

> *"La parole journalistique ainsi fragmentée, nécessairement contradictoire puisque se bornant, pour l'essentiel, à reproduire les analyses de groupes socio-professionnels aux intérêts antagonistes, tente de retrouver une certaine cohérence"*[13].

Cette cohérence du discours des journalistes est faite soit par le soutien à un projet politique, soit par l'usage d'un registre moralisateur au nom de l'entente internationale et sociale. Cet état de fait débouche sur une institutionnalisation du journalisme, c'est-à-dire sur la recherche d'une reconnaissance par l'institution dont on parle au lieu de celle d'un auditeur ou lecteur.

Au lieu d'apparaître comme le défenseur des droits du citoyen contre les abus du Pouvoir, le journalisme tend à s'érige en Pouvoir, le quatrième pouvoir, qui, avec ses abus et perversions propres, oriente nos esprits et ne se préoccupe que du résultat final. Même voilé, ce résultat final est de plus en plus souvent le fait d'arracher les dirigeants à leur immobilisme, car l'une des principales fonctions du "quatrième pouvoir" est d'agir au nom des valeurs de la démocratie.

> *"Instantanéité, spectacularisation, fragmentation, simplification, mondialisation et marchandisation sont désormais les principales caractéristiques d'une information structurellement incapable de distinguer le vrai du faux"*[14].

Au lieu donc d'éclairer et enrichir le débat démocratique, l'information est considérée avant tout comme une marchandise. Les répercussions de cette mutation on va les analyser dans le chapitre suivant, avec les autres perversions de ce "quatrième pouvoir" médiatique.

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MULTIMEDIA FOR US ALL

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Abstract. Multimedia has been for a couple of years the central topic of the computer congresses and conferences. Very interesting is that, despite its often use, the term does not have an exact and clear definition, and the specialists' opinions concerning its importance might be even contradictory. For instance, Peter Kronfeld (Münchener Multimediatechnik-Hersteller Fast Electronic) considers that the huge business-figure hardware producers hold multimedia up to ridicule, whilst Lucie Fjieldstad (Director IBM Computers, Multimedia Department) thinks that through the together development of the four distinct industrial branches: Computer business, Entertainment electronics, Telecommunications and Electronic media, a new superindustry, able to offer various digital products and services, emerges.

The goal of this paper is to introduce the main characteristics of multimedia, to analyze the social consequences of its use and to present hardware devices that enable multimedia applications.

What is multimedia?

Multimedia, which word for word means the use of ***multi***ple ***media***, is defined in "Meyers Groβes Lexikon" as: "Avantgardistische Vorstellung, oft unter Einbeziehung des Publikums, bei der die verschiedene traditionellen wie die modernsten visuellen und akustischen Medien eingesetzt werden..."[1][5].

Bernd Meier defines multimedia as "der Oberbegriff für kombinierte Informationstechniken und -dienste mit einer Vielzahl von neuen Anwendungen"[2] [3].

The boundaries between phone, television and computer disappear, the latter integrating text, graphics, animated cartoon, sound, still images and videofilm. The telephone lines become real media channels, through which all kind of information can be sent, and the PC is, in the same time, TVset, telefax, photo album and learning instrument.The ultimate goal is to have the information which is still in paper form (more than 90%) digitized.

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[1] "Avant-garde presentation, often with the participation of the public, which combines different traditional as well as very modern visual and acoustic media…"

[2] "generic notion for the combination of various information technologies and services to develop new applications".

One of the main characteristics of multimedia consists on its *interactivity*. The user has the possibility to choose the way to continue, or the piece of information he/she wants to access. Here we can see the difference between interactive multimedia environments and television. When you watch, for instance, a news broadcasting there is also videofilm or still images, sound or text (combination of multiple media), but your only activity is to press the button on the remote-control. Further more, if you are a couple of minutes late, you lose a piece of the transmitted information. On the other hand, the PC allows interactivity, using the keyboard, the mouse or the joystick, but most of the users benefit only from text, graphics and eventually sound. From the marriage between television and computer a new paradigm was born: ***multimedia***.

The proliferation of multimedia techniques provides various benefits to different types of users. Everyone uses multimedia: clerks in offices, executives, professionals, artists, engineers and researchers in any field. The key point is that *multimedia is not limited to specific applications*, it provides tremendous advantages to all users, improving the overall quality and quantity of human-computer interaction on a global level. In the table below, we present various multimedia applications together with the problems which could arise and which should be handled with care (sources: [2], [3], [7]).

Area	Services	Problems
Medicine	Remote diagnosis and patient supervision; Medical image processing (CT, RMN, ultrasound); Better management;	"transparent patient"; data protection;
Social services	Easier assistance for old and disabled persons, through multimedia contacts;	further isolation for older citizens
Living	Telebanking; Teleshoping; Security	decrease of social contacts;
Entertainment	Interactive games; Video on demand; Virtual reality;	youth-protection; lose of reality; children become dependent;
Education	Modern distance-learning; Individual interactive learning programs; Lifelong learning (cheap and individual); Specialized training at the work place; Access to expensive research techniques;	mistaken contact with the teacher;
Research	Rapid exchange of information and results between researchers;	data protection;
Public administration	Transparent and citizen-friendly administration; Electronic access to services from home;	Integrity;
Traffic	Traffic management systems; Traffic information;	
Trade	Electronic retail "Just in time" Electronic commerce;	The retail can be limited;

Banking/	Networking;	data protection;
Insurance	Online-services;	computer criminality;
	Online-advisory;	
	Teleworking;	security;
Investment	Remote order for expansive technologies;	copyright;
	Decentralization;	
	Rapid exchange of information between departments (marketing, production...);	

Multimedia hardware devices

Multimedia environments transform the human-computer interactions and allow the creation of a new family of products, catalyst for the launching of the second industrial revolution based on information. These products help us to revolutionize, with the introduction of multimedia computing, business, art, science, engineering and manufacturing.

Multimedia hardware products bring important advantages both in terms of improving user productivity and reducing job-related health problems (eye fatigue, headaches and so on). We will briefly present the main functionality of multimedia input/output devices.

An *input device* (also called *input peripheral*) is a device that allows the human operator to input into the system information taken from the environment (sound, image, text and so on). They range from simple input peripherals – keyboard, mouse, microphone – to more sophisticated multimedia devices like CD-ROMs, high-resolution scanners and video cameras, and touch-screen technology (see the paragraphs below).

By contrast, an *output device* is a device that allows the user to output information to the environment. For instance: loudspeakers, display monitors, printers, plotters, digital film recorders, multimedia projectors.

A device that has both input and output functionality is usually called an *input-output device (I/O device)*. The simplest example is the floppy disk drive (FDD) which allows users both to read from and write information to the floppy disk.[6]

Scanners, video cameras and the touch-screen

"In the broad sense of the word, *scanner* denotes a device that is capable of converting printed or filmed data into electronic format" [2]. More than 90% of world's information is still in paper-form which implies severe access constrains (for instance, a Romanian student cannot read books residing in French libraries, unless he travels across Europe to the source, which is in most cases impossible). The solution is to convert this information in a digital format that can be processed by a computer and made accessible through wide area networks, mainly Internet.

Paper scanners read the scanned area and produce an image that can be further processed using the appropriate software. One of the most advanced technologies in the field is *optical character recognition* (OCR), which allows users

to recognize the characters and the words in an image. Depending also on the quality of the initial print, the *hit rate* (the rate of correctly recognized words) of an OCR system may reach up to 95-99%, which still implies the human intervention to correct errors.

Other types of scanners are used to read from 16mm films, 35mm films, fiche, aperture cards, bank checks, credit cards and engineering drawings up to 40 inches wide.

Scanners are very useful when it comes to converting information which is already on paper or film. What about new pictures of our travels, our parties, our family members or our pets? Do we have to follow the same old procedure of snapping the photo, having it developed, and scanning it into the PC using a color scanner? The answer is brought by the more and more affordable technology of *digital cameras*.

Modern digital cameras allow users to record about 36 medium-quality still images on a 2MB memory card that can be then red by a card drive, or allow them to save their images to standard 3.5-inch floppy disk (Sony Mavica-FD5 and Mavica-FD7).

Video cameras have the ability to capture video streams (combination between image and sound) that can be transmitted to a computer *via* interface cables. The basic hardware device that allows the computer to manipulate video data is the *video board*. A low-performance video board can only display the video output on the screen, while a high-performance device supports special effects (mirrors, spins and so on) and exciting applications (computer-generated animation).

The video data recorded by a video camera can be either stored and then processed on the computer, or further transmitted through fast communication lines to obtain very spectacular applications, like video-conferencing and video e-mail. They require, nevertheless, high-resolution video cameras.

The basic "philosophy" of the *touch-screen* technology consists in the fact that it is easier to touch an icon on the screen than to point and click a mouse or strike a few keys on a keyboard, in order to accomplish the same task. Touch-screens are used in the more developed countries as information booths, movie kiosks, bank automatic teller machines and so on[3].

The importance of high-quality display monitors

Multimedia applications require high-quality display monitors which influence both the quality of the designed application and the health condition of the designer. Large high-resolution monitors increase the speed of work with about 33% and decrease reports of eye strain, headaches and neck fatigue with about 66% [2].

Standard 14-inch monitors can display only 24 lines of text, while a paper document generally contains 55 lines. The user is thus forced to scroll the display to read the entire page, which causes eye fatigue. Large monitors (begging from

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[3] More information concerning the touch-screen technology in [2].

19-inch), reduce or even eliminate these risks and allow high-volume document processing.

"*Resolution* can be defined as the ability of the screen to render images in a clear and precise manner" [2]. Images on the display monitors are created by organizing *pixels* (small dots) into various shapes (alphabet letters, figures, geometric shapes and so on). The resolution typically measures the number of dots per inch (dpi) and can range from 30 dpi (low-resolution) to 130 dpi (high-resolution monitors). Compare it with the resolution of a laser printer which starts at 300 dpi and goes up to 1200 dpi and you will understand why a printed page is far easier to read than a document on the screen.

Other characteristics that affect the quality of a display monitor are the total number of pixels on the screen (*pixel count*), the rate at which the screen is repainted to obtain image stability (*refresh rate*), the *scanning mode* (interleaved or noninterleaved), the *brightness*, the *contrast* and the *bandwidth*[4].

Virtual reality

Virtual reality is the combination of various computer devices that enable users to interact with an impressive computer-generated 3D world they can manipulate interactively. It exists for decades in the form of flight simulators used for military purposes.

The goal of VR is to create a natural interface between the user and the computer, interface based on human senses: sight (3D glasses – Eye Phone), hearing (headphone), motion (tracking devices), touch (Data Glove) and even smell (still in the phase of research).

VR systems are still very expansive and consequently used in fields that benefit of large funding, like robot industry, military, and aeronautics (NASA).

Conclusions

Studies have shown that a person is able to recall about 25% of the information he/she hears, whilst 45% of the one he/she sees. When both audio and image are present, we can retain up to 75% of the information. It follows that applications combining multiple media (multimedia systems) are suitable to be used as high-performance learning instruments.

Another reason pleading for the use of multimedia within educational processes is the impact of interactivity on the quality of learning. A multimedia (interactive) lesson on the computer maintains user's attention focused on the information at a higher level than a written lesson.

Multimedia information can be very easily updated, both modified and extended. Through communication networks it can also be worldwide accessible, and so can distance learning become more efficient.

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[4] For further information on monitor characteristics, read [1] and [2].

The use of high-performance multimedia hardware and software leads to high-performance image, sound and video, which can improve our work productivity and quality, no matter what field of activity. ***Multimedia is for us all***.

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DISTRIBUTION PROBLEMS AND THEIR ALGORITHMIC MODELLING

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Abstract. The paper presents characteristics of modern marketing strategies, strongly influenced by the emergence of the Single European Market, with a special focus on distribution and logistic aspects. We propose algorithmic solutions to the most frequent transportation problems that appear within distribution channels. These algorithms are implemented in computer programs that enable the user to obtain easily the desired outcomes.

1. Distribution problems as elements of marketing strategies

International companies are nowadays facing a new market of 370 million consumers: the Single European Market. This extended market represents an opportunity for these companies, but at the same time is a challenge, too, from the perspective of the competition it creates. The existence of a large number of competitive companies, both on the Single European Market and in general, on the world market, generates a large offer of products and services of superior quality, together with an outstanding range of post-selling services. The seemingly unusual competition experienced by these companies requires a higher effort from them in order to remain competitive, but, on the other hand, is to the benefit of the consumers, the level of their demand being higher and higher. The more obvious exigencies of the consumers spring from better information activities and realization of their real needs.

In this very demanding framework that characterizes the current market, international companies need to redefine their strategy according to strong performance criteria. Therefore, in their activity, marketing occupies a crucial place, since their success highly depends on the way the marketing activity is defined and performed.

Marketing, defined as "a human activity directed towards satisfying the needs and desires through the exchange process" [2], needs to be reconsidered of, re-dimensioned and re-positioned within the companies that act in this very competitive environment. The marketing strategy comprises the fundamental lines of marketing activities in order to achieve the marketing objectives on target markets. The marketing strategy consists of marketing-mix - the central element, budget of marketing and its allocation.

The marketing-mix comprises a coherent set of instruments and marketing variables used by the company to achieve the marketing objectives on the target markets. This concept is divided into four groups: product, price, distribution and promotion.

Distribution is an important element of the marketing mix because it conditions an efficient transfer of products from producer to the consumer or the final user. Distribution is the one that brings commodities on the market. The viewpoint adopted in the past by companies, according to which they have completed their duty after the product exited the factory gate, has become, in time, completely out of date. Companies should be very careful regarding the way in which their products enter the target market. Therefore, distribution channels should be approached from a global point of view, starting with production area and ending with the consumption.

The companies present on the Single European Market have approached the distribution activity from a new perspective. While in most cases, 2-3 years ago, the departments of sales and marketing were still organized on a national basis, with distribution directors subordinated to the local marketing manager, now the situation has changed. The standardization of products' lines or the tendency to uniform use of electronic transfer of information, packaging and labeling processes, had a fairly slow evolution. All these processes imply a reduction of distribution costs. Marketing departments deal with the reduction of the total logistic cost (this can lead to an increase from 30% to 40% of the production costs). Small logistic costs will generate high consumer prices. Even though logistic costs are high, the companies could act towards a good organization of the logistic activity so that the latter would transform itself into an instrument of the competition marketing. The objective to attract new customers could be attained by offering services that would save consumers' time.

A new approach of the distribution activity relative to the Single European Market as a unique market gains ground. An example is the case of Benetton, which works with a *single distribution center*, placed in Castrette, Italy. The immense center, nicknamed "Big Charley" has a sufficient number of robots to send the newest Benetton models into every company store from 120 countries in 12 days. In this context, shortest-path solutions (see 2.) become crucial, especially when the distribution network is in continuous transformation.

Commercial logistics is the activity of organizing and controlling the flow of commodities, from the production centers to the selling ones, with a reasonable cost, of professional services offered to the client, under the constraint of keeping up with the term set up in advance (time limit).

Kotler proposes [2] two perspectives on the logistic activity of companies: the "*supply chain*" and the "*demand chain*".

From the *"supply chain"* point of view, the company sees the market exclusively as a receiver. This is the case of a company that produces a certain quantity of products that are sent afterwards to the market. These products are transported, manipulated, stored, and in the end they reach the retail area. The company would be more efficient if it took into primarily consideration the

requirements of the target market (not only the ones regarding product characteristics, but also those related to the place and the way in which products are expected on the market) and defined the supply chain afterwards. This model introduces a modern viewpoint called "logistical systems on the market" that leads to the examination of the supply chain as a "*demand chain*". The model of the "demand chain" increases the productivity; this fact can be revealed by a case study [2] describing a company that produces, for instance, washing machines – such as Whirlpool – in a sufficient number, for each period and destination (distribution centers, retailers, households). Nevertheless, if the demand is not big enough, the company will have high stocking costs.

From the *"demand chain"* perspective, the company will ask the distributors to work only with commodities (washing machines) that exist in their stores. These distributors will transmit periodically, through a computer network, the characteristics and number of products (washing machines) that have been ordered. The firm will define its daily production taking into account the demand "pulled" from the clients' orders (demand pulling). Each washing machine will be produced in a few days and sent directly to the client. This "just-in-time" system reduces to a large extent the storage costs that were generated by incorrect forecasts.

In order for the model of the demand chain to be successful, certain conditions should be met:
- the company should be able to receive the most recent information regarding the orders of the retailers
- the company should be able to produce and send ordered products within a few days (the proposed solution is a modular-phased production, which deals with the characteristics required by consumers only in the end; for instance, 90% of the products could be manufactured in advance, leaving the rest of 10% to be personalized).
- the client can afford to wait for a few days until he / she receives the ordered product.

Logistic operations could be grouped into two large categories: transportation activities and storage activities.

The storage activity is a part of the logistic activity that has an important impact upon the distribution activity of international companies. Firms must deal with the issue of locating the warehouses in a manner which enables the producers to meet any order in the shortest possible time, at a reasonable price, performing the appropriate service to the client.

Within the current market, characterized by a very rich offer proposed by the producers and a still limited demand, the speed attained by products while reaching the target market becomes a crucial advantage in the competition between firms.

Kotler [2] has introduced the term: "turbo-markets" to define the companies that, aiming to obtain a competitive advantage from the speed their products reach the market with, try to reduce the time cycle that is necessary to produce and launch the products on the market. The author applies "turbo-marketing" into four

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areas: innovation, production, logistics and sales. Concerning logistics, the producers have followed the development of swift supplying systems. For example, many producers of clothing, such as Levi Strauss or Benetton, have adopted computerized systems with quick response, which link suppliers, producers, distribution centers and selling points. The information-gathering advantages provided by computer networks and software products designed to satisfy communication demands are outstanding. In this respect, a firm can use its own computer network (usually a local network) or a wide area network, mostly in the case of companies that are extended on a large geographical area.

To conclude, logistics implies planning, implementation and control of the physical tract of materials and products from the production point to consumption areas, at a reasonable cost, of an acceptable service and within a certain limit of time.

Most of the companies define their logistic objectives as follows: *"to offer the perfect product in the perfect market, at the perfect moment, at the smallest cost"*. This goal defines only a side of the firm's activity, since none of the logistic systems can maximize the client service together with the minimization of distribution costs. The improvement of client services implies large stocks (in order to meet any order in the shortest time period), a higher number of transports, a larger number of warehouses, and all these generate high logistic costs. The minimum logistic cost will be attained for a cheap transport, small stocks and a small number of warehouses.

Decisions regarding the logistic activity of a company should take into account all the elements of the logistic system. Therefore, *the starting point consist in the study of the needs and requirements of consumers and the study of the competition offer.* The clients ask to be served in time, the availability of suppliers to meet urgent requests, careful manipulation of the products, the acceptance of suppliers to take back deteriorated products and to offer proper ones in exchange [3].

Certain aspects regarding the logistic activity of a company, especially those related to the transport activity, can be solved automatically by using *computer- implemented algorithms*. In the following paragraph we shall present algorithmic solutions for the most frequent logistical problems, which arise especially within distribution networks that are in continuous transformation – the case of the European market, which expands permanently. Some of the problems we deal with are: finding the shortest path between two geographical points, possibly under the condition of passing through certain intermediate centers, distribution of fluid products (such as oil, gas), timing control of various distribution phases.

2. Algorithmic modelling of some distribution problems

Automatic solving of distribution problems, using computer algorithms, is very important for an efficient approach. We shall further present some of the computer science methods for tackling these problems. The corresponding

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algorithms are transcribed into efficient programs, which run fast, on any type of computer.

2.1. Theoretical notions

Many problems that appear in practice can be solved using techniques offered by *graph theory* [5], a computer science field that offers algorithms for a wide variety of problems that can be modelled with a net of inter-connected nodes (for example, a network of railways or of roads). This is the intuitive representation of a *graph*, which can be rigorously defined as formed by a set of elements named *vertices* or *nodes* connected by *edges*. There exist directed edges, as ordered pairs of vertices and undirected edges – unordered pairs of vertices [1]. In order to specify direct connections between vertices, there are also used the notions of *adjacent vertices* or *vertices that are incident with the common edge*.

If *(i,j)* is an edge, it is also said that *j* is a *successor* of *i* or that *i* is a *predecessor* for *j*. For each vertex *x* there can be defined the set of successor vertices (usually referred as Γx), respectively the predecessor set (usually referred as $\Gamma^{-1}x$).

A succession of adjacent vertices that form distinct edges is a *path* (along the graph). If the initial vertex is the same as the final one, the path becomes a *cycle*.

For example, the network
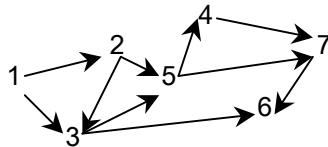
is a directed graph that contains the vertices {1,2,3,4,5,6,7} and the edges {(1,2), (1,3), (2,3), (2,5), (3,5), (3,6), (4,7), (5,4), (5,7), (7,6)}. {5,6} is the set of successors for 3 and {1,2} are its predecessors. In this graph, (1,2,3,5,4,7) is a path and (5,4,7,6,3,5) – a cycle. If the edges were undirected, the graph would also be undirected and each edge (i,j) could be regarded as a double-directed edge: i→j, j→i.

In practice, the necessity of associating values to the edges is very frequent; usually, these values regard distances or certain costs. This process creates *weighted* edges or weighted graphs. Based on the values of direct connections between vertices, there can be computed weights or costs for paths that contain intermediate vertices, as a sum of weights associated to all the edges that form a path.

It can be noticed that various structures of inter-connected elements from every-day life can be modelled using graphs: railway networks, roads, communication networks, etc. Graph theory offers a large variety of algorithms [1] for solving different problems: finding the shortest path between two nodes, testing whether two nodes can be connected directly or by intermediate nodes (*connected*

components or *connected graphs*), determining a spanning graph with the minimum numbers of edges that connects each two vertices (*spanning tree*), etc.

We shall further describe the methods (from the above mentioned ones) which solve the most frequent **distribution problems** that appear within product distribution networks. These computer-assisted solutions are very quick and efficient in solving various transportation problems.

In order to apply specific algorithms, implemented in programming languages, it is very important to represent the network in an adequate form, i. e. a form that enables automatic processing. The most common representations of a graph are:

- *Adjacency matrix* is a matrix that contains, for a graph with *n* vertices, $n \times n$ elements; the *(i,j)* element is *1* if *j* is a successor for *i* and *0* otherwise. For example, the graph from the previous example is represented by the following adjacency matrix:

$$\begin{bmatrix} 0 & 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{bmatrix}$$

It can be noticed that adjacency matrices for undirected graphs are symmetric, i. e. $M(i,j)=M(j,i), \ i,j=1,n$.

- *Adjacency matrix for weighted graphs* substitutes the common adjacency matrix if values representing costs are associated to the edges (weighted edges). Therefore, the *(i,j)* position will contain the weight of the corresponding edge or *0* if that edge does not appear. Applying certain algorithms implies retaining special values on the positions that encode the lack of edges (for example, minimum path algorithms introduce *0* for the *(i,i)* positions and a very big value for the elements where there are no edges).

- *Adjacency lists* retain, for each vertex, its successors. These are memorized within an array *B*, which is controlled by another array *A*, that contains, for each vertex, the index from *B* where the enumeration of its successors begins. If a vertex has no successors, there will be introduced a value based on which no valid positions could be computed in *B*, for example the index of the next element from this array. The end of *A* will be marked by a special value, which reflects the length of *B*. For example, the same graph can be represented using the arrays:
  A=(1,3,5,7,8,10,10,11)
  B=(2,3,3,5,5,6,7,4,7,6).

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2.2. Algorithms for distribution problems

In order to find quick and efficient solutions for distribution problems there must be used *computer algorithms*. We intend to present a few methods that generate automatic solutions for the most common of these problems. In this respect, we shall tackle, from the algorithmic point of view, the following themes related to a *distribution network*, formed by *distribution centers* connected by *distribution channels*:

(1). finding the shortest path (or the path with the minimal cost) between any two centers belonging to the network

(2). determining the shortest path between two centers under the constraint of passing through a list of certain centers (where some products are to be unloaded, before the final destination)

(3). if the goal of the network consists in the distribution of fluid products (hypothetically without losses) using a system of pipes with certain capacities, the problem is to determine the maximum flow (quantity) of fluid which can be transported from an initial center to a destination center, provided that the designed capacity of each pipe bounds above its corresponding flow

(4). implementing a timing control of the distribution activity by studying the moments in time when it is necessary for each stage – of a given duration – to begin or to end, in order to match the final deadline.

We shall further describe the computer science methods for solving the above mentioned problems. Since they all rely on distribution networks, which can be modelled with graphs, we will adopt the *graph theory* algorithms [1] that are suitable for each situation. Obviously, in the graph that models a distribution network vertices correspond to distribution centers and edges – to distribution channels.

The algorithms were implemented in Pascal programming language (Borland Pascal); for each type of problem we shall provide run times for various sets of input data and we shall discuss efficiency aspects. Most of the input data sets that were used to reveal the effect and functionality of the programs are real and cover European distribution networks.

(1). **Finding the shortest path** is a classical problem in graph theory and there are many known algorithms [5], [1] that solve it. These algorithms can be classified in:

- *All-pairs shortest paths algorithms* compute the minimal path between each two vertices, by constructing a solution matrix that retains on each position *(i,j)* the value of the shortest path between nodes *i* and *j*. The programmed algorithm that is further described (Floyd-Warshall algorithm) belongs to this category.

- *Single-source shortest path algorithms* compute the shortest path from one vertex to all the others, for example Dijkstra or Bellman-Kalaba algorithms [5]. Like Floyd-Warshall algorithm, the latter pursues an optimum principle (Bellman's principle) stating that any partial path of a shortest path is also minimal (shortest). Therefore, the value of the shortest path from a vertex *x* to any vertex *y* can be expressed as the minimum from all sums formed by the weights of the edges between *x* and all its successors (let *s* be such a successor) and the weights along the paths connecting a successor *s* with the final vertex *y*. Implementing such an optimum principle into an algorithm can be viewed as applying the programming technique known as *dynamic programming* [4].

Floyd-Warshall algorithm was adopted since it computes simultaneously the shortest paths between each two vertices of a graph. The algorithm is very efficient, with a complexity of n^3, computed as number of performed operations, where *n* is the number of vertices (number of centers in the distribution network). Obviously, the execution time increases with *n* but this growth is polynomial, therefore reasonable even for a big *n*.

The algorithm processes the adjacency matrix with weights (see 2.1), trying to introduce in the path connecting each two vertices *i, j*, a vertex *k*, as predecessor of the last vertex *j*, verifying whether the new path is shorter than the current one. By transforming the initial matrix according to these principles, the shortest path matrix, (containing values for all $i \rightarrow \ldots \rightarrow j$ shortest paths) will be obtained. It can be noticed that an infinite value in the computed matrix signifies the corresponding nodes can not be connected with a path (similar to Warshall algorithm for determining connected components [1]).

In order to reconstruct the shortest paths by finding their nodes, an auxiliary matrix *T* will be used; this matrix will retain, on each position *(i,j)*, *j*'s predecessor in the associated shortest path. Obviously, these values are introduced as the weighted matrix is computed. This method enables the computation of a single shortest path between each two vertices (the most common problem), even if there are more than one minimal paths connecting two nodes. If all shortest paths between two vertices are needed, *backtracking method* [4] can be applied, but it will considerably increase the algorithm complexity and diminish its efficiency.

The program for determining shortest paths within a network, given the weights of the edges, was applied on various sets of data, introduced as text files. We considered distribution centers located in European cities and weights for distribution channels (edges) – equal to distances between the cities connected by direct channels (obviously, other transportation costs may be considered if necessary). Direct distribution channels were introduced pursuing principles of geographical position and other auxiliary principles, such as possible existance of commercial parteners and of target markets. Some of the chosen input data sets were:

a)   n=7. Centers: Paris, Brussels, Amsterdam, London, Milan, Vienna, Berlin.

b)   n=12. Centers: Paris, Luxembourg, Brussels, Amsterdam, London, Milan, Rome, Vienna, Prague, Berlin, Warsaw, Budapest.

c)   n=17. Centers: Lisbon, Madrid, Paris, Luxembourg, Brussels, Amsterdam, London, Milan, Rome, Vienna, Prague, Berlin, Warsaw, Budapest, Bucharest, Belgrade, Sofia.

Run times on a 16MB RAM Pentium (naturally, excluding the time for input and output operations) are presented in the table below (1hs=1 hundreth of second).

Input data set	Run time
a) n=7	<1hs
b) n=12	5hs
c) n=17	5hs

From the results that were obtained on the input networks, we give a few samples:

• the shortest path between Lisbon and Budapest is 2515 km long and passes through: Madrid and Milan.

• the shortest path between London and Sofia is 2544 km long and passes through: Brussels, Vienna and Budapest.

• the shortest path between Brussels and Bucharest is 2205 km long and passes through Vienna.

(2). ***Shortest path between two nodes with the constraint of passing through a list of intermediate nodes*** was determined with *backtracking method*. This method can be applied in order to obtain all solutions composed of n elements chosen from a given list of sets so that they are submitted to certain constraints. The method offers a more efficient solution than the generation of all possible couples of elements followed by a filtration, since it enables a controlled generation of possible solutions. At each step, we try to continue the generation of the current solution by introducing a new element from the set corresponding to its position, so that all elements of that set are tested. If the constructed sequence is a possible solution, the generation continues for the next position (in the sequence). Otherwise, if the attempt to introduce the next element from the corresponding set fails (there is no element in the current set that can lead to a possible solution), we return to the previous position and continue the process. When applied to an optimum problem with constraints, backtracking method enables the memorization of the best solution by comparing each current solution with the best solution obtained so far (as in a common minimum algorithm); in this case also, the controlled generation of possible solutions is more efficient than a global search. But when the inputs have big dimensions (there are many sets, which contain a large number of elements), the execution time increases rapidly and the method becomes inefficient. Nevertheless, backtracking is often applied when all possible solutions of a problem are required (or must be tested in

order to obtain the best solution) and there are no alternative programming techniques available (such as dynamic programming or Branch and Bound method [4]).

If the distribution problem requires passing through all the vertices (and possibly returning to the initial node), the problem reduces to the famous *traveling-salesman problem* [1]. This was thoroughly studied and yet, no polynomial solution was found; its solutions (backtracking or, preferable, Branch and Bound) have an exponential complexity and are therefore inefficient for a large number of nodes. In such cases, characterized by a large dimension of the search space (these features are typical for artificial intelligence problems – for example, a program which would play chess), there are often adopted the so-called *heuristic methods*. These methods always provide a good solution in a short time (a fundamental requirement for most practical problems), even if it is not the best solution. For example, a heuristic solution for the traveling-salesman problem is to choose, in each node, the nearest neighbour for continuing the path (this strategy can be regarded as a Greedy solution [1]). This method does not always generate the best solution but it constructs a good solution in a very small amount of time, having a polynomial complexity ($n(n-1)$).

The algorithm, which applies backtracking method, chooses all the elements from the *{1,…n}* set, corresponding to the indexes of the centers (their names are retained in an array). Due to its concision, the recursive form of backtracking was adopted.

A node can continue the current solution if is a successor for the previous node from the current solution and does not appear before in the current sequence (although this condition does not generate a very efficient backtracking, we have no other choice, since if we also tested whether the current sequence induced a total cost less than equal to the minimum cost obtained so far, we could loose solutions that contain the intermediate nodes but their cost was not a global minimum). An efficient method for testing distinct nodes is to mark those ones that are already chosen and to unmark them if they are extracted from the current solution. When the destination node is reached, we will verify whether the intermediate nodes appear in the solution and retain the configuration only if its total cost is smaller than the best obtained so far.

The Pascal program was executed for the input sets we presented for the previous algorithm, which were extended with lists of *nr* intermediate centers:

a) n=7. The centers in the network are: Paris, Brussels, Amsterdam, London, Milan, Vienna, Berlin.
   Number of intermediate centers nr=1. The intermediate center is Berlin.
   Initial node: London. Final node: Milan.
b) n=7. Centers: Paris, Brussels, Amsterdam, London, Milan, Vienna, Berlin.
   Number of intermediate centers nr=2. Intermediate centers: Milano, Paris.
   Initial node: London. Final node: Vienna.

c) n=12. Centers: Paris, Luxembourg, Brussels, Amsterdam, London, Milan, Rome, Vienna, Prague, Berlin, Warsaw, Budapest.
Number of intermediate centers nr=1. Intermediate center: Rome.
Initial node: London. Final node: Budapest.

d) n=12. Centers: Paris, Luxembourg, Brussels, Amsterdam, London, Milan, Rome, Vienna, Prague, Berlin, Warsaw, Budapest.
Number of intermediate centers nr=2. Intermediate centers: Berlin, Milan.
Initial node: Brussels. Final node: Budapest.

e) n=17. Centers: Lisbon, Madrid, Paris, Luxembourg, Brussels, Amsterdam, London, Milan, Rome, Vienna, Prague, Berlin, Warsaw, Budapest, Bucharest, Belgrade, Sofia.
Number of intermediate centers nr=2. Intermediate centers: Paris, Vienna.
Initial node: Lisbon. Final node: Budapest.

f) n=17. Centers: Lisbon, Madrid, Paris, Luxembourg, Brussels, Amsterdam, London, Milan, Rome, Vienna, Prague, Berlin, Warsaw, Budapest, Bucharest, Belgrade, Sofia.
Number of intermediate centers nr=1. Intermediate center:Vienna.
Initial node: Amsterdam. Final node: Budapest.

Run times on the same type of computer - 16MB RAM Pentium - excluding input and output operations are given below. We used the abbreviations: min = minute, s = second, hs = hundreths of second.

Input data set	Run time
a) n= 7, nr=1	<1hs
b) n= 7, nr=2	<1hs
c) n= 12, nr=1	44hs
d) n= 12, nr=2	1s 43hs
e) n= 17, nr=2	55s 26hs
f) n= 17, nr=1	2min 25s 17hs

It can be noticed that the execution time increases rapidly with the dimension of the network and the length of intermediate lists; the algorithm is much slower than the classical shortest-path one because the generation of all possible solutions increases its complexity.
A few samples of results are given below:

• the shortest path between London and Budapest (in the network with 12 nodes), which passes through one intermediate center (Rome), is 3263 km long and includes the following centers: London, Paris, Milan, Rome, Vienna, Budapest.

• the shortest path between Brussels and Budapest (in the network with 12 nodes), which passes through two intermediate centers (Berlin, Milan), is 1685 km long and includes the following centers: Brussels, Berlin, Vienna, Budapest.

- the shortest path between Lisbon and Budapest (in the network with 17 nodes), which passes through two intermediate centers (Paris, Vienna), is 3328 km long and includes the following centers: Lisbon, Paris, Vienna, Budapest.

(3). **The maximum flow problem** is mathematically defined for a directed graph called *flow network*, which has one source node (without any predecessors), one destination node (without any successors), in which any two nodes can be connected by a path (is a connected graph) and a positive value, named *edge capacity* , is associated to each edge. A flow network supports the transportation of a flow (intuitively, a certain quantity of fluid) from the source node to the destination node, given the following constraints: any flow transported along an edge can not exceed its capacity (flow is bounded by capacity) and the total flow that enters a node (except the initial and final ones) is equal to the total flow that leaves that node (conservation of flow). It can be noticed that a flow network models the distribution of a fluid product through a pipe network with certain capacities. In such a network, the aim is to transport the maximum possible flow from the source node to the destination one.

It can be mathematically proven [5] that, in any flow network, the total flow (sum of flows) from the source is equal to the total flow to the destination (which is intuitively obvious); this value is known as the *total flow*. Moreover, if the set of nodes is divided into two disjunctive sets, so that the initial node belongs to one of them and the final node – to the other (*cut*), then the total flow is at most equal to the sum of capacities along the edges with extremities in the two sets (*capacity of the cut*). When these values are equal, the maximum flow is found (and the minimum capacity cut, also).

Ford-Fulkerson algorithm determines the maximum flow in a flow network using a multi-phased labeling of the nodes; this process pursues to accomplish an increment of the flow, along various paths from the source to the destination, with a value that maintains the upper capacity bound on all edges that form a path. (After reaching the final node, the labels enable the reconstruction of the path along which it was made the attempt to increase the flow and its actual modification.) The algorithm ends when the final node becomes unreachable (in the labeling process); this means that the flow can no longer be increased and its maximum value has been obtained. The last computed values of flow for each edge represent the maximum flow that can be transported along those edges (so that the whole network remains functional).

If the cut whose capacity (minimum cut capacity) equals the maximum flow is also of interest, it can be obtained in the form of the two sets of nodes formed by the labeling process: one with vertices that can still be labeled and the other – with the vertices that can not be labeled any more, starting from the initial node. Intuitively, the flow can still be increased on the edges incident with vertices from the first set, but on the edges that connect vertices from both sets, the flow has already reached the capacity, therefore it can no longer grow. Information regarding the cut can be useful from the practical point of view, since they point out the sections where the flow equals the capacity and the flow can not be

supplemented without causing transportation problems (on these pipes there might appear problems caused by uncontrolled growth of the flow).

The Pascal program which implements Ford-Fulkerson algorithm uses the adjacency-lists representation of the flow network, which facilitates a quick localization of each node's successors. Automatization of labeling processes, of incrementing the flow on adequate paths and of generating the minimal cut involve definitions of special data structures to retain the necessary information and a quite elaborated program sequence.

The program was executed for an input data set that described a natural gas distribution network with Târgu-Mureș as initial node, Cluj-Napoca as final node and 8 indermediate nodes. We used fictive values for capacities, therefore the obtained results do not have practical relevance. On the same hard configuration that was used for the previous programs, the run time was less than one hundreth of second.

(4). *Critical path method* models an activity that requires a rigorous timing of its phases, given the final deadline and the duration of each phase. The method is generally applicable provided that the intermediate timings of a complex activity are of interest; therefore, it can also be applied for controlling distribution activities. A directed graph, named *activity graph* [5], is used to describe the whole activity, since it has to indicate the succession of the phases; its vertices represent events which suggest the achievement of partial goals and the beginning of other phases, whereas the edges which connect the events correspond to the phases of the whole job and are labeled with their durations. Edges that leave a node *x* represent activities which can start only after finishing all the operations marked by the edges that enter *x*. The activity graph has an initial node, without predecessors, which points the beginning of the activity, corresponding to a moment in time considered equal to *0* and a final node, without any successors, which marks the end of the whole activity.

By adding the weights (durations) associated to the edges that form a path, it will be obtained the time necessary to perform all the activities (phases) composing that path. The period of time necessary to execute the whole activity is computed as the maximum length from all possible paths between the initial and final vertices. A path that attains the maximum value contains activities that admit no delays and is named *critical path*. They comprise activities that may affect the deadline of the whole activity unless they are carried out in time (any delay of the activities along the critical path involve a final delay); consequently, these critical activities, which admit no delays (see the explanation below), require a thorough observation. Therefore, determining critical paths and activities is very important in practice, in order to attend the final deadline of a complex job.

For a rigorous study of the activity timing, it will be computed, for each node *x* of the activity graph:

- *the expected term* of the event *x*, that is the term *x* can end at; the value is computed as the maximum length of all paths from the initial node to the current node *x*. For the event *x*, this term ca also be expressed

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recursively, as maximum of the values obtained by adding the expected terms for *x*'s predecessors with the durations associated to the edges that connect them to *x*.

- *the limit term* of the event *x* is the deadline of that event: any delay in its accomplishment will induce a final delay; this value is computed as a subtraction of the maximum length between *x* and the final node from the final deadline. For the event *x*, this term ca also be expressed recursively, as minimum of the values obtained by subtracting the durations of the edges that leave *x* from the limit terms of its successors.

Obviously, for each node, the expected term is less or equal than the limit term. The interval formed by these two values (fluctuation interval) describes the delay that can be accepted for the event. It the two terms are equal, the event is *critical* and admits no delays.

Similar limits can be computed for the edges of the activity graph. *Critical activities* are situated on critical paths, connect two critical events *x*, *y* with the property that *y*'s expected term equals the sum of *x*'s expected term and the duration of the edge between them. For these operations, no delays are admitted, therefore their timing control is very important.

The algorithm implemented in a **Pascal program** uses recursive definitions for expected and limit terms; these values are memorized using two vectors in order to enable the verification whether they were already computed or not. The activity graph was represented using the adjacency matrix (see 2.1), read from a text file. For the final event, the deadline was considered equal to its expected term so that no delays would be admitted.

The program was executed on a data set that models the distribution activity of a firm (see the network below), whose aim is to transport its current, promotional and stock production from the production center to the final destination – the target market.
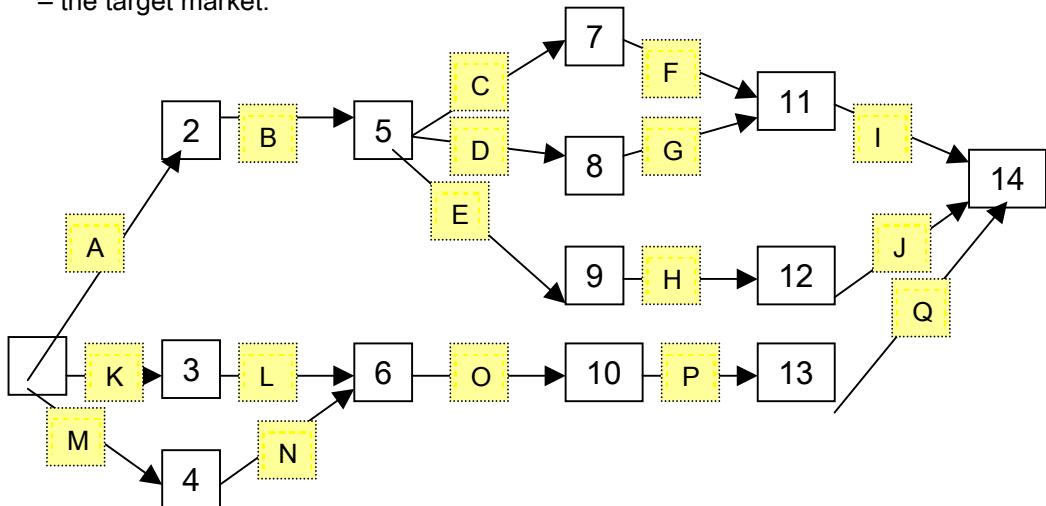
The initial node 1 represents the beginning of the distribution activity; the whole production accedes on the target market when reaching the final node 14. We present below the significance of the letters A,…,Q associated to the edges of the activity graph:

A – Manipulation of current production (duration: 3 hours)
B – Storage of current production (duration: 24 hours)
C – Stocking of a segment S1 from the current production (duration: 48 hours)
D – Railway transportation of a segment S2 from the current production (duration: 8 hours)
E – Intermediate manipulation of a segment S3 from the current production (duration: 2 hours)
F – Loading segment S1 from the current production (duration: 2 hours)
G – Temporary manipulation of segment S2 from the current production (duration: 2 hours)
H – Custom operations performed upon segment S3 from the current production (duration: 2 hours)
I – Transportation (by truck) of segments S1 and S2 (from the current production) towards the final destination (duration: 4 hours)
J – Transportation of segment S3 from the current production towards the final destination (duration: 6 hours)
K – Quality control performed upon promotional production (duration: 1 hour)
L – Packing the promotional production (duration: 3 hours)
M – Temporary storage stock production (duration: 24 de hours)
N – Temporary stocking of stock production (duration: 120 hours)
O – Loading the promotional and stock production (duration: 4 hours)
P – Transportation of promotional and stock production (duration: 8 hours)
Q – Unloading the promotional and stock production (duration: 2 hours).

The results of the program contain expected and limit terms for the events associated to the nodes of the activity graph, critical events and critical activities. We reproduce the output file of the program, in its original form.

```
************************************************************************
*        Event            * Expected term *  Limit term  * State *
************************************************************************
*          Beginning *            0.00  *       0.00  *Critical*
* Current prod: end manipulation *     3.00  *      80.00  *     *
* Promo prod:end quality control *     1.00  *     141.00  *     *
*      Stock prod: end storage *      24.00  *      24.00  *Critical*
*      Current prod: end storage *    27.00  *     104.00  *     *
* Promo&stock:end pack.-stocking *  144.00  *     144.00  *Critical*
*    Current prod: end stocking S1 *   75.00  *     152.00  *     *
*    Current prod: end rail tr. S2 *   35.00  *     152.00  *     *
*    Current prod: end manip. S3 *    29.00  *     150.00  *     *
*     Promo&stock prod:end loading *   48.00  *     148.00  *Critical*
* Current prod: end load&manip. *    77.00  *     154.00  *     *
*    Current prod: end custom S3 *    31.00  *     152.00  *     *
*    Promo&stock:end transport. *   156.00  *     156.00  *Critical*
*Target market – end transport. *   158.00  *     158.00  *Critical*
************************************************************************
```

Critical activities are:
Beginning-->Stock prod: end storage
Stock prod: end storage-->Promo&stock:end pack.-stocking
Promo&stock:end pack.-stocking-->Promo&stock prod:end loading
Promo&stock prod:end loading-->Promo&stock:end transport.
Promo&stock:end transport.-->Target market – end transport.

These critical activities form the critical path, which is represented in the graphical representation introduced above by the sequence of nodes (events): 1,4,6,10,13,14.
Run time was less than one hundreth of second (on the same 16 MB RAM Pentium).

3. Conclusions

The appearance of the Single European Market induced various adjustments to classical marketing strategies. Since markets and firms are continuously expanding, it is obvious that distribution networks are evolving as well; this process imposes the reevaluation of practical solutions for transportation and distribution problems. The present paper describes computer programmed solutions for problems that arise frequently in distribution networks; their execution will provide the desired result in a short time. If the network configuration modifies, only the input sets of data will have to be readjusted, since the programs are generally valid for the types of problems they deal with.

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V. BOOK REVIEWS

L'intégration régionale des espaces,
sous la direction de Fred Celimene et Claude Lacour, Economica, Paris, 1997.

Cet ouvrage représente une nouvelle et importante contribution de l'ASRDLF (l'Association de Science Régionale de Langue Française) dans les cadre des sciences régionales. Une vraie "école" de sciences régionales, l'ASRDLF ajoute un nouveau titre à toute une série des ouvrages parus depuis trente années sous la signature des professeurs de notoriété des universités de préstige: Montréal, Paris, Bruxelles ou Genève. A coté de F.Célimène et C. Lacour, d'autre auteurs ont rendu leur contribution à la naissance de cet ouvrage: C. Baumont, J.Perreur, J.M. Huriot, G. Gaudard, D.Jordan, H. Capron, G. Santi, M. Goze, Ch. De Boissieu, J. Hellier, M. Peyrefitte, O.Heddebaut, G. Joignaux, J.B. Layan, Y. Lung, S. Négassi.

L'ouvrage soumet au débat une question devenue cruciale dans l'environement économique internationale d'aujourd'hui. Il s'agit de savoir si les processus d'internationalisation de la production, des échanges et des mouvements de capitaux et le renforcement des union économique à l'echelle continentale, vont ou non atténuer les disparités de croissance et les écarts de développement entre les régions constitutives (entendues ici comme des ensembles territoriaux significatifs à l'echelle infra-nationale). Par leurs reflexions sur la convergence des ensembles régionaux, les auteurs vont montrer que les bénéfices de la monaie unique pour les régions de l'Union Européenne seront dépendants de l'intensité et de l'éfficacité des politiques correctrices qui seront mises en oeuvre par les Etats membres et par la Communauté elle-même. L'utilisation d'une seule unite monétaire au niveau de l'Union Européenne va avoir incontestablement des effets positifs en supprimant les surcouts liés à la couverture des risque de change, en facilitant les arbitrages financiers et en fluidisant les échanges. Mais dans le même temps elle va mener à la concentration accrue des ressources et des capitaux vers les régions les plus développées. C'est pour cela que la question des politique régionales concertées UE - Etats - Régions reste encore en actualité.

L'ouvrage, précédé d'une Introduction générale, s'articule en quatre parties comportant chacune trois ou quatre chapitres.

La **première partie insiste sur le** *renouvellement d'un débat classique.* C.Lacour et F. Célimène commencent par nous montrer les *éléments d'une théorie de l'intégration régionale des espaces* (chap.I). Parmi les nombreuses définitions de l'intégration, les auteurs usent d'une image très parlante: "l'intégration économique peut être comparée à un système d'écluses, qui facilite la circulation, fait converger les niveaux tout en freinant des flux qui, laissés à leur propre force, pourraient se révéler dévastateurs, d'ou le thème de la convergence/divergence comme base du débat sur l'intégration économique en Europe". Ils présentent ensuite cinq composantes essentielles de l'intégration régionale des espaces: la recherche de nouvelles centralités et d'un nouvel esprit communautaire, s'appuyant sur une cohésion importante, une coopération

priviligiée et une capacité d'adaptation permanente. Ces éléments expliquent la genèse des trois principales formes d'intégration: l'intégration par fusio/absortion, l'intégration par la coordination des stratégies globales et enfin une forme paradoxale mais juste qui serait l'intégration par la résistance à l'intégration.

Dans le deuxième chapitre C.Baumont dédie son étude à la *croissance endogène des régions.* Elle rappelle la problématique originaire de Romer (1986) et des modèles subséquents et souligne que les facteurs explicatifs de ces modèles: externalités d'agglomération, information, comunication, équipements publics d'infrastructure, ont souvent une dimension spatiale implicite. Elle avance alors l'idée d'un "capital spatial" et propose une explication de la croissance du produit à partir de la croissance de trois types de capital: le capital physique, le capital humain, et le capital spatial, et de leur acumulation dynamique.

La première partie s'achève par l'etude de J.M Huriot et J. Perreur sur "*Centre et peripherie: fondaments et critères*" (chap. III). Après la présentation des propriétés de la centralité, les auteurs propose une définition et une mésure des phénomenes de centralité caracterisée à la fois par des attributs d'atractivité (centralité- A) et de diffusion (centralité - D).

La **deuxième partie** aborde le problème des *échelles de l'intégration régionale, du mondial au local.* Une première étude, due aux auteurs G. Gaudard et D. Jordan, met l'accent sur *l'espace mondial face à la deuxième vague des unions régionales* (chap. IV). On verra récapitulées les caractéristiques de quelques vingt unions régionales conclues entre 1951 et 1994 en insistant sur la CEE, l'UEM, l'AELE et l'ALENA. Les auteurs soulignes combient le régionalisme de la période actuelle est devenu systémique et ouvrent quelques pistes de reflexion pour l'avenir.

Le chapitre V est axé sur *la dynamique de croissance des régions en Europe* par l'étude de H. Capron qui distingue, en ce qui concerne la convergence dans l'UE, un effet intra-pays et inter-pays en partant de la mésure économetrique de la convergence.

G. Santi étudie sur le cas de la France les résultats du processus d'intégration économique nationale à travers les *mécanismes de solidarité financière* (prélevements fiscaux supportés par les régions et dépenses de transfert dont elles bénéficient) montrant en définitive combien les régions riches paient pour les régions pauvres (chap.VI).

Dans le chapitre VII M. Goze étudie les phénomènes d'intégration non plus régionale mais urbaine à l'echelle de la métropolisation à travers ce qu'il appelle "*les relectures stratégiques de la décentralisation*".

La **troisième partie** aborde la question de *l'intégration monétaire et financière*. Elle commence par une mise au point sur *la problématique de la monnaie unique* par C. de Boissieu (chap. VIII). L'auteur présente tant les avantages de l'Euro:diminution des couts de transaction, élimination du risque de change dans le commerce intra-européen, accélération de la concurence, que les défis: empêcher l'emergence d'une Europe à plusieurs vitesses, coordonner les politiques budgétaires et fiscales, choisir entre l'approfondissement et l'élargissement, renforcer l'union politique.

Ce même thème de l'union monétaire est abordé d'une point de vue plus théorique par J. Hellier. A partir d'un ancien modèle de Mundell (1961) l'auteur montre comment peuvent s'opérer les ajustements dans une union monétaire, assimilée à un jeu de Nash entre *n* pays (chap. IX).

Deux études plus appliquées achèvent cette troisième partie. L.Guihéry analyse avec pertinence les transferts financières nés de la réunification allemande et les évolutions institutionnelles qui l'ont accompagnée

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(chap. X). M. Peyrefitte enfin, analyse les logiques d'intégration sur le cas des régions françaises dans le cadre de la procedure des contracts de Plan Etat-Régions (chap. XI).

La **dernière partie** de l'ouvrage, *l'intégration sectorielle,* débute par le cas des *grandes infrastructures de transport en Europe,* étudié par O. Heddebaut et G. Joignaux (chap. XII).

Une autre secteur sensible de l'intégration économique des régions est l'industrie automobile, analysé par J.B. Layan et Y. Lung (chap. XIII). En partant d'une vision mondiale, les auteurs soulignent l'envolée espagnole et la constitution d'un pole ibérique, l'intégration du Mexique au pole Nord-Américain et bien sur, l'intégration des régions de la zone Asie - Pacifique.

Le dernier chapitre de l'ouvrage aborde le problème de *l'intégration régionale par les investissements - le cas de l'Asie*, traité par S. Négassi (chap. XIV). Un modèle, élaboré et testé avec l'aide de P. Balestra, fait apparaitre, sur le cas des investissements directs du Japon à l'étranger depuis trente ans, le role prépondérant du taux de change entre yen et dollar et l'abondance des liquidités disponibles dans la sphère financière au Japon, ce qui est une des constantes structurelles de l'economie nippone.

"L'intégration des espaces régionale" est un ouvrage trés bien reçu par le milieu académique et très utile, tant pour les étudiantes, que pour spécialistes impliqués dans le processus de la prise des décisions publiques. Un livre qui fait une analyse pertinente du processus actuel de restructuration des espaces locaux, nationaux et mondiaux, un livre qui nous invite à reflechir aux nouveaux institutions locales, nationales et supranationales necessaires à accompagner ce processus.

MARIUS SUCIU

George Cristian Maior*, diplomé au Ministère des Affaires Etrangères,* **"Concepts de droit public européen"**, Bucarest, 1997, 298 pages.

L`auteur traite de l`apparition et de l`évolution de l`idée d`ordre public européen, en axant son analyse sur la Convention Européenne des droits de l`homme comme possible matérialisation de cet ordre. Il montre comment, dans la litterature de spécialite occidentale, il y a trois façons d`aborder le procéssus d`intégration européenne: le courant fédéraliste, qui véhicule des concepts tels que "Les Etats Unis d`Europe", "L`Europe fédérale" etc., l`Etat étant dans cette vision une composante d`une structure européenne de type fédéral; le courant intergouvernemental, l`Etat étant conçu comme moteur et sujet du procéssus intégrationniste; enfin, le courant fonctionnaliste (pragmatique), qui voit l`intégration par étapes, en tenant compte des rapports de force et d`intérêts dominants. Toutes ces manières d`aborder ce problème manquent plus ou moins de réalisme, le procéssus qui a lieu en Europe, unique et original, ne se laissant encadré dans aucune d`elles.

La Convention Européenne des Droits de l`Homme est, à l`origine, un traité de droit international public conclu sous l`égide d`une organisation intergouvernementale, le Conseil de l`Europe. Pourtant, elle marque

l`interférance entre la sphère du conventionnel et celle de la constitutionnalité, ayant par son contenu et ses éffets une nature d`acte normatif basé sur des transferts de compétences de la part des Etats. La Convention crée ainsi un ordre juridique objectif - spécifique pour les actes normatifs -, dont le fondement n`est pas la réciprocité et l`obligation envers le partenaire mais l`obligation envers les individus. En même temps cet ordre est *reel*, *fonctionnel*, en assurant des mécanismes éfficaces de protection des droits individuels. Il serait pourtant erroné de croire - et l`auteur nous attire l`attention en ce sens - que le système instauré est de type fédéral, la Cour de Strasbourg ne pouvant pas censurer et contrôler les décisions des tribunaux nationaux (d`ailleurs elle ne peut non plus contrôler la façon dont les Etats respectent ses décisions).

L`idéologie de la Convention est le constitutionnalisme libéral, chose naturelle du moment que tous les Etats membres ont ce fondement idéologique. La Convention transpose la rhétorique de la démocratie et des droits de l`homme sur le plan de la normativité internationale; elle crée un système de contrôle sur le respect, par les Etats, des obligations assumées: pour la première fois l`individu - et non seulement l`Etat - peut s`adresser directement a une juridiction internationale (ou supranationale), pour la prèmiere fois une juridiction internationale a une compétence obligatoire et prononce des décisions obligatoires pour les Etats. L`auteur met en lumière le fait que, de cet façon, on a réalisé une brèche dans la conception de droit international public, conception basée sur la coopération entre des Etats souverains comme seuls sujets de droit. Or, par le biais de la Convention, l`individu devient lui-aussi sujet du droit international. Le livre offre des arguments convaincants en faveur de la constitution d`un ordre public

européen: le fait que l`individu est placé par la Convention au centre de son système; le fait que l`idéologie libérale est transposée sur le plan du droit; la création d`une structure législative. Les auteurs de la Convention ont essayé de réaliser un équilibre entre la conception nationale-basée sur l`idée de souveraineté-et la conception européenne-axée sur l`individu-, équilibre refleté dans ses stipulations: en faveur des Etats on a institué le principe de la subsidiarité, la protection de l`individu étant realisée tout d`abord au niveau national; d`ailleurs, on ne peut pas saisir les organismes européens sans avoir préalablement épuise les mécanismes nationaux; les Etats ont la possibilité de restreindre les droits protegés par la Convention, en vue de la protection des objectifs considérés supérieurs (l`ordre public, la securité nationale, la santé et la moralité publiques), de même qu`ils ont la possibilité de suspendre l`application de la Convention en cas de danger qui ménace la vie de la nation; la Convention a prévu aussi la possibilité d`y adhérer avec des réserves. En faveur de l`individu elle a institué les mécanismes de protection dont on a fait

mention plus haut; puis, ni les limitations ni la suspension ne peuvent concerner des droits considérés essentiels pour l`individu, elles étant d`ailleurs contrôlées par les organes de la Convention; enfin, les Etats ne peuvent pas formuler des réserves à caractère général. Ainsi, l`antagonisme classique entre le droit international public et le droit constitutionnel, entre l`ordre national et l`ordre international, tend à s`atténuer: commence à se structurer un ordre européen de type supranational au sein du Conseil de l`Europe, son garant étant cette fois-ci une juridiction et non plus les Etats.

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