

Economic Growth , Innovation, Cultural Diversity

*What are we all talking about?
A critical survey of the state-of-the-art*

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KNOW – Knowledge, Technology, Human Capital

*'I do not want my house to be walled in on all sides and my windows to be stuffed.
I want the cultures of all the lands to be blown about my house as freely as possible.
But I refuse to be blown off my feet by any.'*
Mahatma Gandhi

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Economic Growth, Innovation, Cultural Diversity

What are we all talking about?

A critical survey of the state-of-the-art

The special issue on *Economic Growth and Innovation in Multicultural Environments (ENGIME)* collects a selection of papers presented at the multidisciplinary workshops organised by the ENGIME Network.

The ENGIME workshops address the complex relationships between economic growth, innovation and diversity, in the attempt to define the conditions (policy, institutional, regulatory) under which European diversities can promote innovation and economic growth.

This paper addresses the need to adopt common definitions in a sort of cross-disciplinary brainstorming.

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Further information is available at www.feem.it/engine.

Workshops

- **Mapping Diversity**
Leuven, May 16-17, 2002
- **Communication across cultures in multicultural cities**
The Hague, November 7-8, 2002
- **Social dynamics and conflicts in multicultural cities**
Milan, March 20-21, 2003
- **Governance and policies in multicultural cities**
Rome, July 2003
- **Trust and social capital in multicultural cities**
Athens, November 2003
- **Diversity as a source of growth**
Milan, April 2004

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INTRODUCTION

The EU can be thought of as the biggest laboratory of intercultural collaboration of today's world (Hofstede, 1991). In 1994 the Killilea report of the European Parliament (1994, explanatory statement par. 6) said that an '*estimated 40 million Community citizens speak a language other than the nine official European Community languages and the two national languages, Irish and Letzeburgesch. This represents one person in eight. In addition, 12 million people descended from immigrants speak a non-European language*'. Since then, accession of Austria, Sweden and Finland in 1995 brought in new languages and cultures.

The process of enlargement and the immigration from outside EU will further increase the degree of diversity, while EU institutions are being formed and profound structural changes, such as the process of globalisation and the evolution of a knowledge-based economy, are taking place.

ENGIME intends to provide to European researchers an interdisciplinary forum that studies the complex relationships between economic growth and innovation and cultural diversity.

ENGIME is constructed around a pattern of workshops addressing the 'complex symbiotic relationship' that Jacobs (1969, p 224) suggests to be at the core of the creative dynamic of the urban economies. Each workshop is multidisciplinary, and involves five dimensions of research: historical, cultural, economic, sociological and political. Many disciplines are represented in the proposing consortium and will represent a catalyst for research carried out outside the consortium.

***What are we all talking about?* addresses the need to adopt common definitions in a sort of cross-disciplinary brainstorming.**

The objective is to obtain an instrument of reference that researchers, professionals, or simply amateurs can consult in order to obtain exhaustive definitions and thoughts on the vast questions related to **culture, economic growth and innovation**. We do not intend here to explain and decorticate the multiple relationships between these concepts but to create a cross-disciplinary base where the research can start from. In this sense, *What are we all talking about?* is not intended to be a document complete in itself, but rather as a working tool for the Network.

The selection of the Key-Words

The reasons for selecting *Development* and *Culture* are straightforward since they represent the key-issues of the network. *Innovation* and *Conflict* represent the positive and negative side of diversity at work. The existence of *Communication* across different cultures determines whether increasing diversity would result in more *conflict* or, on the contrary, more *innovation*. *Institution*, *Social capital*, *Trust* and *Governance* are four key concepts for communities to restore communication across cultures. *Globalisation* is a current process that is leading to more and more contacts across cultures, and cannot be overlooked in this Network.

We are striving to provide a multidisciplinary rather than a specialised tool to enable disciplines to speak to each other. The exercise was not without problems. In fact, some interesting lessons can be drawn from the difficulties we faced in this preliminary phase of ENGIME.

- We faced the problem of being too specialised and concentrated on one aspect of the concept, for example, growth can be interpreted widely in economics terms but will leave out some interesting sociological aspects.

- Some words are not explicitly dealt with some disciplines and finding their significance requires therefore an extra effort.
- The need to include different section within each definition became obvious as some aspects of the definition needed to be ‘treated apart’ or further explained in the purpose of clarity.
- The order of the concepts also became very important as we realised that the interconnection between the definitions meant we had to be careful not to be repetitive.
- The importance of involving different disciplines in the process of this glossary, apart from the obvious aspect of creating a multidisciplinary tool, stems also from the constructive critical side of this exercise, and hopefully reaching a rather exhaustive, accurate and entertaining analysis.

The patterns of workshops in ENGIME

Cultural diversity entails costs and benefits. On the cost side, a common culture and a common language allows individual to interact (and trade) more easily: a contract need not be translated if two individuals speak the same language. Moreover, often, cultural diversity may lead to cultural shocks and conflicts. On the benefit side, skills and knowledge are often culture-specific: Individuals with different cultural backgrounds have different skills, expertise and experiences. If these are relevant to each other, cultural diversity creates an environment in which the gains from complementarities can be significant, provided that there exists enough communication across individuals.

Cities offer a natural laboratory for analysing diversity at work. *Cities* are the places where costs (for example in the form cultural and racial conflicts) and benefits (for example in the form of cross-cultural knowledge spillovers that foster the processes of innovation and assign to cities a central role in the process of economic growth) of diversity show up. Whether benefits or costs prevail will depend on the degree of cross-cultural communication and cross-cultural complementarities.

Based on this framework, six themes have been selected by ENGIME partners to be covered in the workshops. The six themes have been widely discussed among ENGIME partners and we believe they allow covering in an efficient manner the issues at stake. However, interaction among partners and with policy world will be used, if needed, to redefine on the final topics and their sequencing during the network’s lifetime.

The six themes define a pattern of workshops around the ‘complex symbiotic relationship’ that Jacobs (1969, p. 224) suggests to be at the core of the creative dynamic of the urban economies.

Workshops will cover the following themes. Workshop 1 (WKS1) *Mapping and measuring diversity* studies where Europe and its cities stand in terms of cultural diversity and how this is reflected in social-economic structures. WKS2 *Communication* studies the form of communication. WKS4 (*Conflict*) studies the *costs* of breaking *communication* down in terms of social exclusion. WKS5 (*Trust and social capital*) studies trust and social capital and how *communication* may be restored or reinforced. WKS7 (*Governance*) studies the forms of governance that help to minimise costs and maximise benefits of cultural diversity. WKS6 *City as source of growth* studies knowledge spillovers, a possible way of realising the potential benefits of cultural diversity once *communication* is restored.

1. DEVELOPMENT AND GROWTH

1.1 Definition

Economic development refers to the growth process of the production of goods and services given a certain population. Following Perroux (1961), scholars often distinguish between the concepts of ‘growth’, ‘development’ and even ‘economic advancement’.

‘*Growth*’ usually means simple increase in production, ‘*development*’ implies underlying structural change as well; and ‘*economic advancement*’ adds the idea of broader social and cultural transformation or change. Over time, two closely related strands of research have emerged in economics: theories of growth have their focus on advanced countries, while theories of development focus on issue that are more closely related to developing countries¹.

Traditionally, theories of growth are specifically oriented to advanced countries and ignore key features of developing countries. Often, they have the tendency to dismiss ideas and concepts originating in the development field, which are often presented as non-rigorous. However, some of these concepts are now at the centre of more recent theories of growth such as endogenous growth theories (concepts such as externalities, increasing returns and other non-convexities)².

1.2 Measuring growth and development

Economic growth is traditionally measured in terms of output per capita. Several measures of output exist: the most common is the Gross Domestic Product (GDP) In non technical terms, GDP is equivalent to the value of the production in one year in a country, net of intermediate consumption. Alternative measures are Gross National Product, where remittance of emigrants are also taken into account, and Gross Value Added, which include indirect and import taxes. The differences between all these measures are relatively small and not relevant for the purpose of ENGIME. GDP growth rates of developed countries are averaging at around 1.5% per annum.

GDP is a synthetic, clear and understandable measure of a country’s output and it is the most common measure of growth. However, it leaves aside several issues that are of interest when comparing across countries.

Broader measures of development have therefore been constructed, taking into account not only pure output, but also factors such as life expectancy, educational attainment. For example, the Human Development Index is an index produced by the United Nations Development Programme and covering 162 countries. It is a broader—and more controversial—measure of well-being than GDP per head. The HDI combines three indicators of welfare: life expectancy, GDP per head and educational attainment. In 2000, Norway overtook Canada for first place whereas Sierra Leone remained firmly at the bottom.

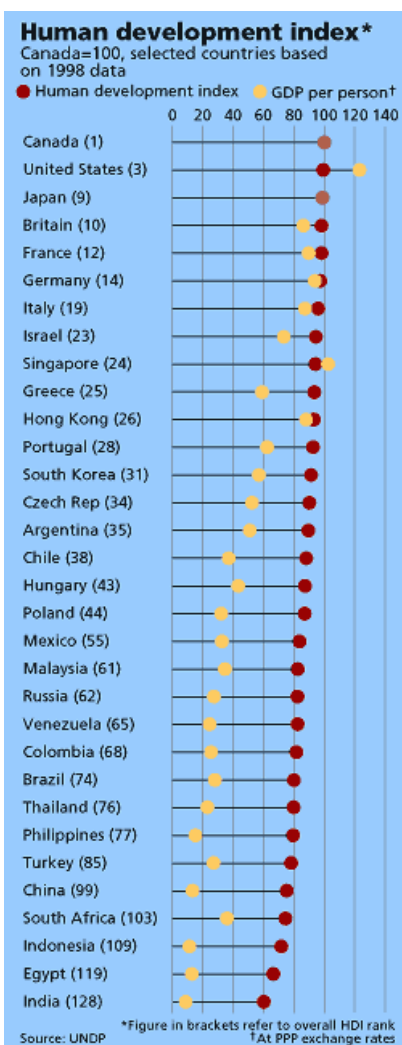
In general, higher GDP corresponds to higher HDI and vice-versa: richer countries have higher rankings on HDI than poorer ones. Several countries, however, are ranked in surprisingly different places on the HDI than on a conventional ranking by GDP per head. Canada, for instance, comes top of the HDI in 1998 (see Chart 1.1 below). However, on the basis of 1998

¹ See also Key-Word 1 Section 4 *Theories of Development*.

² See Key-Word 1 Section 3 *Theories of growth*.

figures for GDP per head, it ranks ninth. Britain ranks tenth on the HDI—above France and Germany. Its GDP per head, however, is lower³.

Chart 1.1: Human Development index



1.3 Theories of growth

Theory of growth is a research strand in economic that tries to explain and model economic growth, measured by output growth. Theories of growth generally focus on advanced countries.

Output growth can be explained in terms of two straightforward causes: either there are more workers or each worker produces more (assuming the number of hours worked per worker does not change). In modern economies, per capita GDP growth rates are mostly determined by increases in productivity (output per worker) rates rather than by increases in the labour force.

³ The Economist, September 26th 2001.

In turn, productivity growth might come about through three channels:

- 1) increase in the quantity of capital available to each worker (through investment in physical capital);
- 2) increase in the quality of work due to better education and improved skills in the workforce (through investment in human capital);
- 3) technical progress, i.e. increase in the quality of capital (through investment in knowledge capital).

The identification of the role played by each of these factors constitutes the main interest in the analysis of growth.

Smith (1776) stated that production growth was based on a 'virtuous circle': the more production is increasing and has increased in the past, the more it will increase in the future. Growth of production allows an enlargement of markets and firm sizes which itself leads to an increase in productivity. These ideas were developed later by other economists: for example, Kaldor (1957) and Arrow (1962) analysed the increase in labour productivity enhanced by production or investment within the firm.

According to Marx (1844) growth was driven by technical progress, endogenously determined by economic and social structure of a country. Schumpeter (1947) developed a model where technical progress is the basis of economic development. Technical progress itself was driven by innovations.

After WWII, the theory of economic growth was dominated by models extending conditions that guarantee full employment in the short run (Keynesian analysis), to the long run. In particular, Harrod (1939) defines a growth rate of 'equilibrium' between supply and demand in his model. This equilibrium growth rate is 'warranted' and determined by the propensity to save and the share of capital (K) in total output (GDP), i.e. K / GDP .

In the 1950's, *neo-classical growth models* have criticised Harrod's model for two aspects:

- the assumptions that the propensity to save, the ratio capital-output (K/GDP) and the one of capital-labour (K/L) are constant and known;
- the lack of microeconomic foundations or microeconomic justifications to the main hypotheses of the model (in particular to the assumption of a known real wage in presence of unemployment).

The main characteristic of *neo-classical growth models* is the assumption that market mechanisms, based on the flexibility of relative prices, guarantee growth in conditions of full employment. Solow (1956) has done seminal work in this class of model. Solow's model is characterised by constant returns to scale and perfect competition. In Solow's model growth comes through investment: in each period individuals decide how to allocate their income to consumption or investment. Investment in this period increases the capital available in the next period, implying higher income per capita and therefore growth. The crucial point is that returns to capital are diminishing: successive increments of capital bring about smaller and smaller increments of production, an assumption needed to solve the model in conditions of perfect competition. The assumption of diminishing returns to capital implies a zero steady-state long-term growth of income per capita. In order to explain *endless growth*, a stylised fact about actual economies, neo-classical models need to assume the existence of *exogenous* technological progress that moves outward the frontier of production. Without technological progress, the long term growth would be nil.

The first model to endogenise technological progress is Arrow (1962). In this model, labour productivity growth rate of a representative firm depends on the level of current and past investment made by the firm itself (learning by doing) as well as the level of investment made by other firms (because of the nature of 'knowledge' as a public good). The final result of the Arrow model is that the growth rate of per capita production is an increasing function of the population growth rate. This result is not fully satisfying because if the population was stable, per capita production growth rate would be zero.

In the 1980's, *the 'new' endogenous growth models* tried to endogenise the sustained accumulation of factors including human and knowledge capital. They pay particular attention to the micro-foundations of the accumulation process, i.e. to the private and social costs and benefits of investing in physical capital (capital goods), human capital (education, skills) or knowledge capital (technological progress).

The different strands of endogenous growth theories fall within two branches: the first, initiated by Lucas (1988), stressing the importance of accumulation of human capital, and the second, initiated by Romer (1986), emphasising the importance of sustained innovation.

In order to be able to save the perfect competition characteristics of Solow's model and explain endless growth, they introduce a gap between private and social costs and benefits:

- In Lucas's type of model the private effort of individuals to improve their own skills also improve the productivity of other workers;
- In Romer's type of models, the private efforts of firms to innovate and gain a temporary monopolistic rent, also increases the stock of public knowledge;

ie, private returns to investment are diminishing (consistently with standard economic assumptions), but social returns are not and growth can be sustained endlessly. The gap between private and social costs and benefits also implies that market allocation may not be optimal, allowing for the possibility of policy intervention: policies that favour investment in RandD and education are shown to influence permanently the economic growth rate.

As a consequence, ideas and concepts originating in the development field (such as the existence of spillovers effects and increasing returns, the attention to education), which were often presented as non-rigorous are experiencing a new interest in growth theory.

1.4 Theories of development

While theories of growth have their focus on advanced countries, theories of development focus on issues that are more relevant to developing countries.

In economic history 'development' and 'growth' have almost the same (measurable) meaning: self-sustained increase of per-capita output. This definition is not different from the one used in economic theory. This coincidence of meanings is likely to be due to the low starting levels of material output in pre-industrial societies. Despite the convergence in its quantitative definition, the term development involves a broader range of issues than growth and no agreement has been reached on its explanation and drivers.

Several explanations of development have been put forward in the literature. They are briefly summarised below.

Theories and historical analysis of the process are increasingly oriented toward non-material factors ('intangibles') (Cipolla, 1980). Explanations of the so called 'residual factor' are not satisfactory and there are many explanations about causes of one among its key component:

technological development. Recent theories have underlined the concept of '*technological creativity*' (Mokyr, 1990), strictly bounded to social and cultural factors.

Theory of economic development has elaborated the concept of '*creative reaction of history*', but the 'father' of this idea, Schumpeter, has translated it into a narrow sense, as an entrepreneurial activity of innovation (Schumpeter, 1947; Scherer, 1984). On the other hand, Cipolla expresses 'creative reaction of history' in terms of spiritual and cultural atmosphere of a certain period and in a certain society (trust/distrust toward future, material creativity, attitude towards innovation, etc.): in one word, culture in its anthropological meaning.

The latter is being used by an economist and historian of Japanese economic transformation, Morishima, in a very different context from the Western-European one. The Japanese case of economic development, as an exception to the western civilisation rule, has induced Morishima to speak about the primary causes of the process (Morishima, 1982). Culture of the traditional society and its reset to the needs of modern economic development has been consequently underlined.

Some authors start from questions such as 'Why has Eurasia overtaken Africa and America in the run to development?' (Diamond, 1997); 'Why, has Western Eurasia overtaken the Eastern part?' (Jones, 1981). What are the roots of a development oriented culture in remote times, owing to *environmental and ecological factors*?

From Max Weber (Weber, 1958) onwards, the originality of *European urbanisation process* has been proposed as a possible answer to the second question: Medieval towns had in Europe a progressive role in terms of cultural milieu, political institutions and economic organisation (co-operating and 'horizontal' society).

The American institutionalist school focuses on the importance of the '*rules of game*', such as property rights, protection by law of innovations, social redistribution of risks, etc. (North, Thomas, 1973; North, 1990).

In general, sociology and historiography have traditionally given a great importance to religious beliefs, as a key area of culture affecting inclination towards economic development. Catholic culture was considered less suitable than Protestantism. The leading entrepreneurs of the industrial revolution in Great Britain were recruited from non-conformist religious sects within Protestantism (Payne, 1978).

Rostow (1960) analyses national cases of economic growth and industrialisation and develops a chronological taxonomy that classifies countries according to their '*stages of economic development*': first comers, second comers, late joiners, countries on path of development, backward countries. The study of development mechanisms in second comers or late joiners countries, has produced the concept of 'catching up': pursuants run faster than first comers or second comers.

The analysis of national cases, within their state borders, has been criticised by Pollard, who describes the historical development and his diffusion as a regional process (Pollard, 1981). Nowadays, Rostow's theory has been discredited: it is unable to explain how one country can pass from one stage to the next, and its pattern suggests the idea of universality-that every country, sooner or later, will pass through each stage).

Contrasting with Rostow's theory is the Pollard's concept of '*contemporaneity differential*': in history, unusual events (such as world wars, railways construction) may equalise countries that had previously been characterised by different levels of development. This concept is useful in studying links between developed and underdeveloped countries, demonstrated by the effect of the world-wide spreading of consumption pattern, or international migration patterns in the

functioning of labour markets. Emigration can often function as a short cut along a development path full of obstacles.

More recently, 'alternative' approaches to development have stressed the idea that no single path to 'development' can be assumed for all societies. Those approaches focus on the distinction between *growth* and *development*. *Growth* is essentially an economic concept based on 'classical' assumptions such as:

- the existence of an '*homo oeconomicus*' maximising his profits and minimising his costs;
- the likelihood of a society in which reaching richness and welfare is an objective *per se*;
- the use of a single indicator – GDP or GNP per capita – as *the* measure of 'development';
- the use of the concept itself of 'standard of living', in which a non-economic idea (the well-being) is transferred to the field of economic values ("well-endowed").

On the contrary, *development* is considered, by these 'alternative' views, as a *whole*, in which economic factors exist side by side with a concern for social, cultural, ecological, political aspects of life. More precisely, the Dag Hammarskjöld Foundation (1975) stated that five are the pillars of this new concept: the need for the satisfaction of *basic needs*; the need for *self-reliance*; the need for *eco-development*; the need for an *endogenous development*; the need for *structural changes*.

Basic needs are of two different types: material (food, shelter, health and so on); and immaterial (identity, freedom, for example): both are crucial in defining a 'whole' concept of development.

Self-reliance approach refers to the need for one people to be autonomous in the practices of development, by first avoiding the risks of too much dependence on external inputs.

Eco-development represents a practice and an attempt to put together the right to survival of people in different world contexts (*synchronic solidarity*) and the right of the future generations to live in a healthy planet, and to have equal chances to develop their societies, hopefully in an ecological way (*diachronic solidarity*).

Endogenous development is a consequence of the self-reliance approach, in that the primary impulse to develop arises from the very core itself of the community, or society, and no external input is required for this process (or, at least, no input generating dependence).

Last but not least, *structural changes* are needed where the political, economic and social framework of society does not correspond to people's desire of equitable development.

In this view, we cannot speak of *development* only in terms of *economic development*, but we have to encompass several aspects of man's life, from economic security to health, from a good environment to the right to express political opinions, to the possibility of self-determination in choosing the main priorities of life. Hettne (1990) in his fundamental work, stated that development is a process and development studies are in search of new territories of research; but today there seems to be a general agreement about the need to enrich this concept.

And yet, the very concept of 'growth' did not cease to be re-worked out again and was used by historians and economists alike. Recently, they moved their attention from the notion of 'self-sustained growth' (Landes, 1969; Arndt, 1987; Rist, 1996) to that of 'sustainable growth'. This seems necessary every time that 'development' (economic, human, ecological) also involves 'growth'. Sustainability means the capacity of one complex system to persist in the long run, to reproduce itself and, if necessary, to grow without undermining the very properties of factors which have made it a functioning system. Sustainability has two interdependent specifications:

- A physical one (energy and, generally speaking, natural resources);
- An organisational one (problem-solving institutions).

Sustainability or collapse follows from the success or failure of problem-solving institutions. The capacity of institutions to solve problems changes over time, suggesting that a science of problem-solving, and thus a science of sustainability, must be historical.

Complexity is a primary problem-solving strategy, which is often successful in the short-term, but cumulatively may become detrimental to sustainability. Historical case studies (e.g. Roman Empire, Byzantine Empire, Europe since medieval times) illustrate different outcomes to long-term development of complexity in problem solving. These cases clarify future options for contemporary societies: collapse, simplification (the strategy adopted by the Byzantine Empire and, during last decades, by many American firms, where simplification of management and elimination of costs contributed to competition and recovery), or increasing complexity based on increasing energy subsidies (Tainter, 2000).

Wolfgang Sachs (1992) and his colleagues developed *a counter-history of development* from the point of view of critical approaches from the South and of heterodox approaches in the West (or North). Their work is important in *stating the right to different paths to 'development'* for different peoples and cultures on the planet and, generally speaking, *the right to diversity and non-conformist views about life*. For advanced countries, this implies the necessity of a non-ethnocentric approach towards others' experiences. This work is also very important for its intellectual effort to re-examine the 'traditional' dictionary of the development debate, ranging from Help to Environment, from Needs to Planning, to Progress.

1.5 Economic development and multicultural environments

How can diversity affect the economy?

On the one hand, a common culture and a common language allow individuals to interact (and trade) more easily: a contract need not be translated if two individuals speak the same language. Moreover, cultural diversity may often lead to cultural shocks and conflicts. In this case, diversity imposes *costs* to the economy.

On the other hand, skills and knowledge are often culture-specific: individuals with different cultural backgrounds have different skills, expertise and experiences. If these are relevant to each other, cultural diversity creates an environment where the gains from complementarities can be significant (provided that there exists enough communication across individuals). This is relevant in the context of the endogenous growth theories: endogenous growth theories view externalities (and particularly externalities associated with knowledge spillovers) as the 'engines of growth' (Romer, 1986; Lucas, 1988). To the extent that diversity positively affects knowledge spillovers and innovation, diversity can be read as 'engine of growth' itself (see Key-Word 3 *Communication*). In this case, diversity implies some *benefits* for the economy.

History suggests interesting examples of the latter. In pre-industrial Europe, the first moves towards capitalism in the 17th and 18th centuries are associated with religious diversities and conflicts. *Religious tolerance* goes hand in hand with an open society, favourably disposed towards *new ideas and innovation*. This relation is proved by the experiences of countries that have achieved success in their economic condition: Holland, England, Sweden and the French region of Switzerland (Geneva). On the contrary, *crisis and slackness in business are related to actions of ethnic and religious intolerance*, such as the banishment of economically enterprising and well skilled social groups. Historical paradigms of this negative relation are well known:

banishment of 'Moriscos' in Spain after 1609; expulsion of Jews from Iberian peninsula after the end of 15th century; and of the Huguenots from France during the 16th and the 17th centuries.

Between the end of the 19th century and the First World War, the great migration of Jewish people from the intolerant Eastern Europe (Russia) to the tolerant United States is another example of the connection between economic development and acceptance of ethno-cultural diversity, as well as between backwardness and refusal of a multicultural social environment.

Some economists have tried to explicitly factor diversity into economic models. Those models may lead to opposite results, depending on the nature of cross-cultural communication and complementarities assumed.

Lazear (1995) assumes that a common culture and a common language facilitate trade between individuals and shows that minorities have incentives to become assimilated and to learn the majority language so that they have a larger pool of potential trading partners. Multiculturalism is a *bad*. In this model, individuals do not properly internalise the social value of assimilation. They ignore the benefits that others receive when they learn the majority language and become assimilated. In the absence of strong offsetting effects, policies that encourage multiculturalism reduce the amount of trade and have adverse welfare consequences.

Lazear (1999) defines the global firm as a team whose members come from different cultures or countries. Combining workers who have different cultures, legal systems and languages imposes costs on the firm that would not exist with a homogeneous staff: translation costs and costs of transacting across borders are examples of these costs. However, *complementarities* between the workers, in terms of disjoint and relevant skills, offset the costs of cross-cultural dealing and justify the existence of global firms. The search for best practices is an example of how firms may gain from multicultural teams. Here, multiculturalism is a *good*. A necessary assumption is that *communication costs* between individuals from different cultures are low. O'Reilly et al (1997) adds the possibility of cultural conflicts. Results are different: diversity creates conflict so that any creativity gains are more than offset by those associated with the conflict itself.

Lazear (1995), Lazear (1999) and O'Reilly et al (1997) highlight important keywords in modelling cultural diversity, such as *communication*, *complementarities*, *conflicts*, and associate costs and benefits.

Discussion in Key-Word 3 *Communication*, Key-Word 7 *Conflict* further discuss the role of diversity in fostering or hampering growth and development.

References

- Aghion P., Howitt P., (1998), *Endogenous Growth Theory*, The MIT Press.
- Arndt H.W., (1987), *Economic Development. The History of an Idea*, The University of Chicago Press, London.
- Arrow K.J., (1962), *Economic Welfare and the Allocation of Resources for Invention*, in Nelson, R.R. ed., *The Rate and Direction of Inventive Activity*, Princeton University Press, Princeton.
- Barro R.J., Sala-i-Martin X., (1995), *Economic Growth*, McGraw-Hill, Cambridge, MA.
- Becker G., (1991), *Treatise on the Family*, Harvard University Press, Cambridge MA.
- Cipolla C., (1980), *Storia economica dell'Europa pre-industriale*, Il Mulino, Bologna.

- Cohen W.M., Levinthal D.A., (1989), Innovation and Learning, the Two Faces of R&D. *The Economic Journal*, 99, pp. 569-596.
- Cole H.L., Mailath G.J., Postlewaite A., (1992), Social Norms, Saving Behaviour and Growth, *Journal of Political Economy*, Vol 100 n 6, pp. 1092-1125.
- Dag Hammarskjöld Foundation, (1975), *What Now. Another Development*, Development Dialogue 1/2, (tr. it. Torino 1990).
- Diamond J., (1997), *Guns, Germs, and Steel. The Fates of Human Society*, New York-London, W.W. Norton and C.
- Eaton J.,Gutierrez E., Kortum S., (1998), European Technology Policy. *Economic Policy*, pp. 404-438.
- Harrod R F., (1939), An Essay in Dynamic Theory, *Economic Journal*, 49 (June), pp. 14-33.
- Hettne B. (1990), *Development Theories and the Three Worlds*, Longman, Harlow (tr. it. Roma/Torino 1996).
- Hofstede G., (1991), *Cultures and Organizations: Software of the Mind.*, UK: McGraw-Hill Book Co, UK.
- Jones E.L., (1981), *The European Miracle*, Cambridge University Press, Cambridge, MA.
- Landes D.S., (1969), *The Unbound Prometheus*, Cambridge University Press.
- Landes D. S., (1999), *The Wealth and Poverty of Nations*, WW. Norton and Company Inc.
- Lazear E .P., (1995), *Culture and Language*, NBER Working Paper 5249.
- Lazear E. P., (1999), Globalisation and the Market for Team-Mates, *The Economic Journal*, 109, C15-C40.
- Lucas R., (1988), On the Mechanics of Economic Development, *Journal of Monetary Economics*, 1988, pp. 223-42.
- Marx K., (1844), *Das Kapital*.
- Mokyr J., (1990), *The Lever of Riches. Technological Creativity and Economic Progress*, Oxford University Press, New York.
- Morishima M., (1982), *Why Has Japan Succeeded?*, Cambridge University Press, Cambridge, MA.
- North D.C., Thomas R.P., (1973), *The Rise of Western World*, Cambridge University Press, Cambridge, MA.
- North D.C., (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge, MA.
- O'Reilly C.A. III, Williams K.Y., Barsade S, (1997), *Demography and Group Performance: Does Diversity Help?* Research Paper n 1426, Graduate School of Business, Stanford University.
- Payne P.L., (1978), *Impresa industriale e management in Gran Bretagna, 1760-1971*, Italian Translation from *The Cambridge History of Europe, volume VII: The Industrial Economies: Capital, Labour, and Enterprises*, Cambridge University Press, Cambridge, MA.
- Perroux F., (1961), *De l'économie du XXe siècle*, PUF, Paris.

- Pollard S., (1981), *Peaceful Conquest. The Industrialization of Europe, 1760-1970*, Oxford University Press, Oxford.
- Porter M.E., (1998), *The Competitive Advantage of Nations*, The Macmillan Press Ltd., UK.
- Rist G., (1996), *Le développement. Histoire d'une croyance occidentale*, Presses de la Fondation Nationale des Sciences Politiques, Paris.
- Romer P., (1986), Increasing Returns and Long-Run Growth, *Journal of Political Economy*, 94, pp. 1002-1037.
- Rostow W.W., (1960), *The Stages of Economic Growth*, Cambridge University Press, Cambridge.
- Sachs W. (1992), *The Development Dictionary*, Zed Books, London (tr. it. Torino 1998).
- Scherer F.M., (1984), *Innovation and Growth: Schumpeterian Perspectives*, MIT Press, Cambridge, MA.
- Schumpeter J.A., (1947), *The Creative Response in Economic History*, in *The Journal of Economic History*, VII.
- Solow R., (1956), A Contribution to the Theory of Economic Growth, *Quarterly Journal of Economics*, 94, pp. 65-94.
- Spence M., (1984), Cost Reduction, Competition and Industry Performance. *Econometrica* 52(1):101-121.
- Sutton J., (1998), *Technology and Market Structure*, The MIT Press, Cambridge, MA.
- Tainter J.A., (2000), *Problem Solving: Complexity, History, Sustainability*, in *Population and Environment*, 22 (1), pp. 3-41.
- Weber M., Martindale D., Neuwirth G., eds., (1958), *The City*, Free Press, New York-London.

2. INNOVATION

2.1 Definition

Innovation is commonly understood as the act of bringing a new product into the market or the alteration of what is there such that it constitutes a novelty. ⁴Innovation is part of the process through which technological change affects the productivity and the living standards of different societies.

In economics the study of innovation began seriously with the work of Josef Schumpeter who distinguished three steps in the process of technological change: invention, innovation and diffusion⁵.

He was thereby drawing a distinction between the first enunciation of an idea or ‘change of the intellectual climate’(Wiener, 1993), its invention and the development of such an idea into a marketable product, innovation. These first two steps are sometimes referred to as the process of Research and development (R&D).

It is often criticised that economic models of the research and development process are founded on a linear model which assumes that scientists do research and technologists then take over the development of innovations. This linear view of the R&D process fails to capture the possibility that the process of innovation is a complex one in which the experience arising from the development stage of a product may itself feed back into new inventions.

Certainly economic theories of research and development are more suited to the analysis of the process of innovation and usually ignore the question under which circumstances inventions are more likely to appear⁶. There is also a large economic literature on the diffusion of innovations which we will not delve into here.

The discussion on innovation in the sections below builds up to the discussion of a recent economic literature that links growth and cities. Two themes emerge as important in this literature:

- the factors that affect the level of investment in innovation and
- the importance of knowledge spillovers in facilitating innovation.

We will look at these themes in the following sections.

2.2 Measuring innovation

Given the importance of innovation an understanding of the rates of technological change is imperative. Specifically we would like to know not only how the rate of technological change is developing over time, but also how different industrial structures and institutional factors affect this rate.

To answer such questions economists have attempted to measure both innovative outputs and flows of knowledge, emanating from the innovation process, to outsiders. The importance of such ‘spillovers’ in economic theories of innovation, is discussed in the following section. Here I briefly discuss the evidence we have about the level and the impact of knowledge spillovers.

⁴ Cf. The Oxford English Dictionary

⁵ Compare the more extensive discussion in Jaffe et al. (2000).

⁶ The circumstances favourable to *invention* are discussed by Wiener (1993)

The measurement of technological change

As Grilliches (1990) argues we have few good measures of the “underlying” rate of technological and scientific progress and are therefore bound to rely on proxy measures to understand something about technological change.

The effort of firms or countries in undertaking innovation is usually measured through the resources devoted to Research and Development (R&D). However this provides only a measure of inputs to innovation. In order to understand how technology changes over time we would need measures of the output of the R&D process. Good measures of technological output, that would provide answers to questions about the pace of long run technological change, have remained elusive.

Economists have repeatedly tried to use patent statistics to develop measures of technological output. These efforts provide a good example of the kinds of problems that afflict efforts to develop measures of the rate of technological change.

Patents are issued for technological innovations and protect their owners against imitation for a specific period. Each patent provides information not only about the innovation covered but also about its relationship to previous patents and other scientific publications. As Hall et al. (2001) point out patent statistics therefore provide a rich record of innovative activity and have received a commensurate amount of attention from economists.

Unfortunately⁷ many innovations are never patented, for instance because the innovating persons or firms rely on secrecy to protect their ideas. Patents therefore do not provide a complete record of innovative activity. Other measures of innovative activity such as R&D expenditure at the firm level are similarly partial (Pattel and Pavitt 1995).

As Grilliches (1990) points out the first attempts to utilize patents in economics were based on the assumption that they would provide a record of innovative output. However it was soon realized that the number of patents granted depends strongly on the level of employment at the granting patent office. Therefore simple time series of patent counts are not a very reliable measure even of research effort.

It has also been shown that the economic “value” of individual patents varies tremendously. It has been argued that therefore variations in simple patent counts would provide no information about the rate of technological change even if the above cited problems did not exist (Trajtenberg 1990). This argument is challenged by those who argue that even failed research programs constitute important new knowledge (Pattel and Pavitt 1995). For instance a failed research program may clarify which research avenues are unlikely to be profitable and thereby narrow down the number of approaches left to investigate. Such counterarguments show how complex a process the creation of new knowledge is.

To the extent to which we are interested in the sum total of existing knowledge, that can be turned into productive innovations, the measurement of the “value” of innovations embodied in a patent will matter. This can be achieved by making use of the number of citations a patent receives. Trajtenberg (1990) provides an interesting example of the possibilities and limitations of this approach. He shows that in a specific field (computer tomography) a measure of citation weighted patents can capture quite well the distribution of values associated with patenting in that field. However in order to establish this fact he needed an additional measure of technological output to validate his method. Without further validation in other fields and at other times the exact value of citation weights is difficult to establish (Hall et al. 2001).

⁷ This is unfortunate from a measurement perspective mainly.

Capturing the ‘value’ of the measured innovative output is also a problem that afflicts other measures of innovative output such as the counts of innovations announced in trade journals as used by Feldman and Audretsch (1999).

The efforts of economists to measure the rate of technological change are meeting with increasing success. However comprehensive measures that would enable us to answer the types of questions set out at the beginning of this section seem a long way off as yet.

The measurement of spillovers

As will be argued below spillovers of knowledge assume an important place in economic theories of innovation. We therefore review briefly the insights that empirical research provides into their level and effects.

Using amongst other evidence, studies of patent citations, economists have established that:

- significant spillovers of knowledge between firms arise;
- spillovers are geographically localized;

Measuring spillovers directly is almost impossible, given the nature of knowledge. An overview over the different attempts to establish the extent of spillovers and their effects is provided by Griliches (1995). His survey shows that the literature provides evidence for quite substantial levels of spillovers.

An example for this is the work by Jaffe (1986) who exploits citation patterns in patent statistics to establish how knowledge spills over between firms. The same source is used by Jaffe et al. (1993) to establish whether spillovers are geographically localized. They find evidence of this, although they also show that this effect weakens over time. This latter aspect of spillovers will be important in the discussion of theories of innovation and growth in cities.

2.3 The economic theory of innovation

The empirical concern with the pace of technological change has been mirrored by a theoretical focus on the processes that underpin technological change in a capitalist economy. Economists have used formal models and descriptive theories to argue about the evolution of whole industries affected by innovation as well as the incentives to innovate at the firm level. The discussion here focuses once again on the more general question of the pace of technological change and then turns to a discussion of spillovers and their effects.

Determinants of the pace of technological change

Ever since Schumpeter first pointed out the importance of technological innovation economists have argued about the importance of ‘competition’ in inducing innovation. Schumpeter suggested that much of the concern about the degree of ‘static’ competition in a market (also referred to as market structure) as measured by the degree of concentration in the market was misplaced. He argued that monopoly rents are essential if firms are to undertake the inherently risky activity of investing in new technologies.

Modern economic theories of innovation have shown the relationship between innovation and the degree of market power to be a highly complex one (Scherer 1992). It is by no means clear under which market structure the incentives for firms to innovate are strongest, only that they are likely to be weakest under perfect competition.

Furthermore it seems clear that market structure itself is at least partly determined by forces, such as the degree of technological opportunity, that also affect the pace of technological advance. As Dasgupta and Stiglitz (1980) show this means that attempts to affect the pace of innovation through the regulation of competition (where the latter is not directed at abuse of market power) are unlikely to be met with much success.

The importance of spillovers for technological change

While Schumpeter's arguments have given rise to much subsequent work the terms in which he develops his case are conceptually vague as Scherer (1992) argues. Subsequent theoretical work on innovation has made much progress in this area. Specifically the analysis of the nature of new knowledge arising from innovation has emerged as an important focus of economic theorising in this field. Initially it was argued that knowledge emanating from the innovations of others has the properties of a public good; that is once produced it can be consumed/used by many simultaneously without this impinging on the value of use for any individual user (non-rivalry) and it is not possible to exclude others from making such use of new knowledge (non-excludability). This view of knowledge created through innovation is often attributed to Arrow (1962).

The impossibility of excluding others from making some use of the knowledge created in the process of innovation suggests that this knowledge somehow travels from the innovator to other potential users; the knowledge is said to 'spill-over'. As Arrow (1962) shows the existence of such spillovers dampens the incentives to invest in innovation as some of its benefits are now appropriated by others than the initial innovator. This suggests that the return to innovation as perceived by any individual innovator and society as a whole will diverge. Underinvestment in innovation is the consequence.

The patent system is an institutional attempt to remedy this problem by giving innovators a monopoly over their innovations, such that any rival users of their innovation are essentially excluded from using it without the permission of the patent owner. The patent system is rarely perfect, but it goes some of the way to restoring the incentive to innovate.

As Spence (1984) points out, it would be a mistake to conclude that the reduction of spillovers is necessarily the right way to deal with the disincentives to undertake R&D which spillovers give rise to. He shows that where firms undertake complementary R&D, spillovers have important benefits for an industry as a whole. The increased incentives to do R&D at the firm level, that reducing spillovers gives rise to, often do not make up for the increased costs of innovation at the industry level, that arise because firms no longer share innovations.

This is a very important point as it underlines the dual nature of spillovers: as reducing incentives to innovate and simultaneously increasing the productivity of the research process as a whole. Empirical studies of high technology industries have shown that firms understand this point very well and sometimes actively encourage spillovers (Cockburn and Henderson 1998).

The 'public good' view of new knowledge has also been challenged as ignoring the importance of investments in R&D that actually give rise to the ability to absorb knowledge. As Cohen and Levinthal (1989) show innovative activity has the benefit, not only of increasing the stock of existing knowledge in a given firm, but also of enabling the firms' innovators to make use of the innovations of others. Without their own expertise these innovators would remain unable to make use of information spillovers.

This discussion of spillovers suggests that some level of spillovers is beneficial to innovative activity. It also suggests one reason why firms are likely to undertake less innovative activity than society might like.

The discussion also indicates that conclusions about the benefits of spillovers depend crucially on how innovation proceeds. Spence (1984) assumed that firms are undertaking research projects that are complementary. Although this is often likely to be true it is by no means necessary. Economic theory has little to say about how the degree of overlap between firms' research interests develops over time. This would seem to be an important area for further investigation as the discussion in the following section will show.

2.4 Innovation and cities

There is a new and growing literature on the connection between the agglomeration of industries and people in cities and the growth of industries. Before turning to this literature we start with the theories of endogenous growth which is the basis of this latest literature.

Theories of 'endogenous' growth

The literature on 'growth and cities' is based on models of 'endogenous growth' as pioneered by Lucas (1988) and Romer (1990). This last literature has itself been extensively criticized recently and this has implications for the work on cities based thereupon. The authors of the 'new' growth models emphasize the importance of spillovers for the growth process. Their models generate growth through feedback equations that suppose that the rate of growth of new ideas/human capital in an economy is directly proportional to the existing stock of knowledge in such an economy. One can tell a story that suggests that the greater is the stock of existing knowledge the more possibilities for generating new knowledge are available.

Although these models generate endogenous growth, their results are very sensitive to the exact formulation of the feedback rule as is pointed out by Solow (2000). This rule describes how existing knowledge gives rise to new knowledge. Furthermore it is open to question whether the implications of the new growth models stand up to empirical scrutiny. A good discussion of this recent literature is provided by Dowrick (2002).

These rather critical remarks concerning endogenous growth theory are not meant to suggest that spillovers of technology do not matter for growth. They just show that the models we use to understand growth are not yet sufficiently well specified to really clarify how spillovers affect the growth rate of an economy.

Cities and growth of industries

As discussed above it has been shown that spillovers of knowledge are generally geographically localized (Jaffe et al. 1993). This suggests that cities may have an important role to play as locations at which knowledge spillovers are particularly likely to occur.

The new literature on the nexus between the growth of industries and agglomeration of industries is based on the premise that this is so. It has raised some interesting issues:

Glaeser et al. (1992) raise the question whether cities with a diversified industrial base are likely to grow faster than cities in which industries of one type are concentrated. The distinction is drawn between spillovers that arise within the same industry (also referred to as MAR⁸ spillovers) and spillovers that arise between firms in different industries (also referred to as Jacobs⁹ spillovers). If the latter are more important then diversified cities should grow faster.

⁸ MAR are Marshall, Arrow and Romer

⁹ This refers to the work of Jane Jacobs, Jacobs (1969)

This literature may be linked to the question of complementarities between the research efforts undertaken by differing firms as discussed above. One way to read the work by Glaeser et al. (1992) is as a suggestion that complementary research is more likely to arise in diverse cities. This does beg the question whether there can be too much diversity leading to unrelated innovation and no gain from spillovers.

The evidence brought to bear on these questions by Glaeser et al. (1992) cannot provide answers to them. Their data is rather coarse and open to a number of different interpretations as they themselves admit.

A more recent paper by Feldman and Audretsch (1999) seems to provide better evidence in favour of the view that diversity leads to more productive spillovers.

The work by Feldman and Audretsch (1999) raises the interesting question as to how likely it is that firms with complementary research interests locate in the same city, i.e. how likely beneficial diversity is. Their work suggests that the location choices of firms are influenced by the presence of innovators in complementary industries.

The most detailed evidence on all of these questions to date has been amassed by Henderson (2001). He has constructed a panel data set of individual plants across the United States that allows him to test the above ideas in great detail. His results suggest that:

MAR spillovers are strong and matter particularly for high technology industries. He also finds that these spillovers are highly localized, which reinforces the evidence we have to date.

Jacobs spillovers, that arise from diversity, are weak or non-existent.

This rather negative finding regarding Jacobs spillovers is not the end of the story however. Duranton and Puga (2001) have developed a hypothesis according to which new products are overwhelmingly developed in diversified cities. Once such products are shown to work the firms that created these migrate to specialized cities where firms take advantage of MAR spillovers. The findings reported by Henderson (2001) would then seem to apply predominantly to plants that have been established for longer and have already migrated.

Duranton and Puga (2001) provide some evidence from France for the veracity of their hypothesis. They also discuss further evidence from other work that would seem to support their view. Their main point however is that both diversified and specialized cities are necessary for this process to operate well. The diversified cities then operate as nurseries.

References

Arrow K. J., (1962), *Economic Welfare and the Allocation of Resources for Invention*, in Nelson, R. R., editor, *The Rate and Direction of Inventive Activity*, Princeton University Press, Princeton.

Cockburn I. M., Henderson R., (1998), Absorptive Capacity, Coauthoring Behaviour and the Organization of Research in Drug Discovery, *The Journal of Industrial Economics*, XLVI(2), pp. 157-182.

Cohen W. M., Levinthal D. A., (1989), Innovation and Learning: The Two Faces of R&D, *The Economic Journal*, 99, pp. 569-596.

- Dasgupta P., Stiglitz, J., (1980), Industrial Structure and the Nature of Innovative Activity, *The Economic Journal*, 90(358), pp. 266-293.
- Dowrick S., (2002), *Investing in the Knowledge Economy: Implications for Australian Economic Growth*, Australian National University.
- Duranton G., Puga D. (2001), Nursery Cities: Urban Diversity, Process Innovation, and the Life Cycle of Products, *American Economic Review*, 91(5), pp. 1454-1477.
- Feldman M.P., Audretsch D.B., (1999), Innovation in Cities: Science Based Diversity, Specialization and Localized Competition, *European Economic Review*, 43, pp. 409-429.
- Glaeser E. L., Kallal H. D., Scheinkman J. A., Shleifer A., (1992), Growth in Cities, *Journal of Political Economy*, 100(6), pp. 1126-1152.
- Grilliches Z., (1990), Patent Statistics as Economic Indicators: A Survey, *Journal of Economic Literature*, XXVIII, pp. 1661-1707.
- Grilliches Z., (1995), *R&D and Productivity: Econometric Results and Measurement Issues*, in Stoneman, P., editor, *Handbook of the Economics of Innovation and Technological Change*, Blackwell, chapter 3, pp. 52-89.
- Hall B. H., Jaffe A. B., Trajtenberg M., (2001), *The NBER Patent Citations File: Lessons, Insights and Methodological Tools*. NBER Working Paper No. 8498.
- Henderson V., (2001), *Marshall's Scale Economies*. NBER Working Paper 7358, Jacobs J., (1969), *The Economy of Cities*, Random House, New York.
- Jacobs J., (1969), *The Economy of Cities*, Random House, New York.
- Jaffe A. B., (1986), Technological Opportunity and Spillovers of R&D: Evidence from Firms' Patents, Profits and Market Value, *American Economic Review*, 76(5), pp. 984-1001.
- Jaffe A. B., Trajtenberg, M., Henderson R., (1993), Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations, *Quarterly journal of Economics*, pp. 577-598.
- Jaffe A. B., Newell R. G., Stavins R. N., (2000), *Technological Change and the Environment*. NBER Working Paper 7970.
- Lucas R. E., (1988), On the Mechanisms of Economic Development, *Journal of Monetary Economics*, 22:3-42.
- Pattel P., Pavitt K., (1995), *Patterns of Technological Activity: Their Measurement and Interpretation*, in Stoneman, P., editor, *Handbook of the Economics of Innovation and Technological Change*, Blackwell, chapter 2, pp. 14-51.
- Romer P. M., (1990), Endogenous Technological Change, *Journal of Political Economy*, 98(S71-102).
- Scherer F. M., (1992), Schumpeter and Plausible Capitalism, *Journal of Economic Literature*, XXX:1416-1433.
- Solow R. M., (2000), *Growth Theory, An Exposition*, Oxford University Press.
- Spence M., (1984), Cost Reduction, Competition, and Industry Performance, *Econometrica*, 52(1), pp. 101-121.
- Trajtenberg M., (1990), A Penny for Your Quotes: Patent Citations and the Value of Innovations, *RAND Journal of Economics*, 21(1), pp. 172-187.
- Wiener N., (1993), *Invention*, The MIT Press, Cambridge, Massachusetts and London, England.

3. CULTURE

3.1 Definition

The oldest definition of the term '*culture*' referred to the cultivation of soil or the raising of some plant or animal. In the Age of Enlightenment, the word was used figuratively and referred to the work of someone who improves his mind by reading. Another meaning appeared in the 19th century in Germany. This new meaning came from the work of the philosopher Herder. According to Herder, every culture is distinguished by its 'Volkgeist', its original inspiration. In this sense, 'culture' is formed by the major collective and distinctive features of a people.

The concept of culture was further developed mainly by Anglo-Saxon sociologists or anthropologists, who were influenced by the German tradition. In 1922, Malinowski developed the idea that arts, faith, rites and techniques of a society form a coherent set, and that this set tends to evolve very slowly. Malinowski studied the Trobriand society and demonstrated that their ideas on reproduction and their beliefs concerning death correspond with each other and form a logical set. During the 1930s, Ruth Benedict and Margaret Mead investigated how culture is embodied in the individuals by means of education. The kind of fieldwork in exotic cultures relativised the so-called superiority of western civilisation, which had allowed them to hold in contempt all non western cultures.

Today, two different meanings of the term are most in use.

The first of these, 'the training, development and refinement of mind, tastes and manners' – as quoted in the Oxford English Dictionary – had already begun to take precedence over the old Latin meaning by the 1950s.

The second, whose common usage has increased since the 19th century, chiefly owes its popularity to the sciences of sociology and anthropology and is best explained by Edward Tylor's famous definition of 1871, in which he describes culture as 'that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society' (Tylor, 1994). This definition was resolutely opposed to that of racist theories (in which biological factors were perceived as the cause of the variety of ways and customs) and to the evolutionist theories in which every people or country is placed on a scale ranging from savagery to high civilisation). Tyler positively states that culture is acquired and not inborn. He insists (in opposition to evolutionist theories) on the fact that any community, whatever its shape, has a genuine culture.

In the first instance thus culture is perceived as a universal value, generally ascribed to the realms of cultural production such as music or art or to the scientific field, and frequently defined in opposition to the lack thereof. Matthew Arnold (1925) wrote that to have culture is to 'know the best that has been said and thought in the world'. Today, this concept is more often termed 'high culture' to indicate the artistic and cultural expressions valued by a given society's elite, and as such frequently opposed to popular culture.

Tylor's definition, on the other hand, while still describing culture as a single entity, by focusing on the distinguishing characteristics of each social group, already carries within it the implication of relativity. Nevertheless, it was Franz Boas who first provided a pluralistic definition of culture as something that always characterises a specific group and therefore, similar to a group, exists only as a plurality. Thus he laid the foundations for *cultural relativism*, which rejected the developmental stages of evolutionism in favour of viewing cultures as having

their own standards, and thus not as subjects whose value rested on the opinions of other cultures.

Subsequently, the concept of culture replaced the concept of 'race' as the main term of comparison in anthropological discourse. 'Culture' instead of 'race' as the fundamental difference between humans was meant to be a different kind of difference: difference was no longer a question of descent, of heritage, of differential positioning on the steps of evolution, of unalterable, virtually natural-biological endowment with differential abilities. 'Cultural differences are acquired differences, acquired by socialization in specific cultural contexts.' (Sökefeld)

Lévi-Strauss (1949) opposes the particularity of culture to the universality of nature, believing that 'everything universal in man derives from the order of nature and is characterized by spontaneity, (...) while 'everything which is subject to a norm belongs to culture and presents the attributes of the relative and the particular.' Others, such as Geertz (1973) and Weber (1905), have preferred to focus on the problematic aspect of culture rather than on its definition, and regard man's condition with reference to culture as that of 'an animal suspended in webs of significance he himself has spun'. Therefore, they consider the analysis of culture to be 'not an experimental science in search of law but an interpretative one in search of meaning'.

Further elements towards the understanding of culture have been provided by psychoanalysis, including the influence of the unconscious life on creativity (Freud, 1964), the connection between social organisation and the control of sexual drives (Freud, 1930), studies on the universality of myths and symbols (Jung, 1990) and the deep interconnection between language and the unconscious (Lacan, 1968). Unconscious cultural patterns are manifested both on the individual and social level, for example, the style of self-expression as well as social habits and customs.

3.2 Measuring and classifying culture

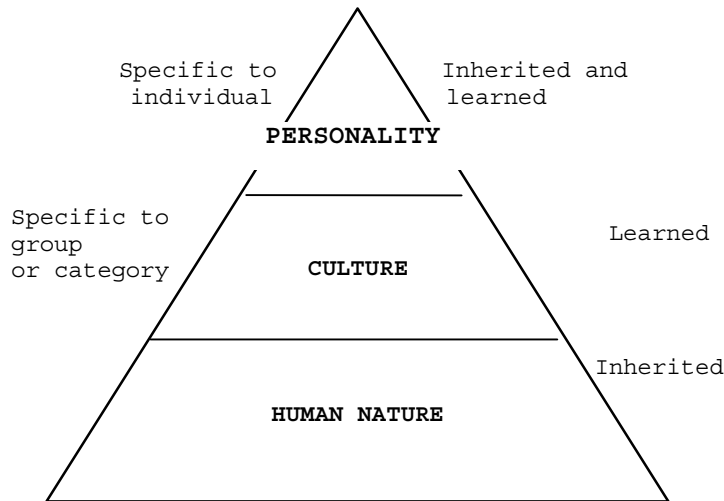
In the first half of the 20th century social anthropology has developed the conviction that all societies, modern and traditional, face the same basic problems, and that only the answers differ. Therefore, a defined set of issues (or *dimensions*) appeared to identify common basic problems across all cultures and affect the functioning of societies, of groups within societies, and of individuals within groups.

On this basis, several scholars have attempted to identify the cultural dimensions (a *dimension* being 'an aspect of culture that can be measured relative to other cultures' (Hofstede, 1991) and to measure differences across cultures. Different models exist. We will focus on two recent ones: Hofstede's and Trompenaer's. Even though these models derive from research in corporate cultures, the dimensions they cover serve as a framework to analyse differences and similarities in other cultural settings.

Hofstede (1980): culture as the programming of the mind

Hofstede defines culture as the collective programming of the mind, which distinguishes the members of one group or category of people from another. According to Hofstede, culture is learned and is a product of our social environment. The author makes a distinction between culture, human nature and personality. *Human nature* represents the universal level in the 'operating system' which determines one's physical and basic psychological functioning (the ability to feel, the need to communicate, the need to play and exercise, etc.). *Culture* mediates our physical and psychological functioning as it tells us what to do with our experiences and

how to express or interpret them. The *personality* of an individual constitutes the unique set of mental programming, which is not shared with another individual. Personality is formed by biological traits (genes) and our unique personal experiences.



Source: Hofstede (1991).

In his view, Hofstede classifies cultures according to 4 dimensions. These dimensions give an insight on how national cultures affects values and behaviour:

1. **Power distance (high, low):** refers to the degree which members of a group accept hierarchy. Contrary to low power distance, high power distance cultures tend to accept inequality in status and power in societies
2. **Uncertainty avoidance (high, low):** shows how far cultures tolerate ambiguous situations and uncertainty about the future. Contrary to low uncertainty avoidance, high uncertainty avoidance cultures tend to be intolerant about uncertain situations.
3. **Individualism vs. collectivism:** describes the relationship between individuals and the groups they belong to. Individualists ('I' identity) emphasise self-realisation and individual goals, while collectivistics ('we' identity) emphasise in-group's goals and fitting into the group.
4. **Masculinity vs. femininity:** analyses how sex roles are differentiated, and deals with the values associated to them. Contrary to feminine cultures, masculine societies give greater value to achievement, work, to differences between men and women. Feminine cultures emphasise quality of life, service and interdependence.
5. **Long-term orientation:** the extent to which people accept and expect immediate gratification of their needs.

Table 3.1 Hofstede's Dimensions

<i>Region/County</i>	Individualism-Collectivism	Power / Distance	Uncertainty/Avoidance	Masculinity-Femininity
North America (USA)	Individualism	Low	Medium	Masculine
Japan	Collectivism and Individualism	High and Low	High	Masculine/feminine
Europe:	Individualism	Low/medium	Low/medium	Masculine
Anglo				
Germanic: West Slavic, West Uergic	Medium Individualism	Low	Medium/high	Medium/high Masculine
Near Eastern: Balkanic	Collectivism	High	High	Medium masculine
Nordic	Medium/high individualism	Low	Low/Medium	Feminine
Latin Europe	Medium/high individualism	High	High	Medium masculine
East Slavic	Collectivism	Low	Medium	Masculine
China	Collectivism	Low	Low	Masculine feminine
Africa	Collectivism	High	High	Feminine
Latin America	Collectivism	High	High	Masculine

Source: www.pittstate.edu/mgmt/culture.html

Table 3.2 Cultural Dimension Scores For Ten Countries

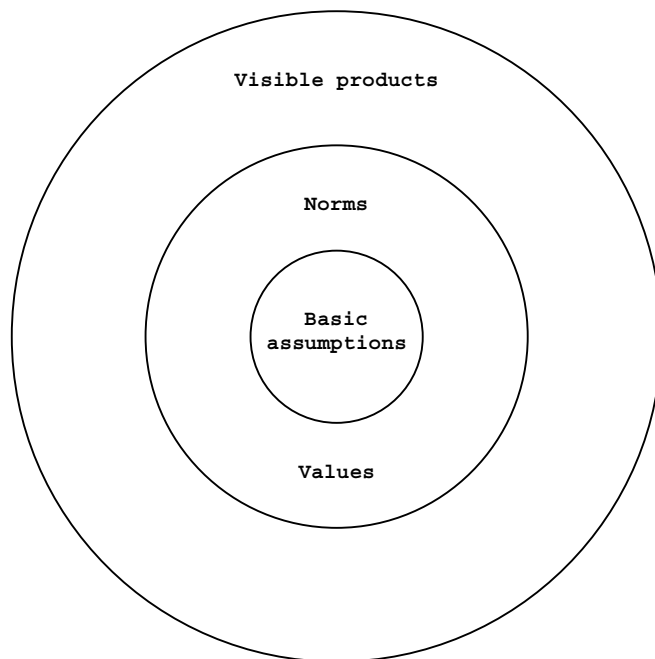
	Power Distance	Individualism	Masculinity	Uncertainty Avoidance
USA	40L	91H	62H	46L
Germany	35L	67H	66H	65M
Japan	54M	46M	95H	92H
France	68H	71H	43M	86H
Netherlands	38L	80H	14L	53M
Hong Kong	68H	25L	57H	29L
Indonesia	78H	14L	46M	48L
West Africa	77H	20L	46M	54M
Russia	95H	50M	40L	90H
China	80H	20L	50M	60M

H= high M= medium L=low

Source: www.pittstate.edu/mgmt/culture.html

Trompenaar's model (1990): the layers of culture

For Trompenaars (1999), culture is a product of the interaction among people and it *'is the way in which a group of people solves problems and reconciles dilemmas'*. Trompenaars visualises culture as an 'onion' with different layers: the outer layer represents the visible products of culture. This layer is also called the explicit culture and it constitutes recognisable and observable realities such as language, architecture, art, food, etc.



Source: Trompenaars & Hampde Turner (1999) .

The layer of values and norms is more difficult to identify as it is found deeper in the onion. Both values and norms can give us conscious or unconscious directions on how to behave. While norms give us a distinction of right versus wrong, values give us an indication of what is good or bad. The third and last layer is that of basic assumptions. This layer represents our implicit norms and values, which are taken for granted and form part of our unconsciousness. This layer represents what is obvious and unquestionable, what is considered an absolute truth and form part of our intrinsic views of the world.

Trompenaars develops 7 dimensions of culture:

2. **Universalism vs. Particularism:** refers to what extent cultures ascribe more value to general rules (universalism) or emphasise relationships above rules (particularism).
3. **Communitarianism and Individualism:** Both dimensions are complementary and refer to how individuals and group relate to each other.
4. **Neutral vs. emotional:** cultures differ in the way in which they express emotions. Neutral cultures carefully control and subdue feelings, while emotional (or affective) cultures reveal more easily their feeling verbally and non-verbally.
5. **Specific vs. Diffuse:** cultures differ in the way people get involved with each other and 'mix' personal (informal) relationships with formal roles. Specific –oriented cultures separate the personal and the formal roles. Diffuse-oriented cultures tend to accept a mixture of the two.
6. **Achievement vs. ascription:** refers to how status is accorded based on achievements and doing (achievement status) or accorded to other traits such as age, class, gender, education (ascribed status, based on being rather than on doing).

7. **Sequential vs. synchronic time**¹⁰: cultures differ in the way time is managed and perceived. Sequential time orientation sees time as a sequence of events and synchronic time cultures see time as a combination of simultaneous events.
8. **How we relate to nature**¹¹. Cultures differ in the way they believe that they can and should control nature (inner-directed) or in they way they coexist with nature with minimal influence on it (outer-oriented cultures).

Table 3.3 Trompenaar’s Cultural Dimensions

<u>Country</u>	<u>Percent showing Universalism</u>	<u>Percent showing Neutrality</u>	<u>Percent showing Specificity</u>	<u>Percent showing Achieved Status</u>	<u>Percent showing Inner-Directed Control</u>	<u>Percent showing Individualism</u>
Canada	96		81	53	83	
USA	95	40	89	55	89	79
UK	90	71	92	47	75	66
Australia	93		96	43	81	70
China	48		28	26	35	64
Hong Kong	56	55	66	29	69	69
India	59				72	
Indonesia	47	75	48	27	73	
Japan	67	83	83	28	56	60
Malaysia	55		64			
Pakistan			75		84	
Philippines	69					
Singapore	67	42	56	34	58	50
South Korea	26			28		49
Thailand	63		60		71	50

Source(s): Understanding Cultural Dynamics: www.forum.learningspace.com

Note(s): Sequential vs. synchronic time not included.

3.3 Cultures and the economy

Classical writers in economics, such as David Hume (1848), Adam Smith (1776), John Stuart Mill (1847), realised and discussed about the importance of institutions, such as firms, families, contracts, markets, rules and regulations, and social norms to economic development. Weber (1905) identified the protestant ethics as one of the roots of the surge of capitalism.

However, throughout much of the 20th century, mainstream economics traded breadth for rigor and cultural factors have been largely neglected.

¹⁰ Hall (1959) also elaborated on the concept of time orientation: people develop temporal patterns, which define when it is appropriate to do certain things and how many things it is appropriate to do at the same time. In general, the concepts of monochronic time (people tend to do one thing at the time) and polychronic time (people engage in several activities at the same time) are used to refer to these patterns or orientations. For monochronic people time is a linear progression, which is measured as an exact entity. For polychronic time cultures, time is seen as a holistic entity and the emphasis is placed in the activities occurring rather than on the clock time itself (Gudykunst, 1997). Kluckhohn and Strodtbeck (1961) also elaborated on the concept of time. To them, cultures differ in their focus on time based on their orientations to the present, the future or the past (Usunier 1996, Gudykunst 1997).

¹¹ This parameter is based on Kluckhohn and Strodtbeck’s (1961) person-nature orientation, which considers this relationship at three levels: mastery of nature, subjugation to nature and harmony with nature (Mead 1998, Hoecklin, 1995).

Cultural factors appear to play a larger role in the writing of economic historians. Concluding his economic history of last 500 years (Landes, 1999), David Landes writes that 'If we learn anything from the history of economic development, it is that culture makes all the difference' (p 545), suggesting that the European sense of progressive time, the existence of open institutions, and the attitude towards innovation gave the European a definitive advantage on other civilisations in the run to economic development.

This conclusion is not uncontroversial (see Frank, 1998) and a hot debate is currently in course amongst historians.

Here we do not enter into that debate and discuss how cultural values may affect long-term economic growth.

However, we would like to highlight four different levels at which the influence of culture on economic growth can be seen to operate:

- Culture intended as a *body of knowledge* tends to coincide with scientific knowledge. In this sense the accumulation of scientific knowledge is parallel to the underlying scientific progress. Thus culture is intended as a body of comparable information and theories that develop in a progressive and cumulative way, and in this sense it can be said that a single scientific 'culture' exists. Similarly then, it can be said that there are as many cultures as there are the scientific fields and homogeneous communities of scientists and scholars. From this point of view, culture and development could be said to be two sides of the same coin. But culture differs from knowledge in that it is not empirically discovered or analytically proven;
- Culture/cultures are fundamental in the process of defining and creating values. A value is, of course, anything of value, given by its merit and importance, and culture is a process of attribution of value. As such, culture is fundamental in directing the course of economic growth. Indeed, culture as a process of attributing values leads to norms of behaviour and (self)-imposed codes of conduct. These values, norms and codes of conduct provide an incentive structure for the economic transactions. As an incentive structure, culture can reduce enforcement costs. Given that an economic actor will move to produce or acquire that to which value is attributed, culture as code of conduct can be used as a measure to interpret and understand the rational/irrational behaviour of economic actors;
- Culture is a powerful instrument in the shaping of both individual and community identities. From an economic perspective, different cultural identities can be said to correspond to different *market sectors*. This is true insofar as culture can be considered to be a more progressive, and in this sense modern, instrument to shape identities than race and ethnicity, because in a way cultural identities are much more flexible and rapidly evolving than racial or ethnic identities. This means that cultural identities are more liable to change and evolve in accordance with the market-oriented development of modern societies, with its continuously shifting models of belonging and identification. The passage from biological to cultural identity is, in a way, a passage from the concreteness of reality to the lightness of symbols. It goes without saying that if the values of identification undergo a continuous process of transformation and therefore have to be considered weak, transient and fleeting (as stated by post-modernists and theorists of the *pensiero debole*), the mechanisms of identification involved do not necessarily produce equally weak, renegotiable and revocable identities. On the contrary, by reaction, they may result in rigid and simplified identities which are opposed to any kind of evolution or transformation.

- The fourth dimension concerns the **cultural domination** of developing countries on the part of Western countries, as a by-product of economic domination. From this perspective the Western world is seen as imposing its culture on developing countries (cultural imperialism), thus carrying out an even greater form of exploitation. This interpretation has recently been challenged by the concept of globalisation¹², put forward by sociologists in order to better consider the nuances and complexities of the relationship between the economic and cultural dimensions of global flows, rather than merely assuming that cultural domination is an almost automatic consequence of economic domination. Most conceptions of globalisation posit that global processes of cultural homogenisation always met with resistance (Scott, 1997), and take into account the significance of migration and diasporas in the transformation of national cultures in a new global age (Held, McGrew, Goldblatt and Perraton, 1999). Appadurai's (1990) contribution has been particularly enlightening regarding the 'fundamental disjunctures between economy, culture and politics'. Taking into consideration the complexity of the modern world, he provides a vivid picture of globalisation as the result of the interaction of a number of disjunctive flows: ethnoscaples, mediascaples, technoscaples, finanscaples and ideoscaples. (Appadurai's 1990, p296).

3.4 Cultural diversity, citizenship and multicultural societies

Especially for Europe, diversity and citizenship represent two key issues in the years to come:

1. The process of enlargement of the European Union implies the development of contacts between different cultures. Will the EU choose to have a common culture or will the EU prefer a multicultural regime, made up of a mosaic of nations?
2. The immigration of non-Europeans is demonstrating to European countries how difficult it is to reconcile the universal conception of citizenship and the multi-ethnic character of Westerner societies. In France, the debate in 1989 concerning the Islamic veil has provoked the following a debate: was it necessary to protect the cultural difference of the pupils? Was it better that all the citizens respect the principle of secularism of the school? These questions arise more and more as the globalisation of the economy contributes to the movement of the populations.
3. In all the Western countries, more and more groups are searching for identity. They demand official recognition of their religious or moral convictions, their cultural specificity, their ways of life, their sexual practices, etc. They demand specific rights and/or a political autonomy.

History of modern migratory movements, in the 19th and the first half of the 20th centuries, offers several examples of the significance of ethnic and cultural diversities. Up to the last decades of 19th century, both governments and migrants had the scope of minimising ethnic and cultural diversity between the receiving society and the immigrants. Overseas migration from Europe to Americas has clearly been manifested in two flows: one, towards North America, of Anglo-Saxon origins; the second concerns Latin origin languages speaking populations, sailing from Europe to South America. Since 1880, the international labour market was unified by connecting the two sections. This standardisation occurred in USA in order to support the more important diversity between Asian and European immigration. Chinese immigration (forbidden in 1880) and Japanese immigration (forbidden in 1905) are considered incompatible with the American way of life and its cultural foundations. Asian immigration ('kanaka' from Melanesia) was treated in a similar way during the same period by the Australian government.

¹² See Key-Word 5 *Globalisation*.

The debate on this subject was renewed during the first years of 20th century, when diversity appears once again as a result of ‘new immigration’ from countries of Southern and Eastern Europe, in opposition to ‘old immigration’ from United Kingdom, Scandinavia and Germany. Immigration policy of USA tried to establish a new kind of diversity, based on a certain degree of formal educational level of the migrant (literacy test), required for the admittance in USA.

Diversity and citizenship today

Today’s debates about culture no longer concern the acknowledgement of equal dignity between different cultures. The notion itself of culture clearly conflicts with racist and evolutionist theories. It allows researchers to give the same value to all forms of human organisation. In this sense, cultural relativism was a great scientific and media success. This success can be partially explained by the guilty conscience of the West after the 2nd World War and in the process of decolonisation

Nowadays most Western societies recognise the need to promote pluriculturalism through the implementation of programmes and policies aimed at fostering, protecting or even promoting cultural diversity. However, the current debate on pluriculturalism has all but shed light on the definition of ‘culture’. While it has been claimed that every homogeneous group has a culture of its own and that, therefore, culture should be ranked alongside terms such as ‘race’ and ‘ethnicity’ in identifying the various groups making up homogeneous communities, the same difficulties encountered with the definition and use of the concepts of ‘race’ and ethnicity are also found in establishing the boundaries of individual cultures and of the various subgroups making up each culture.

The contemporary use of the word ‘culture’ is itself sometimes ambiguous. The stress on universalism has also become an alibi for western hegemony. The notion of cultural relativism can be dangerous: if the membership of a culture is considered in absolute terms, the dialogue between different cultures becomes difficult to handle. Cultural relativism can become an alibi for nationalism, xenophobia, ethnocentrism. For example, the membership of the Serbian culture can justify the fact that the Serbian do not want to share their territory with another culture. The absolutism of cultural differences raises a problem: Can individuals who belong to different cultures live together in a common space? Does the acknowledgement of the variety of cultures imply denying the universal or the communication between different communities?

How can we respect cultural membership and establish a common political space at the same time? In particular, how much importance should be placed on cultural memberships in multicultural societies? These two questions characterise the today’s intellectual debate. This intellectual debate revolves around universalism and ‘différentialisme’, monoculturalism and multiculturalism.

Three major strands of thought characterise the current debate.

The liberals (Allan Bloom, Benjamin Barber, Souza’s Dinesh) are universalistic and individualistic. They think that respect for the individual is more important than respect for the community. According to them cultural differences should stay in the private sphere. It is necessary to promote common, universal values rather than to protect community values.

The communitarians (Michael Sander, Alasdair Mac Intyre, Amitai Etzioni) are collectivist and particularistic. According to them, the state should protect the interest of communities because they are threatened by individualism and by the dominant culture, which thinks that its cultural choices have universal worth.

Today, the most influential thinkers (Charles Taylor, Michael Walzer and Will Kimlicka) have an intermediate point of view: they think that the *malaise* of modernity and the defects of the economic liberalism are the cause of group's demands. According to these thinkers, the principle of equity should take the place of the principle of equality: the state must help a community when its culture is threatened. But this help must not cause damage to another group or person: for example, in Western countries, the state does not permit polygamy (even though polygamy is part of Muslim culture) because it maintains that polygamy harms women.

The European discourse has considered multiculturalism as a typically North American practice. In France, it is said that the role of the State is to integrate different groups into the same society. Actively multicultural policies are considered dangerous because they provoke a division of the society into separate groups. The situation is changing a little: the religious and cultural associations that protect group identity were given official status in 1981. Group languages and regional languages are starting to be taught.

Opposition between universalism and particularism, monoculturalism and multiculturalism, between citizenship and tradition may lead to a dead end. Debate is moving on in considering the fact that, if it is true that the idea of a citizen without social ties is an illusion, it is also true that individuals are not locked into their culture of origin. The content of a group's culture is not static. It is dependent on history and evolves. The culture of origin is one of the numerous resources that individuals can use in a 'do-it-yourself' cultural identity. Instead of wanting to protect or to liberate oneself from the culture of origin, it can be read as an important factor of change, creativity and invention.

The demands of ethnic groups are now replacing class struggle and the denunciation of social and economical exploitation. At present, social policies are separated from multicultural policies. These two aspects are often connected together. People who undergo cultural discriminations often undergo social and economical injustices too. Furthermore, the recognition of a culture does not imply the end of its social and economical exploitation. It may be necessary to connect the policies of cultural recognition and the policies of economical redistribution (see Key-Word 7 Conflict).

References

- Appadurai A., (1990), *Disjuncture and Difference in the Global Cultural Economy*, in M. Featherstone (ed.), *Global Culture: Nationalism, Globalisation and Modernity*, Sage, London.
- Arnold M., (1925), *Culture and Anarchy*, MacMillan, New York.
- Banks S., (1995), *Multicultural Public Relations. A social Interpretive approach*, Sage, London, pp. 7-22.
- Cipolla C., (1980), *Storia economica dell'Europa pre-industriale*, Bologna, Il Mulino.
- Cohen A., (1994), *Self Consciousness. An Alternative Anthropology of Identity*, Routledge, London, pp. 6-11.
- Constant F., (2000), *Le multiculturalisme*, Flammarion.
- Cuche D., (1996), *La notion de culture dans les sciences sociales*, La Découverte.
- Derrida J., (1972), *Structure, sign and play in the discourse of the human sciences*, in Macksey, R., Donato, E., *The Structuralist Controversy. The Language of Criticism and the Sciences of Man*, The Johns Hopkins University Press, Baltimore.

- Dewitte P., (1999), *Immigration et intégration, l'état des savoirs*, La découverte.
- Dijkstra S., Gwuijen K., de Ruiter A., (2001), Multiculturalism and Social Integration in Europe, *International Political Science Review*, January 2001, United Kingdom, pp. 55-83.
- Flinn M.W., (1981), *The European Demographic System*, pp. 1500-1820, Harvester Press, Brighton.
- Frank A.G., (1998), *Reorient: Global Economy in the Asian Age*, University of California Press, Berkeley.
- Freud S., (1930), *Civilisation and its Discontents*, Hogarth Press, London.
- Freud S., (1964), *Leonardo da Vinci and a Memory of His Childhood*, translated by Alan Tyson, Norton, New York.
- Galissot R., Kilani M., Rivera A., (2001), *L'imbroglia ethnique. En quatorze mots clés*, Editions Payot, Lausanne.
- Gatherer, D., (March 1997), Feyerabend, Dawkins and the Politics of Cultural Diversity, *Anarchist Studies*, United Kingdom, pp. 23-43.
- Geertz C., (1973), *Interpretation of Cultures*, Basic Books, New York.
- Greif A., (1994), Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on collectivist and Individualist Societies, *Journal of Political Economy*, Vol 102 no 5, pp. 912-950.
- Gudykunst W., Yun Kim Y., (1997), *Communicating with Strangers. An approach to Intercultural Communication*, Mac Graw Hill, pp.: 1-27, 44-50.
- Hall E. T., (1976), *Beyond Culture*, Doubleday, New York.
- Held D., McGrew A., Goldblatt D., Perraton J., (1999), *Global Transformations*, Polity Press, Cambridge.
- Hoeklin L., (1995), *Managing Cultural Diversity. Strategies for competitive advantage*, Addison Wesley, England, pp. 1-48.
- Hofstede G., (1991), *Cultures and Organizations: Software of the Mind.*, McGraw-Hill Book Co, UK.
- Hofstede G., (1994), *Cultures and Organisations. Intercultural cooperation and its importance for survival*, Harper Collins Business, London, pp. 3-19.
- Humayun Ansari K., Jackson J., (1996), *Managing Cultural Diversity at Work*, Kogan Page, London.
- Jandt F., (2001), *Intercultural Communication: An Introduction*, Sage, pp. 28-33.
- Jung C.G., (1990), *The Archetypes and the Collective Unconscious*, Routledge, London.
- Kroeber A.L., (1944), *Configuration of Culture Growth*, University of California Press, Berkeley, CA.
- Kymlicka W., Mesure S., (2000), Les identités culturelles, en *Revue Comprendre*, n°1, PUF.
- Lacan J., (1968), *The Language of the Self, the Function of Language in Psychoanalysis*, John Hopkins Press, Baltimore.
- Landes D. S., (1999), *The Wealth and Poverty of Nations*, W.W. Norton and Company Inc.

- Lévi-Strauss C., (1977), *The elementary Structures of Kinship* (1949), Beacon Press, Boston.
- Lodenk M, Rosene J.B., (1991), *Workforce America! Managing employee diversity as a vital resource*. Business One Irwin, Homewood, IL.
- Mead R., (1998), *International Management. Cross-cultural dimensions*, Blackwell, pp. 22-28.
- Noiriel G., (1988), *Le creuset français, histoire de l'immigration*, Seuil.
- North D., (1991), Institutions, *Journal of Economic Perspectives*, 5, pp. 97-112.
- Sassen S., (1996), *Migranten, siedler, fluchtlinge*, Von der massenauswanderung zur festung Europa, Fischer, Frankfurt am.
- Schnapper D., (1991), *La France de l'intégration. Sociologie de la nation en 1990*, Gallimard.
- Schnapper D., (1998), *La relation à l'autre. Au cœur de la pensée sociologique*, Gallimard.
- Scott A., (ed.), (1997), *The Limits of Globalisation*, Routledge, London.
- Smith A., (1776), *An Inquiry into the Nature and Causes of the Wealth of Nations*
- Shah A.M., Baviskar B.S., Ramaswamy E.A., (1997), *Development and Ethnicity*, Sage, London.
- Sökefeld M., (1998), *The Concept of Culture between Politics and Social Anthropology: From Difference to Continuity*, *Ethnologie Heute*, 3, available online: <http://www.uni-muenster.de/EthnologieHeute/eh3/culture.htm>
- Sori E., (1979), *L'emigrazione italiana dall'Unità alla seconda guerra Mondiale*, Bologna, Il Mulino.
- Sori E., (1981), *Mercato del lavoro ed emigrazione*, in *Il mondo contemporaneo*, vol. II: *Storia d'Europa-4*, La Nuova Italia, Firenze.
- Tajfel H., (1982), *Human groups and social categories*, Cambridge, UK quoted in Gudykusnt 1997.
- Taylor C., (1994), *Multiculturalisme, Différence et démocratie*, Aubier.
- Touraine A., (1997), *Pourrons nous vivre ensemble? Egaux et différents*, Fayard.
- Triandis H. C., (1988), *Collectivism vs. individualism* in G. Verma and C. Bagley (eds.), *Cross-cultural studies of personality, attitudes, and cognition*, Macmillian, London.
- Trompenaars F., Hampden-Turner C., (1999), *Riding the Waves of Culture, Understanding Cultural Diversity in Business*, Nicholas Brealey Publishing, London, pp.: 1-28, 29-33, 50-53, 69-72, 102-108, 120-122, 141-142.
- Tylor P.B., (1994), *Collected Works*, Routledge, London.
- Usunier J.C., (1996), *Marketing Across Cultures*, Prentice Hall, pp.: 1-19, 32-36, 65-81.
- Walzer M., (1997), *Pluralisme et démocratie*, Esprit.
- Warnier J.-P., (1999), *La mondialisation de la culture*, La Découverte.
- Weber M., (1905), *Protestantism and the spirit of capitalism*.
- Wiewiorka M., (1996), *Ube société fragmentée ? Le multiculturalisme en débat*, La découverte, Paris.
- Wiewiorka M., Ohana J., (2001), *La différence culturelle. Une reformulation des débats. (colloque de Cerisy)*, Balland.

Williamson J.G., Hatton T.J., (1994), *International Labour Market Integration and the Impact of Migration on National Labour Markets since 1870*, Proceedings of Eleventh International Economic History Congress (Milan, 1994), Milano, Università Bocconi.

Wintle M., (1996), *Culture and Identity in Europe*, Avebury, England, pp. 9-24.

Zetterholm S., (1994), *National Cultures and European Integration*, Berg, Oxford, pp. 1-12.

4. COMMUNICATION

4.1 Definition

In the 15th century, communication is almost synonymous with communion, meaning: *to share*. Today, communication refers to the process of intentionally stimulating meanings through the use of symbolic information (Jandt, 2001). According to Samovar and Porter (1988) communication is:

'a dynamic transactional behaviour-affecting process in which sources and receivers intentionally code their behaviour to produce messages that they transmit through a channel in order to induce or elicit particular attitudes or behaviours. Communication is complete only when the intended message recipient perceives the coded behaviour, attributes meaning to it, and is affected by it'.

According to Gudykunst and Yum Kim (1997), the meaning attached to a message depends on the form, the channel, the physical environment, the situation, the relationship and the kind of interaction that takes place between individuals. Based on this assumption, they state that messages can be (always) transmitted, but meanings cannot.

Contrary to Jandt and Samovar and Poter, Gudykunst and Yum Kim point out that intention is not a necessary condition for communication. Intention is the way we instruct ourselves about how to communicate. Because communication occurs when someone gives meaning to her or another person's behaviour, it is not necessary for an individual to transmit a message intentionally in order to communicate.

Following Oomkes (2000), it is necessary to distinguish the terms *communication* and *information*. In communication, there are always signals, which are symbolic and refer to a particular experience/reality. Information in itself is the recognition of the symbols of which it is made, without necessarily making any link to its contextual meaning. It means that information becomes communication when we attach certain meaning to it in a certain context.

4.2 Communication and our societies

Communication has become a fashionable subject. Indeed, it is one of the fields where technology made, in recent years, has made the greatest progress. These new technologies play a role in many aspects of our daily life, at least in our industrialised countries: work, family life, leisure, etc. This reality concerns everyone and modifies habits.

Discussing communication means immediately thinking of tools, instruments, communication technology. Why? Because it is the principal feature, the most striking feature that differentiates our own, as well as our parents and grandparents way of communication. They send letters, we phone, we send e-mails. Letters need days, sometimes weeks, to reach their destination; but with internet, in a few seconds, we can address messages to the other end of the world. We can communicate with people whom we do not know, meet people from a distance and access to an extraordinary amount of information.

All this is possible because we have machines to do it, we have technology.

But behind any technology, there is a science, that is to say a speech, a philosophy, some world views, a culture or an ideology. In other words, invention, conception, realisation and use of

these technologies implies a spirit, a certain way to contemplate reality, to decide what is real and what is not. This vision of the world is expressed in the most rigorous way by the science that regards technology: *cybernetics*, the science that allowed for the invention of communication technologies. It has been developed in the middle of the 20th century by N. Wiener's, a US mathematician. This science, first applied to machines, soon exported its method into life and the social sciences.

At the same time, social sciences were making language as their priority subject. In short, during this period, we can distinguish two trends: structuralism in France, and theories of language in United-States. Structuralism, which was interested in language and narrative structures, is in part neglected today.

Theories of communication

Under the two influences of cybernetics and structuralism, the so-called *theories of communication* were developed, more pragmatic and above all better suited to new technologies than structuralism itself. Theories of communication prevail largely in actual knowledge of human relationships, and dictate most of choices. They are the work of anthropologists, psychiatrists, sociologists gathered around what is now called «Palo Alto school» (the most famous: G. Bateson, P. Watzlawick, E. Goffman).

Theory of communication takes, as the name indicates, considers communication as an explicative principal of all human fact. But in communication, as explains P. Watzlawick, it is no longer more energy, but information which is transmitted. That is the essential difference between Freudian psychodynamic and theory of communication when it explains human behaviour (H. Beavin, D. Don Jonson, P. Watzlawick, *Pragmatics of Human Communication, 1967*). Life of human groups does not consist in expense of energy, but in circulation of information. The great discovery of theory of communication, applied to human systems, is its possibility to explain any behaviour without requiring vital energy but only, as in cybernetics, the notion of « information ».

This theory was, and still is, interesting because of the apparent easiness of its application. It allows statement of relatively simple rules and schematic representation; it makes possible immediately a pragmatic action, a practical application, for example within the context of therapy.

Nature and body seem to let themselves handle and transform without great resistance by our sciences and technologies. In the fields of culture and human psychology, theories of communication tried to find a comparable efficiency. Researchers tried to find techniques able to transform, for example, pathogenic situation, and these techniques are sometimes similar to simple « tricks ».

So, theories of communication were elaborated abandoning the ancient notion of 'energy'. Not only the notion of 'energy', but also all those that go with it: strength, life, movement, material, impulse, desire. These notions (sometimes a bit obscure) were trendy among researchers at the end of the 19th century and at the very beginning of the 20th century. We find it in philosophy (Nietzsche), or in psychoanalysis (Freud). In the tradition of its time, one of founders of sociology, E. Durkheim (1858-1917) describes a world animated by strength, movement, energy, life. He studies dynamic aspects of these phenomena and he sees society as the most powerful beam of physical and moral strength we can see in nature ('le plus puissant faisceau de forces physiques et morales dont la nature nous offre le spectacle' (Durkheim, 1937, p 621) Society is a system of active strength, a movement.

Focusing on communication while searching in it an explicative principal of social phenomena, we focus on an exchange of information and we give up viewing relationships as expressions of life, confrontations of strength.

Communication is a recurrent preoccupation in western culture and it takes an important place in our social running. However, other words could be more useful: speaking, speech, or word (« he's a man of his word »), talk (in French: *la parole*). These words characterise a deeper reality. Speech serves to communicate, but it has many other uses too. It can do good or evil, it can cure or kill, it can be hesitant or authoritarian, playful or serious. It goes with each human tiny event.

Nothing but technologies' level stands in the way of a faster and faster communication. But speaking needs time, because some speeches are fast (like chattering) but others are rare (like confession). Media dreams of continuous communication. Speaking needs silence. The only quality for communication is clarity of the message, the free flow. Speaking has a vast number of qualities.

Speaking is an act, it has effect, it implies effort, wile. Thinking about communication, we must always remember that, behind this notion, there are individuals speaking. When a man meets another man, they talk. But talking is not only to exchange information, it is not only to communicate. Communication can interest sociologist if he looks for, behind the notion, speaking and acts.

4.3 Models of communication

Linear (transmission) models of communication

Traditionally, transmission models of communication were concerned with the technical efficiency of communication channels for carrying information. These models demonstrate how ideas, feelings, attitudes, emotions and information are transmitted from one person or group to another (Windhal,1992)

Shannon and Weaver's (1949) model visualized communication as a sequential process and was designed to account for differences between sent messages and received messages (Fiske, 1988; Mac Quail, 1994) In this model, communication is presented as a linear and simplified process:

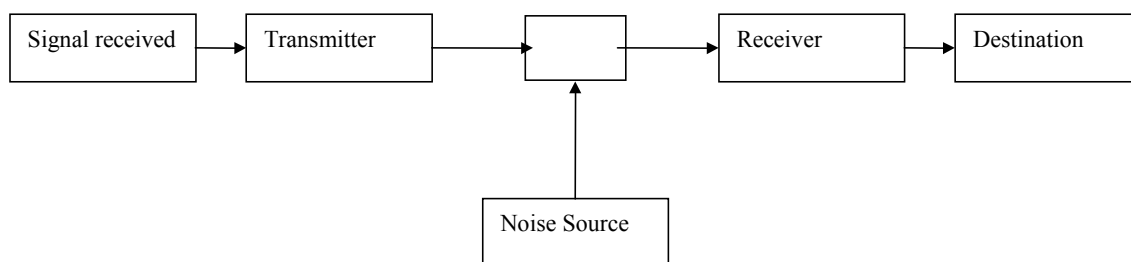


Figure 4.1: Shannon and Weaver’s model of communication

In this model (as in any other), one can identify at least 5 elements of communication: the source, the receiver, the message, the channel and noise. Here the idea is that there is a sender (source), who encodes a message and transmits it intentionally to a receiver through the use of a

channel (or medium). The receiver decodes the message, assigns a certain meaning to it and responds to the sender. The noise or interference can affect the channels that transmit the message.

The focus of this model was on 1) the accuracy in the transmission of the symbols (technical problems), 2) the precision of the symbols when conveying the desired meaning (semantic problem) and 3) the effectiveness of the meaning in affecting conduct (effectiveness problems).

Lasswell (1948) presents a verbal version of Shannon and Weaver's original model. Lasswell's model focuses on *who says what, in which channel and with what effect?* The application of this model is specific to mass communication and replaces meaning for 'effect'. The main idea behind this model is that changing one of the elements (encoder, message, channel) will change the effect on the communication.

Gebner's 'general purpose model of communication' (1956) adds two new dimensions to Shannon and Weaver's linear model: the *perceptual* dimension and the *means and control* dimension.

The *perceptual (or horizontal) dimension* involves the process of selection. That is matching the external stimuli with the internal patterns of thought or concepts (Fiske, 1998). The creation of meaning is derived from this matching, which at the same time is controlled by culture. This means that individuals with different cultural backgrounds will have different perceptions of reality.

The *means and control (or vertical) dimension* involves the relationship between form and content. Here the focus is in finding the best form to communicate certain message/content. The relationship form-content is inseparable and it's interdependent (dynamic and interactive). This means that there is no content without a form.

Newcomb's model (1953) was the first to introduce the role of communication in a society or a social relationship. For Newcomb, A and B are both communicator and receiver and they constitute individuals, groups or organisations. X is part of their social environment. ABX (represented in a triangle) is an interdependent system in which each part influences each other. If one part changes, then the other two will change as well.

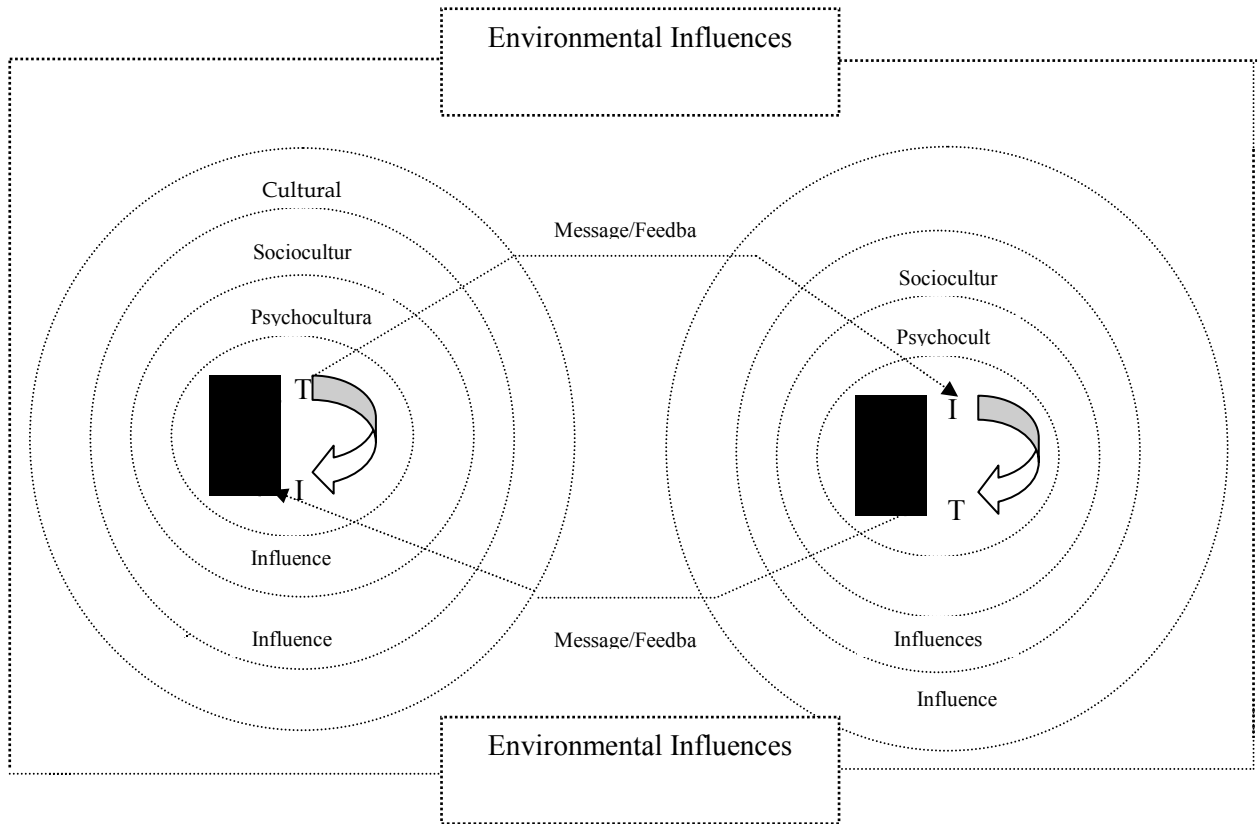
4.4 Communication and multicultural environments: an organising model for studying communication with strangers

Gudykunst and Yum Kim (1984) isolate and identify the elements influencing our communication with strangers (people who are members of different groups and unknown to us). This model sees communication as an interactive process (transmitting and interpreting messages) influenced by different conceptual 'filters': cultural, sociocultural and psychocultural. These filters influence one another and permeate the interaction.

According to this model, the environment¹³ is not a closed system, since most communication takes place in a social environment where others also communicate.

¹³ Context is another term used for the environment in which communication takes place and which helps to define the communication (Jandt 2001). Hall (1976) makes a distinction between high context communication or message (most the information is in the physical context or internalised in the person) and low context (most of the information is in the explicit code). To Hall (1976), without the context, the code is incomplete since it encompasses only part of the message.

Figure 4.2: An organising model for studying communication with strangers



T= Transmitting I = Interpreting

Transmitting and interpreting messages is seen as a simultaneous process. The ‘filters’ influence the process of transmitting and interpreting messages as they give us ‘leads’ on what to expect from the interaction. The filters also influence what we pay attention to (selection process) and how we choose to interpret the received messages. According to Gudykunst and Yum Kim all of us have a preconceived notion of what communication is about and how it takes place. This preconception also affects the way we interpret communication.

Cultural influences are values, norms and rules. *Sociocultural influences* refer to racial and ethnic groups, families, age groups, service and occupational groups, ideological groups, etc. *Psychocultural influences* refer to stereotypes, attitudes, ethnocentrism, etc. and finally, environmental influences refer to geographical location, climate, architectural setting and perceptions of the environment.

4.5 Communication, economic growth and diversity: the concept and role of knowledge spillovers

Communication is very important for growth. Difficult to measure for economists, it is none the less an important variable to explain the development of cities, regions and countries.

Historians and sociologists such as Jacobs (1969, 1984) and Bairoch (1988), observed that that most innovations happen in cities, and concluded that the opportunities that individuals have in cities to meet each other help them to get ideas and innovate (Jacobs, 1969). Marshall (1890) discusses the transfer of knowledge in an occupation to explain the existence of industrial clusters.

Economic theory has formalised this idea into the concept of '*knowledge spillover*': the knowledge of one individual spills over into other individuals and improve other people's productivity. The word 'spillover' is used because the interactions are not mediated by price mechanisms. Knowledge spillovers therefore imply externalities: investment in owns knowledge not only improve owns productivity, but also other individuals'.

Knowledge spillovers have a key role in two major strands of economic research.

Firstly, knowledge spillovers are a key factor in theories attempting to explain unbounded economic growth. In fact, endogenous growth theories view externalities (and particularly externalities associated with knowledge spillovers) as the 'engines of growth' (Romer, 1986; Lucas, 1988. See Key-Word 1 *Development and growth*).

Secondly, knowledge spillovers are a key factor in the theories attempting to explain the existence and growth of cities. Without knowledge spillovers it will be difficult even to explain the existence of cities. Lucas (1988) expresses the idea very well: 'A city is simply a collection of factors of production: labour, capital and land is always far cheaper outside the city than inside. Why capital and labour do not fly outside? (...) Of course people like to live near shops and shops need to be located near their customers, but circular considerations of this kind explain only shopping centres, not cities. Cities are centred on wholesale trade and primary producers, and a theory that accounts for their existence has to explain why these producers are apparently choosing high rather than low cost modes of operation.' (Lucas, 1988, p 319). *The only force that can keep individuals within the cities is the opportunity to learn from others*'.

This two research strands are strongly interrelated, to the extent that knowledge spillovers are stronger within cities than outside cities, cities are 'engines of growth' themselves, as Jacobs (1969) and Bairoch (1988) suggested.

Despite their importance, knowledge spillovers remain a black box. Theories have assumed their existence in order to explain certain facts of life, such, as discussed above, economic growth and the existence of cities, and the theoretical implications of the assumptions fit nicely with empirical evidence. However, the way they work and the extent to which they contribute to the final results is not clear.

Knowledge spillovers: the role of diversity

Since Marshall (1890), knowledge spillovers have been widely discussed in the literature on cluster and cities. With respect to the view that they have on the role of diversity, those theories can be grouped in two main groups.

The first strand argues (Marshall (1890), Arrow (1962) and Romer (1986)) that the concentration of an industry in a city helps knowledge spillovers between firms and, therefore, the growth of that industry and of that city. Through spying, imitation, and rapid interfirm labour mobility, ideas are quickly disseminated among neighbouring firms within the *same*

industry. Porter (1990) presents in this sense a similar view, arguing that specialised, geographically concentrated industries stimulate growth¹⁴.

The second strand has an opposite view. Unlike MAR and Porter, Jacobs (1969) believes that the most important knowledge transfers come from outside the core industry. According to Jacobs, it is the *variety and diversity* of geographically proximate industries rather than geographical specialisation that promotes innovation and growth.

Glaeser et al (1992) test prediction of these theories analysing a data set on geographical concentration and competition in 170 of the largest US cities over the period 1956-87. In a *dynamic* setting, they test in which cities industries grow faster, as a function of geographic specialisation and competition. Their results confirm Jacob's view: *diversity* positively affects growth.

In a recent paper, Peri and Urban (2001) examine the impact of multinationals on the productivity of domestic firms in Italian and German provinces and find that the impact is larger the larger the initial gap in productivity between investing and local firms. These findings confirm that heterogeneity between different producers operating in the same economic environment can be a powerful source of learning.

Diffusion of technologies does not only take place through spillovers, but also through deliberate choices and there might be obstacles in adopting technologies which are different from those traditionally used by local firms. Several contributions have linked the choice of technique to the human capital or skills already available in a given industry or firm (Benhabib and Rustichini, 1991; Chari and Hopenhayn, 1991; Keller, 1994; Jovanovic and McDonald, 1993; Jovanovic and Nyarko, 1995 and 1996). According to these works, the more skills are specific to a given technique, the more costly it is to switch to and from that technique.

Jacobs (1961) sees diversity (see Key-Word 1 *Growth and development*) as *the* key factor of a city's success. While recognising to *industrial* diversity (Jacobs, 1961, p. 138) a key role, she also suggests that the variety of commercial activities is probably linked to other types of diversity: variety of cultural occasions, aspects, inhabitants, visitors and also variety of tastes, abilities, needs and even obsessions (Jacobs, 1961, p 137).

Jacobs' view is consistent with the idea that there is a role for cultural diversity in promoting growth and innovation.

References

Arrow K.J., (1962), *Economic Welfare and the Allocation of Resources for Innovation*, in R. Nelson (ed), *The Rate and Direction of Inventive Activity: Economic and Social Factors*, Princeton University Press, USA.

Bairoch P., (1988), *Cities and Economic Development: from the Dawn of History to the Present*, Oxford University Press, Oxford, UK.

Bateson G., Bitdwhistell, Goffman E., (1981), *La nouvelle communication*, textes recueillis et présentés par Yves Winkin, Seuil.

Bateson G., Ruesch J., (1988), *Communication et société*, Seuil.

¹⁴ The difference between the two groups stands in the role of competition. In the Marshall-Arrow-Romer (MAR) view, monopoly allows internalisation of external effects and therefore stimulates growth, in the Porter model, it is competition that stimulates growth.

- Benhabib J., Rustichini A., (1991), *Social Conflict, Growth and Inequality*, New York, C.V. Starr Center - Working Papers, New York University, C.V. Starr Center.
- Breton P., (1997), *La parole manipulée*, Editions La Découverte, Paris.
- Chari V.V., Hopenhayn H., (1991), Vintage Human Capital, Growth, and the Diffusion of New Technology, in *Journal of Political Economy*, 99(6), pp. 1142-65.
- Durkheim E., (1937), *Les formes élémentaires de la vie religieuse*, Alcan.
- Ellul J., (1981), *La parole humiliée*, Editions Seuil, Paris.
- Fiske J., (1998), *Introduction to Communication Studies*, Routledge, pp. 6-38.
- Glaeser E.L., Kallal H.D., Scheinkman J.A., Shleifer A., (1992), Growth in Cities, *Journal of Political Economy*, Vol 100, n 6, pp. 1127-1152.
- Gudykunst W., Yun Kim Y., (1997), *Communicating with Strangers. An approach to Intercultural Communication*, Mac Graw Hill, pp.: 1-27, 44-50.
- Hall E.T., (1976), *Context and Meaning* in Samovar L., Porter R., (1988), *Intercultural Communication: A Reader*, Wadsworth Inc., pp. 44-53.
- Henderson J.V., (1974), The Size and Types of Cities, *American Economic Review*, 64, pp. 640-656.
- Henderson J.V., (1988), *Urban Development. Theory, Fact and Illusion*, Oxford University Press, Oxford, UK.
- Henderson J.V., (2000), *The Effects of Urban Concentration on Economic Growth*, NBER Working Paper 7503.
- Jacobs J., (1961), *Vita e Morte delle Grandi Citta*, Edizioni Comunita, translated by G. Scattone from J. Jacobs, (1961), *The Death and Life of Great American Cities*, Vintage, New York.
- Jacobs J., (1969), *The Economy of Cities*, Random House, New York.
- Jacobs J., (1984), *Cities and the Wealth of Nations – Principles of Economic Life*, Random House, New York.
- Jandt F., (2001), *Intercultural Communication: An Introduction*, Sage, pp. 28-33.
- Lasswell H.D., (1948), *Power and Personality*, Norton, New York, USA.
- Keller W., (1994), *Spezifikation objektorientierter Benutzeroberflächen Eine Alternative zum Prototyping*.
- Jovanovic B., MacDonald G.M., (1994a), Competitive Diffusion, *Journal of Political Economy*, Vol 102, pp. 21-52
- Jovanovic B., MacDonald G.M., (1994b), The Life Cycle of a Competitive Industry, *Journal of Political Economy*, Vol 102, pp. 322-347
- Jovanovic B., Nyarko Y., (1995a), The Transfer of Human Capital, *Journal of Economics and Dynamic Control*, June 1995
- Jovanovic B., Nyarko Y., (1995b), *Empirical Learning Curves*, Brookings Papers (Micro.) vol. 1.
- Jovanovic B., Nyarko Y. (1996), Learning by Doing and the Choice of Technology, *Econometrica*, November 1996

- Lick R., (1988), *La juste communication*, Commission des Communautés européennes, Programme FAST, Edition La Documentation française.
- Lucas R., (1988), On the Mechanics of Economic Development, *Journal of Monetary Economics*, pp. 223-42.
- Marshall A., (1890), *Principles of Economics. An Introductory Volume*.
- McQuail D., (1994), *Mass Communication Theory*, Sage, pp. 42-43.
- Oomkes F., (2000), *Communicatieleer, Boom*, Amsterdam, pp. 19-20.
- Peri G., Urban D., (2001), *Foreign Investments and Productivity Growth: Evidence from Italy and Germany*, Centro Studi Luca d'Agliano, Mimeo.
- Porter M.E., (1990), *The Competitive Advantage of Nations*, The Macmillan Press Ltd, London and Basingstoke, UK.
- Porter M.E., (1998), On Competition, 1990, *Harvard Business Review Book Series*, Cambridge, MA.
- Romer P., (1986), Increasing Returns and Long-Run Growth, *Journal of Political Economy*, 94, pp.1002-37.
- Ruyer R., (1954), *La cybernétique et l'origine de l'information*, Flammarion.
- Samovar L., Porter R., (1988), *Approaching Intercultural Communication* in Samovar L., Porter R.: *Intercultural Communication: A Reader*, Wadsworth, Inc., pp. 15-30.
- Sassen S., (1990), Economic restructuring and the American city, *Annual Review of Sociology*, 16, pp. 465-490.
- Sassen S., (1991), *The global city: New York, London, Tokyo*, Princeton University Press, Princeton NJ USA.
- Sassen S., (1994), *Cities in a World Economy*, Pine Forge Press, Thousand Oaks, US.
- Sassen S., (1999), *Guests and Aliens*, New Press.
- Sfez L., (1991), *La communication, Que sais-je?*, PUF.
- Shannon C.E., Weaver W., (1949), *The Mathematical Theory of Communication*, The University of Illinois Press, USA.
- Watzlawick P., Beavin H., Don Jackson D.J., (1967), *Pragmatics of Human Communication. A study of Interactional Patterns, Pathologies and Paradoxes*, W.W. Norton and Compagny, New York .
- Windahl S., Signitzer B., (1992), *Using Communication Theory. An Introduction to Planned Communication*, Sage, pp. 1-18.
- Wolton D., (1997), *Penser la communication*, Flammarion.

INSTITUTION

5.1 Definition

Schotter (1981) defines an institution as a *regularity in social behaviour* that is agreed to by all members of society, which specifies behaviour in specific recurrent situations and that is either self-policing or policed by some external authority. This approach stresses the fact that institutions are, to use a game theoretical framework, self-enforcing equilibrium outcomes.

North (1990, 1991) defines institutions as the rules of the game –both formal rules (laws) and informal constraints (conventions, norms of behaviour and self-imposed codes of conduct) and their enforcement characteristics, that shape human interactions. He further states that institutions create order, reduce uncertainty and transaction costs, and provide an incentive structure in the economy. This approach stresses the fact that institutions represent constraints on human actions and behaviour.

A similar approach is used in Kasper and Streit (1998) who define institutions as ‘*rules of human interaction* that constrain possibly opportunistic and erratic individual behaviour, thereby making human behaviour more predictable and thus facilitating the division of labour and wealth creation’. They range from *formal constraints* (or *external institutions*, such as constitutions, laws, rules, regulations) to *informal constraints* (or *internal institutions*, such as values, norms of behaviour, customs, taboos, attitude). Institutions are shared in a community and are always enforced by some sort of *sanction*, either explicitly or implicitly. Institutions without sanctions are useless. Only if sanctions apply will institutions make the actions of individuals more predictable. Rules with sanctions channel human actions in reasonably predictable paths, creating a degree of order. If various related rules are consistent with each other, this facilitates the co-operation between people, so that they can take good advantage of the division of labour and human creativity. The word institution thus refers to a broader concept than the word organisation. Institution refers to an organisation and to the expectations that the existence of the organisation entails for individuals’ expectations about other people’s behaviour. Organisation and expectations are two main interrelated institutional components.

5.2 External and internal institutions

Internal institutions

How do institutions come into existence? One possibility is that rules and entire rule systems are shaped by long-term human experience. People may have discovered certain arrangements that allow them to better meet their aspirations. Useful rules will become a tradition and will be perpetuated, if adopted by sufficient numbers of people to create a critical mass, so that they are followed community-wide. The rules will be spontaneously enforced and emulated as they gradually emerge and become known throughout a community. Arrangements that fail to satisfy human aspirations will be rejected and discontinued. Thus, most of the rules that matter to our daily lives develop within society in an evolutionary process of gradual feedback and adjustment. And the precise content of most institutions will evolve gradually along a steady path. In analysing how internal institutions come about, institutional economics draws frequently on the insights of moral philosophy, anthropology, psychology and sociology (and even Darwinism).

External institutions

Other types of institutions come into existence because they are designed, are made explicit in legislation and regulations and are formally enforced by an authority outside society, such as a government. For example, such rules can be designed and imposed by agents who are selected by a political process and who act from outside the society as such. They are ultimately enforced by legitimated means of coercion, for example through the judiciary. As soon as institutions are imposed externally by rulers, parliaments or bureaucracies, a fundamental problem arises, namely that the political agents, who should act in the interest of the citizens, may tend to exceed their mandate and use rules and rule enforcement for their own benefit. For this and other reasons, political processes themselves need to be subjected to certain rules.

The effectiveness of external institutions depends greatly on whether they are complementary to the internally evolved institutions: for example, whether legislation supports a society's morality, its cultural conventions, customs and manners.

5.3 Institutions and the economy

In economics there have been several approaches to model economic agents' choices and the functioning of the economy as a whole. A well-known approach is the neo-classical approach: facing scarcity of resources, all individuals make choices that reflect their preferences and maximise the individual welfare. Exchange occurs in the 'market'. The market provides a signal to the individuals through prices. Price signals are the mechanism that allocates resources into the most profitable use.

In the neo-classical model there are no 'institutions' except for the market. Coase (1960) even showed that when there are externalities (when one persons' actions or behaviour affect another persons' well-being), the creators and victims of externalities can internalize them by private contracts. This will result in an efficient use of resources and thus externalities can be corrected by the market, provided that property rights are defined and that there are no transaction costs. Coase's theorem influenced the neo-classical view of non-market institutions. It is only when the market mechanism cannot reach an efficient allocation of resources (e.g. when property rights are ill-defined) that non-market institutions (e.g. state regulations) can play a role. In other words, non-market institutions are a response to market failures and are inversely related to market imperfections. *This view lends support to the idea of non-market institutions as substitute for markets.*

New institutional economics attempts to provide insight into those non-market institutions. As many resources in our economies are closer to common property rather than exclusively owned, new institutional economics drew the attention to the importance of property rights, rules, and regulations that need to be defined and enforced. Property rights, rules, and regulations, determine economic performance through their impact on (reduction of) transactions.

New institutional economics attempts to explain why institutions that produce poor economic (and political) performance can emerge and persist.

Game-theoretical analysis applied to institutions has shown that in many strategic situations there are multiple (both efficient and inefficient) equilibria, implying that outcomes are not uniquely pre-determined. In particular, the following points are worth mentioning (Aoki, 1996).

1. Interdependence of institutions and coherence of institutional arrangements

Games played in the economy are inter-linked from the most local (trade) games to the most inclusive (political games involving the state), in the sense that players simultaneously play

multiple games. Thus viable institutions in the economy may be mutually inter-dependent. Also, once selected, an institution may become sustainable because of sunk costs (costs that cannot be recovered), even if the initial conditions allowing for the emergence of the institution disappear.

2. *Sub-optimality of institutional arrangements*

Since exogenous parameters do not uniquely determine the selection of the equilibrium (and thus of the institutional arrangements), there is no guarantee that institutional arrangements are efficient. The adoption of efficient institutional arrangements can be hindered by institutional path dependence.

3. *Path dependency*

Which path will be selected may depend on historical/geopolitical accidents, expectations and equilibrium play in the game below the explicit organizational level (cultural beliefs and value).

4. *Gains from cross-economy institutional diversity*

Since a universal institutional arrangement (e.g. neo-classical complete markets) does not exist, there are gains from a diversity of institutional arrangements across economies that may be made available from trades, mutual learning, institutional transplants.

5.4 Culture and institutions: two inter-linked concepts?

‘Culture’ and ‘institutions’ are overlapping and interdependent concepts.

On the one hand, if we accept the definition of institution as the rules of the game – both formal rules (laws) and informal constraints (conventions, norms of behaviour and self-imposed codes of conduct), it is possible to classify culture as a form of institution.

On the other hand, faced with different possible institutional arrangements, cultural and social factors impact institutional selection. Greif (1994, 1995) studies the Maghribi and Genoese traders of the late medieval period and concludes that that different cultural heritages led to diverse trajectories of societal organisation (led to different institutional arrangements). ‘Distinct cultures provided different focal points while distinct social processes provided different initial networks for information transmission among the Maghribi and the Genoese traders, leading to the emergence of distinct institutions in fundamentally the same situation.’ (Greif, 1995, p. 20).

Cultural beliefs are one important component of culture. ‘Cultural beliefs are the ideas and thoughts common to several individuals that govern interactions – between these people, and between them, their gods, and other groups – and differ from knowledge in that they are not empirically discovered or analytically proved’ (Greif, 1994, p. 915).

Intuitively we can understand that cultural beliefs will affect economic outcomes (see Key-Word 2 *Culture*). However, the analysis of how cultural beliefs interact with institutional arrangements is not obvious. The work of Greif has suggested that cultural beliefs provide linkages among games. In other words, cultural beliefs affect decision making in subsequent strategic situations.

Classical game theory does not treat much about linkages among games or about mappings from an equilibrium in one game to that of another game. Yet Greif has found, after an unexpected change in the rules of a game, the selection of the equilibrium in that game to have predictable relations with the equilibrium that prevailed prior to the change. In particular, expectation associated with past equilibria were a good predictor of the expectations that

prevailed following an exogenous change in the rules of the game. In other words, these expectations became a cultural element- cultural beliefs - as they transcended the original game in which they had been crystallised. These expectations then become the initial conditions for selection of a strategy in subsequent games. The cultural beliefs co-ordinate expectations and provide focal points for the selection of a new equilibrium.

References

- Aoki M., (1996), *Comparative Theory of Organizations and Systems*, Course material Stanford University.
- Buchanan J.M., (1997), *Constitutional Economics*, Oxford University Press.
- Coase R., (1960), The Problem of social Cost in *Journal of Law and Economics*, vol. 3, pp.1-44.
- Elster J., (1989), *The Cement of Society: a Study of Social Order*, Cambridge University Press.
- Furnboter E., Richter R. (eds.), (1991), *The New Institutional Economics*, Texas University Press.
- Greif A., (1994), Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on collectivist and Individualist Societies, *Journal of Political Economy*, Vol 102 no 5, pp. 912-950.
- Greif A.,(1995), *Micro Theory and Recent Developments in the Study of Economic Institutions through Economic History*, prepared for a symposium on Economic History in the Econometric Society, Seventh World Congress, Tokyo.
- Hurwicz L., (1993), *Toward a Framework for analyzing Institution and Institutional Change*, in Bowles S., Gintis H., Gustafsson B. (eds), *Markets and Democracy*, Cambridge University Press, pp. 51-67.
- Kasper W., Streit M., (1998), *Institutional Economics, Social Order and Public Policy*, Edward Elgar.
- North D., (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press.
- North D., (1991), Institutions, *Journal of Economic Perspectives*, 5, pp. 97-112.
- Schotter A., (1981), *The Economic Theory of Social Institutions*, Cambridge University Press.
- Sugden R., (1989), Spontaneous Order, *Journal of Economic Perspectives*, 3, pp. 85-97.
- Williamson O., (1985), *The Economic Institutions of Capitalism: Firms, Market and Relational Contraction*, Free Press.

6. GLOBALISATION

“In the Cold War the most frequently asked question was: How big is your missile? In globalisation, the most frequently asked question is: How fast is your modem?”, *Thomas Friedman- The Lexus and the Olive Tree (1999)*

6.1 Definition

The term globalisation was used for the first time in 1968 by Marshall McLuhan in his famous book *War and Peace in the Global Village*. Analysing the role of television in the unfolding of the events linked to the war in Vietnam, McLuhan showed how the media in the 1960s had begun to play an important part in current affairs by shaping public opinion, and more generally predicted the decisive role which modern communication technologies were to play in the world in the acceleration of progress.

The word was taken up again by Theodore Levitt in 1983, in his article *The Globalisation of Markets*, to describe the vast changes which have taken place over the past two decades in international economy with the convergence of world markets¹⁵. According to Raghavan (1995), the term globalisation “is also being used synonymously for 'liberalisation' and 'greater openness' of economies – implying both liberalisation of the domestic economy and external liberalisation.”

Advances in transport, communications and information technology are a determining factor in the globalisation process. On the subject, Mr Renato Ruggiero, former WTO chairman and ex-Italian Minister of Foreign Affairs - speaking at the Telecom-95 to heads of the major telecommunications enterprises of the G-7 countries - said that while “liberalisation of capital and trade flows is creating a global economy, the liberalisation of telecommunications, which can bring high quality, medical, education and business services to every village in the world, will globalise human society itself.”

The pre-eminent role of *information* in the globalisation process has also contributed to the concept's being gradually extended from the economic sphere to several political, sociological and cultural phenomena, and one which affects several areas, including human rights, citizenship, democracy, local and global identities, multiculturalism and the “clash of cultures”. It follows that globalisation implies a world system in which different cultures are interconnected on several levels. In this sense Held (1991) describes globalisation as “the intensification of world-wide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice-versa”.

The process of globalisation does imply the profound *restructuring* of economic and labour markets and consequently of political systems. Suffice it to consider the effect that the liberalisation of the economy is having in the countries of the Eastern block and China. The fall of the Berlin wall triggered a complete reorganisation of social and political equilibrium, the far reaching consequences of which are still unforeseeable. The collapse of the previous system has left a situation of political instability in the Balkans and former Soviet Union, with the result that dramatic conflicts have flared-up, although the feared-for mass invasion of Europe on the part of millions of migrants from the East never happened.

¹⁵ In Latin countries the term *mondialisation* is also often used in lieu of globalisation (Nadoulek, 2001) and although some authors - particularly in the Francophone world - distinguish between the two, attributing a more critical meaning to the first, etymologically speaking they are synonymous, and in our opinion there does not appear to be enough evidence that a very clear distinction between them can be made.

Along with these political changes, the debate embraces a wide range of issues, attracting considerable attention from media and public opinion. Worries concern raising inequality across countries in the world, the exploitation of human resources, the cultural homogenisation, pollution, exploitation of natural resources and the sale of unsafe products.

6.2 Globalisation in a historical perspective

The great debates over crucial aspects of contemporary reality have always evoked the problem of historical precedents. The same happened also for the discussion around globalisation.

If the term globalisation is relatively new, the historiographic concept closest to globalisation is to be considered the “**world-economy**”, different from the “world economy” (without hyphen). Braudel (Braudel, 1979) takes as examples antique Phoenicia, Rome, Christian Europe, Islam, China, India as demonstration of globalisation under the form of empires.

Recently, Jacques Le Goff discussed the ancient forms of globalisation (Le Goff, 2001) using the example of the **Roman empire**. Indeed, Romans had the impression that they were expending their dominance to the entire inhabited world, so was the idea of mondialisation or globalisation. The Roman empire was seen as the government of this world: “ecumene”. Rome dominated this empire during centuries and brought peace to it, often obtained by war. It also spread the feeling of being part of a “universal citizenship” amongst some inhabitants of this Roman space and brought the formation of a juridical space with its own rules and laws. This form of globalisation is also at the origin of several problems: the one of the language unification is an example we are still aware of today with the domination of English. Moreover, “Romans” or “globalised Romans” were often unable to integrate new citizens in their space which lead to an exploitation or even an expulsion of these “barbares” or “anti-global citizens” as we might call them nowadays. Other, more recent examples of world-economy include Sixteenth Century Mediterranean, Russia until Peter the Great, Turkish Empire until the end of Eighteenth Century.

Some key concepts arise from the historical analysis:

- Network: globalisation tends to create networks and build on them to prosper.
- Development: globalisation implies a certain form of evolution and is a phenomenon which conquers spaces and societies. For example, colonisation of America not only brought a catastrophic result on health of “globalised” population by diffusing alcohol, diseases, microbes and perturbing the previous biological equilibrium, but also in a second period, developed hygiene and medicine practices (particularly true in Africa). In many cases, mondialisation also brought the diffusion of school, education, and to a certain level, knowledge.
- Communication: the tendency to globalise is stimulated by techniques and tools of communication (see section 4 on *Communication*).
- Success: in the phenomenon of globalisation there exists an idea of success, or of creating something (an idea, a religion, a juridical system, etc.) to succeed.

On a more negative side, there are also two big flaws linked with globalisation:

- Rape and destruction of previous cultures. The example of religion which is an important component of globalisation is striking: globalisation has taken a universal character with religions which often slides towards intolerance and persecution.

- Globalisation exacerbates the opposite situation between poor and rich. Impoverishment is a bad which has almost been unavoidable during globalisation. Mondialisations have raped not only cultures but also history. As an example, many cultures were considered “poor” because based on a non-written history and have therefore been completely cancelled out.

In particular, three characteristics summarise the world-economy:

- Occupation of a certain geographical space, subject to breakage and sudden widening: the Fifteenth-Sixteenth Centuries great geographical discoveries; post-1989 Russia; the recent China widening;
- A centre, represented by one or, for a certain period, two dominant cities (before the exclusion of one of the two poles): Rome, Alexandria, Venice, Genoa in the second-half of Fourteenth Century; London and Amsterdam in Eighteenth Century;
- A division into concentrical areas: centre, semiperipheral areas, periphery.

Braudel (1979) argues that “in every globalisation, there are four essential aspects (or orders): an economic aspect, a social one, a cultural aspect and a political one”. Albeit current debate appears to identify the economic forces as the key driving forces of globalisation, Braudel stresses the fact that older globalisation started essentially as political constructions and not as economic ones (for example China and India and their dependant countries).

Consistently with the objectives of ENGIME, we focus here on the *economic* (measured by *trade*, nations increasingly trade with each other) and *cultural* (measured by *communication*: individuals increasingly communicate with each other at increasingly longer distances) dimensions of globalisation.

6.3 The economic dimension of globalisation

In its economic dimension, globalisation is traditionally measured by the ratio of **world trade** to world GDP (i.e., the more international trade, the more globalisation). The measure captures the degree to which national economies exchange *goods* with each other. An alternative measure used in economic literature is given by the ratio of world foreign direct investment to world GDP. In this case, the stress is on flows of *capital*. In both cases, the variables capture the degree to which national economies are integrated.

Section 6.2 discussed earlier globalisations. In fact, there is still no consensus on when and how modern process of global integration started.

Flynn and Giráldez (1997) reckon that modern globalisation was “born” in the 1570s, by which time trade linked Europe, the Americas, Asia and Africa. Nevertheless, Kevin O'Rourke, of Trinity College, Dublin, and Jeffrey Williamson, from Harvard University, agree that European trade with the rest of the world boomed after 1500. It rose by about 1.1% a year over the next three centuries, probably faster than GDP. The history of the progressive fusion between the different forms of world-economy takes up from Fifteenth to Eighteenth Century. This history occurs through a sequence of “decentralisations” and “re-centralisation” of the different world-economies:

- Second-half of XIV century: polarisation on Venice;
- 1500: decentralisation from Venice to Antwerp;
- 1550-1560: re-centralisation on the Mediterranean Sea (Genoa);
- 1590-1610: decentralisation from Genoa to Amsterdam;

- 1780-1815: decentralisation from Amsterdam to London;
- 1914-1929: decentralisation from London to New York.

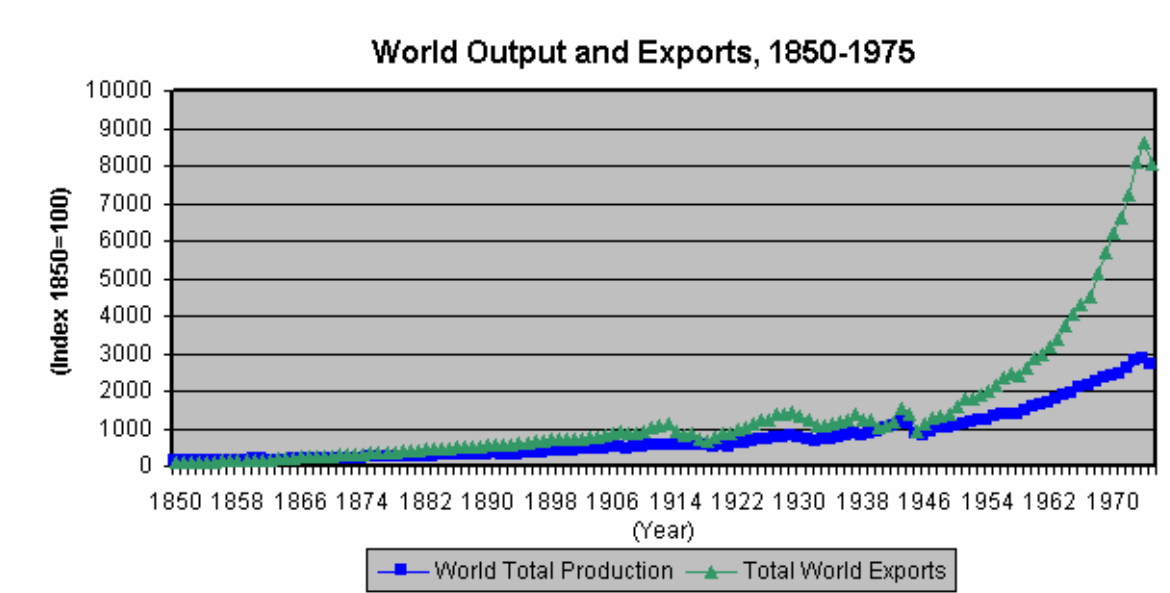
With British economy and empire arising, the first real jump towards globalisation – understood as a coincidence between world-economy and world economy – was completed (Braudel, 1977; Wallerstein, 1974; Id., 1980; Id., 1983).

From 1815, all the indicators show an unprecedented growth in commodities and productive factors **mobility** on world scale: foreign trade development; raising of an international labour market in the shape of international migrations, basically related to non-transferable underused fixed factors (natural resources); international capital transfers.

This early economic world scale unification needed an international payment system (gold standard) rationalising the former precious metals flows from West to East (from Americas to Europe and from here to Asia) as a payment for a reversed commodities flows from East to West (XVI-XVIII Centuries). In turn, the Gold Standard further fuelled exchanges, side by side with a parallel process of foreign trade multilateralisation (commercial treaties with the most favoured nation clause: a GATT/WTO forerunner system)¹⁶.

Chart 6.1 below shows world exports relative to world output from 1850 to 1975. It appeared that globalisation (as measured by world trade) started to be significant after WWII even though there were spurts of globalisation before this date –in particular, in the 1920's before the economic depression of the 30's.

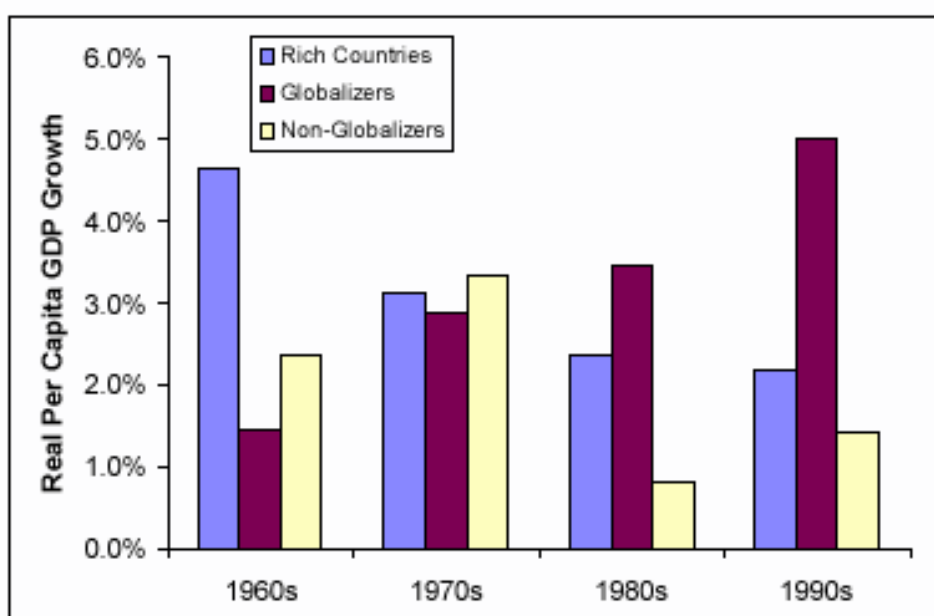
Chart 6.1: World Outputs and Exports, 1850-1975



¹⁶ It has to be noted that, aside with this kind of **capitalist unification** between XV-XVIII Centuries, with a certain advance and also delay with respect to economic chronology the world microbiological unification went forward (XIV-XIX Centuries: plague and cholera above all) (Le Roy Ladurie, 1973). This kind of unity, based on biotic exchanges, bases itself on a more basic unity, which gives account of the simultaneous character of some great economic cycles on a world scale: the long-period climate changes (Braudel, 1967; Le Roy Ladurie, 1967; Id., 1970).

Recent debate on globalisation has focused on the relationships between globalisation and the income divide between rich and poor countries. Recently, economist have started to look empirically at those relationships. Dollar and Kraay (2001) identify a group of developing countries that have seen the largest increases in trade and significant declines in tariffs over the past 20 years as the “globalisers” and compared their economic performances over 1980-2000 with those of the developing countries that remained closer to external trade (“non-globalisers”). Chart 6.2 below shows that growth rates of “globalisers” have accelerated since the 1970’s even as growth in the rich countries and the rest of the developing world has declined. This evidence would suggest that increasing economic integration is bringing about less inequality across countries.

Chart 6.2: Real per capita GDP growth in rich and developing countries, 1950-2000



Note: Rich countries refers to the 24 OECD economies before recent expansions, plus Chile, Hong Kong, Korea, Taiwan, and Singapore. Globalizers refers to the top one-third in terms of their growth in trade relative to GDP between 1975-79 and 1995-97 of a group of 72 developing countries for which we have data on trade as a share of GDP in constant local currency units since the mid-1970s. Non-globalizers refers to the remaining developing countries in this group. Averages decadal and are population-weighted. Unweighted averages and alternative definitions of globalizers are reported in Table 3. Variable definitions and data sources are reported in Table 8.

Source: Dollar and Kraay, 2001

6.4 The cultural dimension of globalisation

A current criticism raised against globalisation concerns the dangers of *cultural homogenisation* and of destruction of local and national identities implied in the globalisation process, seen as a new form of cultural imperialism imposed by the West through economic domination.

Indeed, there are some signs that diversity is diminishing. Up to half of the approximately 6,500 languages now spoken are already endangered or on the brink of extinction, and linguists estimate that a language dies somewhere in the world every two weeks. Much of the remaining linguistic diversity is carried by small communities of indigenous and minority people. Some even predict that we may lose over 90% of the world's languages during the next century. Already more than a quarter of the world population (1.7 billion people), now speak English.

However, many scholars are convinced that the globalisation process already contains within it the seeds to counteract this kind of action, in that a dialectic tension exists between the global and the local, and the process in itself tends in any case to reproduce diversity. In addition, the globalisation process would allow the emergence of local identities, previously suppressed in the name of national homogeneity. "... the conceptual language which would capture the culture of the capitalist world -economy is a task yet to be undertaken. (...) (globalisation) Does it imply cultural homogenization, cultural synchronization or cultural proliferation? What does it say about the direction of cultural flows? Is it the interaction of the local and the global, with the emphasis on the former, or vice versa?" (King, 1998). The latter hypothesis is reinforced by the conventional wisdom in trade theory suggesting that openness will lead to specialisation and geographic fragmentation of economic activities. Moreover, we observe that global cities are melting pots of cultures, languages, economic activities.

Despite the hot debate, many questions still remain open:

- Which forces in the on-going globalisation process tend to preserve *cultural* diversity or, on the contrary, to induce *cultural* convergence?

Several mechanisms may be at work here. For example, increased trade integration with other countries may affect over time the evolution of preferences and cultural traits of domestic individuals and lead to preferences' convergence of the participating countries. Secondly, the structure of "role models" young generations are exposed to may affect cultural dynamics. Innovation and diffusion of information technologies make information faster to diffuse. Individuals geographically far apart from each others are becoming more exposed to new ideas, new ways of thinking and behaving. That effect may considerably enlarge the set of "role models" people are exposed to and local cultural dynamics. Thirdly, transport costs of people are reduced and migration increases. With enhanced facility to move across regions and countries, individuals are more likely to get in contact with other individuals with different cultural traits. This is going to affect intraregional as well as interregional cultural dynamics.

Recent theoretical work and models on population dynamics, social interactions and cultural transmission (Bisin-Verdier 2000a, 2000b, 2000c; Brock and Durlauf, 2000) have investigated how cultural traits do evolve in a population of individuals because of intergenerational cultural transmission, social interactions and socialisation processes. These models integrate aspects of evolutionary anthropology, statistical physics and economics. At the current stage, they provide useful insights to understand elements driving the dynamics of individual preferences and the persistence of cultural diversity or homogenisation.

- Will these forces themselves feed back on the process of globalisation?

We have seen above how the process of globalisation has the potential to affect cultural dynamics. In turn, cultural dynamics fostered by the globalisation may feed back into the process of globalisation itself. Some examples are discussed below.

Firstly, potential trade conflicts in the "cultural industries" may set it and feed back into cultural dynamics. For example, the expansion of US movie, music and TV production into Europe may cause a reaction in those industries at the European level, triggering a revival of European

activities and cultures. In the same way, the cultural perception of migrants by natives may trigger a renaissance of local (as well as migrants') culture and identities.

Secondly, deeper and deeper international integration means that countries start now to negotiate on harmonisation of new instruments like regulations, standards and norms which to some extent do reflect at the local level differences of social and cultural preferences. The persistence of cross country differences in these preferences may feed conflicts against the process of globalisation itself (e.g., anti-globalisers civil society movements).

Trade, cultural and migration policies appear to be more and more interdependent.

What will be the impact of this for Europe? Are trade and migration policy complements or substitutes to cultural policy? How should one think about the organisation of global governance taking into account the constraints implied by cultural dynamics? In turn, is there some kind of cultural policy which may help alleviate problems generated by trade policy?

Obviously, the extremely significant role played by the *media* in this new context cannot be overlooked, along with the risk of the possible manipulation of information on the part of increasingly powerful multinational companies owned by individuals who are not controlled politically. On the other hand, the increasing availability of information concerning the world situation, with its areas of injustice and violation of human rights, can serve to stimulate growing awareness and responsibility in this respect on the part of the world community. Again, also in this context the opportunities offered by globalisation should not be underestimated, in that it entails an even more active social and political participation in which the responsibility of every citizen extends well beyond the boundaries of their local community or country, and extends to the entire planet. In this sense globalisation really does imply the blurring of boundaries, rendering obsolete the idea of nation states as separate political units.

In this context mention should also be made of the role of *migration flows* in increasing the interaction of peoples from different countries - thus forcing the redefinition of the idea of citizenship itself - and in producing new and emerging phenomena such as the new ethno-national Diaspora. Globalisation, therefore, also brings with it the need to deeply rethink many of our traditional categories, such as those of *ethnie* and state "For quite some time the nation state has been regarded as a norm of state formation, that is to say, as the final stage of an *ethnie's* political autonomy and achievement. Currently, however, in the age of globalisation and transnational connections, the nation state ideal may be regarded as a special case of the relationship *ethnie-state*" (Westin, 1998).

References

- Bisin A., Verdier T., (2000a), A Model of Cultural Transmission, Voting and Political Ideology, *European Journal of Political Economy*.
- Bisin A., Verdier T., (2000b), Beyond the Melting Pot: Cultural Transmission, Marriage and the Evolution of Ethnic and Religious Traits, *Quarterly Journal of Economics*.
- Bisin A., Verdier T., (2001c), The Dynamics of Preferences and the Economics of Cultural Transmission, *Journal of Economic Theory*.
- Braudel F., (1967), *Civilisation matérielle et capitalisme (Xve-XVIIIe siècle)*, Paris, A. Colin.
- Braudel F., (1977), *Afterthoughts on Material Civilisation and Capitalism*, Johns Hopkins University Press.

- Braudel F., (1979), *Le Temps du monde de sa Civilisation matérielle - Economie et Capitalisme, Xve-XVIIIe siècle*.
- British Telecommunications, (January 2000), *Variety and values: a sustainable response to globalisation?*.
- Brock W.A., Durlauf S.N., (2000), *Growth Economics and Reality*, University of Wisconsin, USA.
- Dollar D., Kraay A., (March 2001), *Trade, Growth, and Poverty*, Development Research Group, The World Bank. <http://www.worldbank.org/research/growth/pdfiles/Trade5.pdf>.
- Flynn D. O., Giráldez A., (1997), *University of the Pacific, Mines of Silver and Gold in the Americas*, edited by Peter Bakewell, in *An Expanding World: The European Impact on World History*, pp. 1450-1800, vol. 19, series edited by A. J. R. Russell-Wood.
- Held D., ed., (1991), *Political Theory Today*, Stanford University Press, Stanford, California.
- Held D., McGrew A., (2000), *The Great Globalization Debate: An Introduction*, in *The Global Transformations Reader*, Cambridge, Polity Press.
- King A.D., (1998), *Introduction: Spaces of culture, Spaces of Knowledge*, in King A.D., ed., *Culture, Globalisation and the world-system*, University of Minnesota Press.
- Le Goff J., (15 November 2001), Heurs et malheurs des mondialisations, *Le Monde*.
- Le Roy Ladurie E., (1967), *Histoire du climat depuis l'an mil*, Flammarion, Paris.
- Le Roy Ladurie E., (1970), *Pour une histoire de l'environnement: la part du climat*, in *Les Annales*, n. 25.
- Le Roy Ladurie E., (1973), *Le Territoire de l'Historien*, Gallimard, Paris.
- Levitt T., (May 1, 1983), The Globalisation of Markets, in the *Harvard Business Review*.
- McLuhan M., Fiore Q., (1968), *War and Peace in the Global Village*, Hardwired, San Francisco.
- Nadoulek B., (13 June 2001), *Les enjeux de la mondialisation*, in *Vox Latina*, Paris, online at www.voxlatina.com.
- O'Rourke, Kevin H., Williamson J.G., (March 2001), *After Columbus: Explaining the Global Trade Boom 1500-1800*, NBER Working Paper No. W8186.
- Raghavan C., (1995), *What is globalisation* (extract from a lecture delivered at the University of Lausanne), online at www.twinside.org.sg/title/what-cn.htm.
- Stein W., (1974), The Modern World System, in *The Economist*, 26th September 2001.
- Verhofstadt G., (28 September 2001), The paradox of anti-globalisation, in *The Guardian*.
- Wallerstein I., (1974), *The Modern World-System. Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*, Academic Press, New York.
- Wallerstein I., (1980), *The Modern World-System. II. Mercantilism and the Consolidation of the European World-Economy, 1600-1750*, Academic Press, New York-London.
- Wallerstein I., (1983), *Historical Capitalism*, Verso Editions, London.

Westin C., (1998), *Temporal and Spatial Aspects of Multiculturalism: reflections on the meaning of time and space in relation to the blurred boundaries of multicultural societies*, in Baubock R., Rundell, J. eds. (1998), *Blurred Boundaries: Migration, Ethnicity, Citizenship*, Aldershot, Ashgate.

7. SOCIAL CAPITAL AND TRUST

7.1 Definition

The origin of the concept of *social capital* can be dated back to Jacobs (1961), or even to Banfield (1958), who attributed the underdevelopment of Southern Italy to the lack of social trust outside the strict family circle. More recently, social capital was defined independently by Pierre Bourdieu and James Coleman in the 1980s, as being ‘the social ties or membership of particular communities that made resources, advantages and opportunities available to individuals’. Bourdieu’s analysis focused on the benefits accruing to individuals by virtue of participation in groups, and on the deliberate construction of sociability for the purpose of creating this resource. He defined the concept as ‘the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance or recognition’. His definition makes clear that social capital can be broken into two elements: first, the social relationship itself that allows individuals to claim access to resources possessed by their associates, and second, the amount and quality of those resources.

Perhaps the most influential formulation of the concept of social capital, nevertheless, is that of sociologist James Coleman. Coleman defines social capital as ‘a variety of entities having two characteristics in common: They all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure ...’. He used the example of Jewish diamond merchants of New York to illustrate the concept. The merchants were able to have their diamonds appraised through their local networks without the need to resort to costly legal contracts to safeguard against being cheated, because of the strength of the dense ties between their community members and the ready threat of exclusion if trust was violated. Thus, the traders were able to increase their economic advantage because of their social networks.

Recently Putnam has popularised the concept of social capital as ‘features of social life - networks, norms and trust - that enable participants to act together more effectively to pursue shared objectives’. This formulation has been tremendously influential in the spate of empirical work that has appeared over the last few years. This work, particularly among political scientists and economists, focuses on the relationships among associations, trust and other attitudes and norms, or, alternatively, between one or both of these sets of variables and social, economic and political outcomes.

Trust may be defined as ‘... the belief that the other party will not show opportunistic behaviour in vulnerable circumstances’. Opportunistic behaviour is here interpreted as in a game theory context (the prisoner's dilemma) i.e. ‘self-interest with guile’.

In a modern market economy innumerable transactions take place everyday. Quite often the underlying contracts are incomplete, which makes the parties vulnerable: one party may cheat on the other. A high level of interpersonal trust is supposed to reduce enforcement and transaction cost. Laws and rational behaviour are not enough to ensure a properly functioning market economy. At least a minimum reservoir of trust, moral standards and reciprocity must prevail. Given the resources of an economy (physical capital, human capital, natural endowments, technology, ...) trust allows a more efficient use of these resources, thus increasing its economic performance. Trust may be viewed as a lubricant of the market system.

A distinction can be made between bonding and bridging trust. Bonding trust is generated by (intensive) contacts between people of the same family, tribe, class, ethnic group or local community. Bridging trust is more general and abstract and requires no personal acquaintances.

Bridging trust may be enhanced by education, participation in associations and contacts with a correct government and civil service.

Different authors disagree on the precise relationships between *social capital* and *trust*. Jacobs (1961) defines social capital as ‘neighbourhood networks’, while Putnam (1993) as ‘feature of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives’. Coleman (1990) see trust as a product of social capital, while Fukuyama (1995, 1997) equates trust with social capital

In the mid-nineties the World Bank launched the **Social Capital Initiative** on defining, monitoring and measuring social capital with the triple objective of 1) assessing the impact of initiatives to strengthen social capital on project effectiveness; 2) demonstrating that outside assistance can help in the process of social capital formation; and 3) contribute to the development of indicators for monitoring social capital and methodologies for measuring its impact on development. The initiative seems to favour the Putnam approach stressing horizontal associations (networks of civic engagement, the church society) and trust in institutions and among people.

Of particular interest here is the set of indicators that the Initiative has developed for empirical studies (Table 7.1) . Indicators of horizontal associations take a microperspective and typically have been collected for analysis within a country. The other sets of indicators have been calculated at the national level and have been used in cross-country research.

Table 7.1: Social capital indicators (World Bank)

<i>Horizontal associations</i>	
Number and type of associations or local institutions	Extent of trust in trade unions
Extent of membership	Perception of extent of community organisation
Extent of participatory decision-making	Reliance on networks of support
Extent of kin homogeneity within the association	Percentage of household income from remittances
Extent of income and occupation homogeneity within the association	Percentage of household expenditure for gifts and transfers
Extent of trust in village members and households	Old-age dependency ratio
Extent of trust in government	
<i>Civil and political society</i>	
Index of civil liberties (Gastil, Freedom House)	Index of democracy
Percentage of population facing political discrimination	Index of corruption
Index of intensity of political discrimination	Index of government inefficiency
Percentage of population facing economic discrimination	Strength of democratic institutions
Index of intensity of economic discrimination	Measure of "human liberty"
Percentage of population involved in separatist Movements	Measure of political stability
Freedom House index of political rights	Degree of decentralisation of government
Freedom House index of political freedoms	Voter turnout
	Political assassinations
	Constitutional government changes
	Coups

<i>Social Integration</i>	
Indicator of social mobility	Other crime rates
Measure of strength of "social tensions"	Prisoners per 100,000 people
Ethnolinguistic fragmentation	Illegitimacy rates
Riots and protest demonstrations	Percentage of single-parent homes
Strikes	Divorce rate
Homicide rates	Youth unemployment rate
Suicide rates	
<i>Legal and governance aspects</i>	
Quality of bureaucracy	Repudiation of contracts by government
Independence of court system	Contract enforceability
Expropriation and nationalisation risk	Contract-intensive money (currency/ M2)

7.2 Social capital, trust and the economy

Putnam (1993) identifies the stock of *social capital* as a determinant of institutional performance across northern and southern Italian regions. He suggests that the different stock of social capital could also have contributed to the differences in economic development patterns across the two groups of regions. Trust, co-operative norms and associations within groups fall within the definition of social capital he uses. According to Fukuyama (1995, 1998), the well-being of nations depends on the size of the reservoir of *trust*: 'one of the most important lessons we can learn from an examination of economic life is that a nation's well-being, as well as its ability to compete, is conditioned by a single pervasive cultural characteristic: the level of trust inherent in society'.

The main reason underlying this conclusion is that quite often contracts are incomplete, which makes the parties vulnerable: one party may cheat on the other. A high level of interpersonal trust reduces the enforcement and transaction cost. Laws and rational behaviour are not enough to ensure a properly functioning market economy. At least a minimum reservoir of trust, moral standards and reciprocity must prevail. Given the resources of an economy (physical capital, human capital, natural endowments, technology, ...) trust allows a more efficient use of these resources, thus increasing its economic performance. Trust may be viewed as a lubricant of the market system. (Fukuyama, 1995).

Some efforts have been made in the economic literature to strengthen the theoretical framework and to find empirical support to these ideas. La Porta *et al.* (1997) document a remarkable correlation between the trust prevailing in a country and the presence of big corporations. Knack and Keefer, (1997) and Temple and Johnson (1998) have tested the relationships between trust and norms, civic co-operation and economic growth, largely confirming the suggestion of Putnam (1993). Guiso *et al.* (2000) find close correlation between the degree of social capital and that of financial development across Italian provinces.

The question of *how* to re-build social capital in regions of poor economic performance and low levels of trust has not yet been tackled by the literature. Even seminal work on the topic, including that of Putnam and Coleman, tentatively avoid the task of addressing policy measures in the reconstruction of productive social capital where amoral familism, individualism and criminality have prevailed. The difficulty in addressing such issues lies in the dynamics of a vicious cycle of perverse social capital, that tends to reproduce and institutionalise practices of familism, individualism and criminality. Nevertheless, there are regional and urban case studies

emphasising the possibility and means of reversing such dynamics and re-building productive forms of social capital (Fox, 1996; Heller, 1996).

Despite the intellectual appeal of the concepts of trust and social capital and the relative strong impact they had on the political and cultural debate, they have been strongly criticised (mainly by economists) because of the scarce empirical content and weak theoretical foundations (Solow, 1995). Putnam (1993) admits that the mechanisms through which 'the norms and network of civic community contribute to economic prosperity' need further investigations.

References

- Banfield E.C., (1958), *The Moral Basis of a Backward Society*, The Free Press, Gencoe.
- Bourdieu P., (1985), *The Forms of Capital*, Chapter 9 in Richardson J.G. (ed.) *Handbook of Theory and Research for the Sociology of Education*, Greenwood Press, Connecticut.
- Coleman J., (1988), Social Capital in the Creation of Human Capital, *American Journal of Sociology* 94 (supplement), pp. 95-120.
- Coleman J., (1990), *Foundations of Social Theory*. Harvard University Press, USA.
- Fox, J. J., Jayathirtha C., (1996), *Home Ownership and the Decision to Overspend*. *Financial Counseling and Planning*, 7, pp. 97-106.
- Fukuyama F., (1995), Social Capital and the Global Economy, *Foreign Affairs*, Sep.-Oct., pp. 89-103.
- Fukuyama F., (1995), *Trust: the Social Virtues and the Creation of Prosperity*, Hamish Hamilton.
- Fukuyama F., (1997) *The End of Order*, The Social Market Foundation, London.
- Gambetta D. ed., (1988), *Trust: making and breaking cooperative relations*, Blackwell.
- Grootaert C., (1998), *Social Capital: the Missing Link*, the World Bank.
- Guiso L., Sapienza P., Zingales L., (2000), *The Role of Social Capital in Financial Development*, CEPR Discussion Paper 2383.
- Heller F., (1996), *The Role of Social Science in the Study of Economic and Cultural Transformation* in Pat Joynt and Malcolm Warner (Eds.) *Managing Across Cultures: Issues and Perspectives*, International Thomson Business Press, London, UK.
- Jacobs J., (1961), *Vita e Morte delle Grandi Citta*, Edizioni Comunita, translated by G. Scattone from J. Jacobs, (1961), *The Death and Life of Great American Cities*, Vintage, New York, USA.
- Knacks S., Keefer P., (1997), Does Social Capital Have an Economic Pay-off? A Cross-country Investigation, *Quarterly Journal of Economics*, Nov., pp. 1251-1288.
- La Porta R. et al., (1997a), *Social Capital and Urban Development*, the World Bank, USA.
- La Porta, Rafael, et al, (1997b), Trust in Large Organizations, *American Economic Review*, pp. 333-38 Vol. 87 (2), American Economic Association.
- Misztal B., (1996), *Trust in Modern Societies*, Blackwell.
- Portes A., (1998), Social Capital: Its Origins and Applications in Modern Sociology, *Annual Review of Sociology* 24, pp. 1-24.

Putnam R., (1993), *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press.

Putnam R., (1995), Bowling Alone: America's Declining Social capital, *Journal of Democracy*, 6,1 (Jan.), pp. 65-78.

Solow R., Hahn F., (1995), *Critical Essay on Modern Macroeconomic Theory*.

Temple J., Johnson P.A., (1998), Social Capability and Economic Growth, *Quarterly Journal of Economics* , vol 113. no. 3, pp. 965-990.

The World Bank , (April 1998), *Social Capital Initiative*, Working Paper no. 1 .

8. CONFLICT

8.1 Definition

The broader definition of conflict defines it as being a serious disagreement or argument. It can be a prolonged armed struggle, a state of mind in which a person experiences a clash of opposing wishes or needs or a serious incompatibility between two or more opinions, principles or interests.

The interpretation of conflict, and therefore the role attributed to conflicts within a society, has gone from two opposite extremes: At one end, conflict is a social pathology, which alters the equilibrium and harmonious development of social life, thus prioritising the avoidance of conflicts; at the other end, conflict is the expression of a positive interaction between individuals and social groups.

At the basis of these positions is the unresolved dispute of whether a society should be conceived as an orderly mechanism, in which everything occurs smoothly, according to a well established plan, or society should be viewed as a place in which individuals act on the basis of their own free will and creativity, remaining respectful of others. It follows that the latter includes conflicts as a natural part of human interaction, leading to a state in which conflict is actually the creative germ of society, nourishing the possibility of freedom and invoking the need for a rational system of control and domination (R. Dahrendorf, 1971).

It is not easy to draw a line between those who consider harmony and equilibrium implicit to the functioning of a society for which conflicts present a threat, and those for whom conflict is not only the norm in society, but a catalyst for positive changes therein. Some general categories, however, can be devised, and usually Comte, Spencer, Pareto, Durkeim are listed in the former group, and Marx, Sorel, Stuart Mill, Simmel and Dahrendorf in the latter.

Two theoretical strands may be identified within the group claiming conflict as a positive expression within societies—Marxists and liberals (Stuart Mill). According to Marx (*II Manifesto*, 1848), class conflict is a powerful political instrument through which dramatic social change may occur, whose outcome as the subversion of class conflict inherent to the capitalist system, brings about social equality. On the other hand, liberals emphasise the value of conflict as a key element of healthy political life, the necessary proof of the capacity to exercise freedoms in society, whose absence is often interpreted as an expression of coercion on the part of the State.

On another token, conflict can be defined as an extreme form of competition where contenders seek to disable or destroy opponents or even convert them into a supply of resources. Conflict needs not always to be violent but can take the form of industrial or legal conflicts. In a world of business, a firm might find ways of sabotaging competing enterprises without actually assassinating their executives. Nevertheless, warfare serves well as a convenient metaphor for strife and contention generally (Hirshleifer, 2001). Examples of conflictual interactions are “hot” and “cold” wars¹⁷, lawsuits, strikes, redistributive politics and family rivalries.

In his “Manual of Political Economy”, 1927, Pareto wrote: “The efforts of men are utilised in two different ways: they are directed to the production or transformation of economic goods, or else to the appropriation of goods produced by others” [1971 (1927), p. 341]

¹⁷ According to “The New Oxford Dictionary of English”, war is defined as: “a state of armed conflict between different nations or states or different groups within a nation or state”. Terrorism is instead defined as “the use of violence and intimidation in the pursuit of political aims”.

This is the principle of the race: either you run faster, either you trip up your opponents. The first aims at producing more useful goods and services for exchange with other producers, the second tries to appropriate a larger slice of the existing production. In economics, the first way of making a living, i.e. technology of production has been widely developed, whereas the second way, i.e. technology of struggle has been given less attention. Nevertheless, references to wars and conflictual alterations do exist amongst classical references and specialised literature displays relevant developments.

Conflict theory can help explain not only the size and shape of nations, but the outcomes of competition in all aspects of life: social classes struggles, political factions and ideologies, management and labour, contenders for licences and privileges (“rent-seeking”), plaintiffs and defendants in law suits, husband and wife, etc.

Struggle and conflict are obviously costly and inefficient. Yet some observers have seen in the “conflict in Nature” that some conflicts can benefit the whole “system”: for example, the predator eliminating the infirm and the unfit, or male rams fighting for sexual access helping to improve the breed. Nevertheless, these types of conflicts on the human level are rarely benefiting all participants.

Still, the concept of conflict viewed in a wider perspective includes several aspects, not all of which negative. On the one hand conflict is seen as a lack of harmony, which as such undermines a well-ordered society and should therefore ideally be eliminated. On the other hand, there is the conception of conflict as a necessary, and therefore positive, stage towards achieving a new order. This is the example of competition on the market, where conflicting interests can lead to a positive race which fuels growth.

One of the most significant theoretical contributions in the latter sense, and that which has most influenced later thinkers in this respect, is Hegel’s philosophy of the state, much of which focuses around the idea of the opposition between the Finite and the Infinite, and of the dialectical thinking whereby conflict is the spring through which reality develops, passing through Thesis and Antithesis towards a Synthesis (negation as a creative force, which in turn can mean difference, opposition, reflection or relation). As such a conception implies that to cancel conflict is not possible, a well-functioning society therefore is one which is able to manage conflict effectively.

This idea has influenced the thinking of both sociologists and psychologists, including Marx’s class conflict theory and the idea of intra-psychic conflicts in Freud.

However, one of the conflict theories developed from Hegelian philosophy which expresses this concept most stridently, is Carl Schmitt’s, according to which conflict is the essence of the political, as the very nature of politics stems in the opposition of “friends” and “enemies”.

Conflict and its causes

Historians and political scientists offer three traditional issues interpreted as “causes of war”.

- Is war due to the opportunities for material gain at the expense of weaker victims?
- Is war mostly due to hatred and hostility?
- Or is war mainly due to mistaken perceptions of the other’s motives or capacities?

In particular, the *materialistic theory* attributes conflict to competition for resources. Barbarian invasions of civilised cities and empires in ancient times were motivated by consumables, slaves, etc. In contrast, *attitudinal theories* of conflict direct attention to the respective preference functions. The relative weights attributable to genetic versus cultural determinants

attitudes towards conflicts is still an open question. Finally, *informational theories* of conflict emphasise differences of perceptions or beliefs.

Three key elements emerge, which can be interpreted in an economic way as: preferences (hostile preference), opportunities (economic gain) and perceptions (mistaken perceptions).

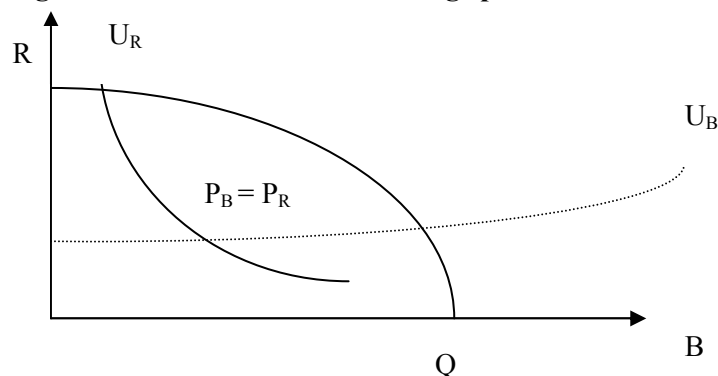
A rational individual taking a decision to engage in a conflict will be subject to those three forces. The decision-maker's preferences, opportunities and perceptions will decide whether to engage in a conflict or not. In turn, preferences, opportunities and perceptions will themselves depend upon the some factors:

- *Preferences* (malevolence or benevolence) is likely to be a function of kinship and shared cultural heritage.
- *Opportunities* may depend on Malthusian population pressures, on economics of increasing returns, the division of labour and the possibility of enforcing agreements.
- *Perceptions* may be influenced by communications, and past and on-going demonstrated hostilities.

Figure 8.1 and 8.2 illustrate how this three forces influence the decision¹⁸.

Axes represent the income of each individual (R and B). The curve QQ bounds the peaceful possibilities or the “settlement opportunity set”. P_B and P_R represent the parties' respective perceptions of the outcome of the conflict. U_R and U_B are the utility curves or utility indifference contours.

Figure 8.1: Statics of conflicts – large potential settlement region



¹⁸ New Pelgrave Dictionary, p. 567, and *ibid*.

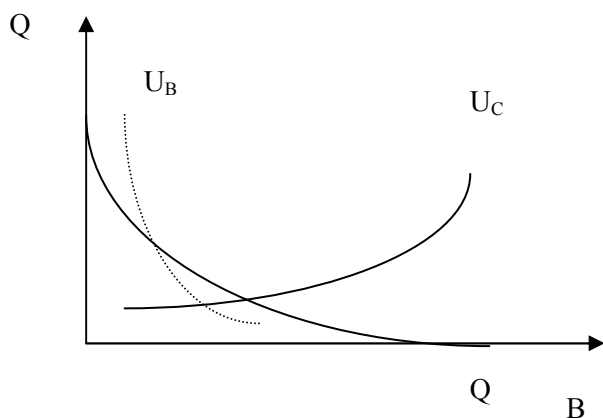


Figure 8.2: Static of conflict – small potential settlement region

The figure on top shows the case when settlement opportunities are complementary and preferences display benevolence on each side and perceptions of returns from conflict are conservative and agreed (P_B and P_R coincide). Individuals B and R are not concerned only with the maximisation of their own income but are concerned about the other's well-being as well. They attached a positive utility to it and that's why utility curves are convex. The potential settlement region, PSR, (shaded in the diagram) is the set of incomes such that both parties regard themselves as doing better by settling than by fighting. When it is large, it implies a high probability of coming to an agreement. It shows a case of "mutual benevolence".

The figure at the bottom is showing a case when each individual is willing to incur a material sacrifice to reduce the other's income. In consequence the indifference curves have now a positive slope and are concave. The PSR is highly reduced and could be eliminated completely. This case is the case of "mutual malevolence".

Neo-classical economics tend to minimise the importance of such divergences. The modern analysis of conflict typically combining the theory of games with the rational-decision economics of choice is represented by three important economists. Schelling (1960), Boulding (1962) and Tullock (1974).

8.2 Conflict and diversity

According to the OSCE High Commissioner on National Minorities ethnic conflict is one of the main sources of large-scale violence in Europe today (OSCE, 2000). Around fifty per cent of Italians reckon that the multiethnic coexistence will be source of social conflict (Corriere della Sera, 1999). Episodes of violence and intolerance related to the presence of cultural and ethnic minorities in cities are daily reported by newspapers.

In conflictual interactions, it would be normal to expect the strong to grow even stronger and the weak weaker. But surprisingly often initially weaker or poorer contenders end up gaining on initially stronger or wealthier opponents. This is called "*the paradox of power*"¹⁹. The key to the paradox of power is a simple economic point: while wealth provides the wherewithal for

¹⁹ Power here is taken to mean the ability to achieve one's ends in the face of rivals.

successfully exploiting a poorer opponent, the initially disadvantaged group is typically rationally motivated to fight harder (Hirshleifer, 2001). In other words, non-conflictual or cooperative strategies tend to be relatively more rewarding for the better-endowed side. This could explain some of the social conflicts arising in cities when immigrants are poorer than the nationals, and are seen as *competitors for housing, jobs and social benefits* (Kempen and Özüekren, 1998). For example, referring to riots in segregated northern towns in Britain in the summer of 2001, much of the Asian population in these towns came to Britain to work in the textile industry. Mill closures in late 1970's early 1980's induced unemployment and poverty in both the whites and Asian communities creating an atmosphere of envy about who was getting what from the public purse²⁰. Social conflicts may also arise when immigrants are seen as a *threat to the alleged cultural homogeneity of the indigenous population* (Faist and Häußermann, 1996).

Economic consequences of ethnic diversity and conflicts have been recently analysed in economic literature. Alesina, Baqir and Easterly (1999) analyse how heterogeneity of preferences across ethnic groups in a city influence the provision of public goods. Results show that the shares of spending on productive public goods are inversely related to the city's ethnic fragmentation even after controlling for other socio-economic and demographic determinants. *Ethnic diversity imply underprovision of public goods*. Abadie and Gardeazabal (2001) analyse the economic effects of conflict (using the terrorist conflict in the Basque Country as a case study) and find that in the *Basque Country GDP per capita is lower of about 10 percent points* relative to a "synthetic" built control region. These gaps seem also to widen in response to spikes in terrorist activity (Abadie and Gardeazabal, 2001)

References

- Abadie A., Gardeazabal J., (2001), *The Economic Costs of Conflict: A Case-Control Study for the Basque Country*, NBER WP N°8478.
- Alesina A., Baqir R., Easterly W., (1999), Public Goods and Ethnic Divisions, *The Quarterly Journal of Economics*.
- Boulding K., (1962), *Conflict and Defence: A General Theory*.
- Dahrendorf R., (1971), *Le funzioni del conflitto sociale. Per una teoria del conflitto sociale. Il conflitto oltre la classe*, in *Uscire dall'utopia (1961-1968)*, Il Mulino, Bologna.
- Faist T., Häußermann H., (1996), *Immigration, Social Citizenship and Housing in Germany*, in *International Journal of Urban and Regional Research*, Vol. 20, n° 1, mars 1996, pp. 83-98.
- Hirshleifer J., (2001), *The Dark Side of the Force: Economic Foundations of Conflict Theory*, Cambridge University Press.
- Pareto V., (1927), *Manual of Political Economy*.
- Schelling T., (September 1980), The Intimate Contest for Self-command, *Public Interest*, N° 60.
- Tullock G., (June 1977), Economics and Socio-biology: A Comment, *Journal of Economic Literature*, vol. 15, pp. 502-506.

²⁰ The Economist, July 14th 2001, p.37.

9. GOVERNANCE

9.1 Definition

The concept of governance is often opposed to that of government, where government is intended as ‘the complex of political institutions, laws, and customs through which the function of governing is carried out’ (Merriam-Webster), while a governance approach implies that conventional boundaries between politics, policies and administration become less significant than the question of how the whole ensemble works (or fails to work). In this sense governance is a broader notion referring to the act of running a government, state, regime, etc., that encompasses and transcends that of government, in that it is a process of management and control involving several actors, and specifically interaction between formal institutions and those of civil society.

Governance may be viewed from two angles, in terms of effectiveness and of the results it aims to achieve and, from an ethical point of view, in terms of the fairness and inclusiveness of the process.

From the first perspective, an effective political system – considered as any system in which supra-individual decisions must be taken and implemented – can lead to increased participation on the part of the actors involved in the decision-making process, and thus result in increasing citizens’ motivation as active members of the ‘community’.

From the ethical point of view, the idea of governance is based on the principles of fairness and transparency that should imbue any bureaucratic or political procedure in a democratic society.

‘The concept of ‘democratic governance’ is generally associated with the shift of power from the public to the private sector, with the strengthening of civil society, and with institutional reforms within the public sector. Thus, recent political theory has emphasised that democracy presupposes the existence of civil society as an autonomous sector, separate from both the administrative and the economic system, and characterised by a pluralism of actors, voluntary civic associations, and interest groups. The functioning of civil society, in turn, requires a pluralistic public sphere in which citizens, sharing only the commitment to a ‘thin’ consensus on procedural rules of discourse, are actively involved’ (Koenig, 1999)

The European Commission's White Paper on European Governance lists five principles which should underpin good governance: openness, participation, accountability, effectiveness and coherence.

By openness is intended the active communication to the public of EU activities and decisions, in understandable and accessible language.

Participation is conceived as spanning the whole procedure from conception to implementation of policies, and depends on central governments following an inclusive approach.

Accountability is achieved by having clearer roles in legislative and executive processes where each institution must explain and take responsibility for its role.

Effectiveness means that policies should deliver what is needed on the basis of clear objectives, evaluation of future impact and, if possible, past experience.

Coherence, a quality which will be all the more required throughout the European Union in view of the enlargement process, which will lead to an even increased diversity, should be based

on political leadership and strong responsibility on the part of the institutions to ensure a consistent approach within a complex system.

Therefore, as stated above, ideally good governance should aim to ensure a high level of participation, and a fair, transparent and effective decision-making and implementation process, contributing to raising the level of confidence. (European Commission, 2001)

This seems by and large to agree with the definition of governance provided by the World Bank, according to which 'good governance is epitomised by predictable, open and enlightened policy-making, a bureaucracy imbued with a professional ethos acting in furtherance of the public good, the rule of law, transparent processes, and a strong civil society participating in public affairs.' (GDRC)

9.2 Governance and Multiculturalism

In accordance with the above definition the concept of governance obviously applies to a wide range of fields, not least the management of cultural pluralism. In this respect, the introduction of *Governance of Cultural Diversity* (Dacyl, Westin, 2000), published by the Unesco-sponsored network 'Management of Cultural Pluralism in Europe', describes governance of cultural diversity as the 'organisational, functional and normative principles in the handling of cultural plurality in diverse societal domains and at various levels of human agency'. It goes on to explain that these principles can be assessed through a more 'pragmatic, efficiency- and solution-oriented approach to the handling of spatial demo-linguistic diversity', i.e. stressing the effectiveness of the process, or in terms of the intangible values it aims to promote (recognition, participation, equality, justice, etc.), therefore emphasising the democratic value of governance. While the first approach has been criticised as too business-like, it is also true that actual promotion of the core values mentioned needs in some way to be translated into action through tangible implementation procedures and structures.

'At the core of the argument about civil society is the belief that the polity benefits when there are a variety of well-functioning mediating structures situated among citizens and between citizens and their government. We are a highly diverse society and it only stands to reason that a rich, dense, and diverse set of mediating structures will work to broaden representation in the political process.' (Ford Foundation, 1999)

The *Charter of Principles for a Culturally Diverse Society*, drafted by the Ethnic Affairs Commission of New South Wales in Australia in 1993, sets out some basic principles which should underpin multicultural societies:

- participation in all levels of public life;
- respect and accommodation of the culture, language and religion of others;
- the greatest opportunity to make use of and participate in relevant activities and programs provided and/or administered by state government;
- recognition and promotion of (...) linguistic and cultural diversity as an asset.

At the same time, Australian state legislation acknowledges local government as a significant player in service provision for different ethnic and cultural groups and recognises the importance of promoting participation of minorities through effective consultative techniques. (Thompson, Dunn, 1998)

This approach highlights two ideas of governance which bear great relevance to multicultural societies; first of all with regard to the needs transparent and open rather than unspoken rules

and procedures and, secondly, concerning the need to take into account multiple points of view. Indeed, while in more culturally homogeneous and undifferentiated communities the interests of most of their members are likely to coincide, in multicultural contexts, where there is a need to reach a great diversity of people in the community, governance becomes essential in order to ensure the participation and inclusion in the decision-making process of people from diverse cultural backgrounds and to prevent discrimination. In this sense the adoption of a governance model is already a first step towards recognising changes and extending participation to newly emerging contexts.

Increasingly heterogeneous and multicultural local communities, neighbourhoods, schools, etc. mean the convergence of a variety of social, political and cultural differences, along with diverse – and often conflicting – needs and requirements. To be effective in such contexts - that is to benefit the community as a whole and promote confidence and participation - governance models need to be based on transparent decision-making processes which are understood by all involved and which are as far as possible inclusive of the diverse components represented, through effective consultative techniques.

In order to operate effectively, such systems require both a stable framework providing coherence and continuity, and a process which is sufficiently flexible to allow decision-making and implementation that take into account the changing needs of communities as they emerge from the consultative process with the various actors involved. 'The ability to govern is no longer a uni-directional, hierarchical and monopolistic process flowing from public decision-makers to citizens. The citizenship demands spaces for involvement and engagement of a new type, both in the definition of problems and policies and in the management of programmes and services; spaces which should conform to relational logics, in which the actors stop working as a function of formal hierarchies and contribute to the organisation of deliberative, non-authoritative channels of the resolution for social conflict (Subirats, 2001)

From the above two main issues emerge: first of all the need to reduce the distance between government and citizens through multi-level governance systems which bring the decision-making process closer to the various actors involved; and, secondly, the need to involve communities - considered as networks of people sharing the same space and environment but not necessarily the same needs - in the process. It is hardly surprising that it is particularly authors from America and Australia who stress the role of local communities in implementing and fostering the political cohesion of a multicultural society. We don't think it is an oversimplification of the complexity of the political debate to state that an important element in this sense lies in the dimensions of these countries, and in the resulting physical and psychological distance of many of their citizens from their central government, which mean that the multi-level political hierarchy and local bodies which come to be created play a fundamental part in fostering and maintaining feelings of social participation on the part of local communities. For example, a few American cities have built neighbourhood-based participation systems, where it is assumed that 'neighbourhood government will build a commitment to shared values which will make citizens more involved, more tolerant of those they disagree with, more trusting of the governmental process, and more educated about public policy. When these practical goals are translated into the discourse of modern social science, such systems are designed to promote 'civil society,' 'civic engagement,' and the creation of 'social capital'.

Europe is now facing these very issues as it undergoes the process of transformation of its political order, which places the centre of political decision-making even further than previously for many of its citizens. If, in this context, strategies implemented according to a governance model have a profound meaning in all sectors of policy-making, this is even truer in the

symbolically highly-charged area of cultural diversity, as these obviously directly affect the composition and, consequently, the identity, of local communities.

‘Multiculturalism will be an unavoidable dimension of European citizenship, since it would allow both for the inclusion of new cultural values, and therefore the shaping of value community (...) beyond national stories.’ (Dacyl, Westin, 2000)

Another related issue which Europe faces in the area of governance concerns the need to harmonise migration policies. This is a delicate area in that individual nation-states must still be allowed to retain a measure of control over their borders, and which therefore requires the application of a multi-level governance model where all concerned parties, including the European central government and the nation-states have a say in the process, as well as any other actors, such as autonomous regions, which may be involved. These complexities are evident, for example, in the Spanish situation: ‘In Spain, analysing territorial complexity requires reference to two simultaneous dynamics: *Europeanisation* and *territorialisation*, understood, respectively, as displacements of government towards the European Union (EU) and towards autonomous communities (Acs) and local governments (LGs). Furthermore, both are projected to a greater or lesser extent onto differentiated dimensions of the political system: on the dimension of identities, institutions and actors (*‘polity-politics’*) and on the dimension of decision powers (*‘policymaking’*). (Subirats, 2001)

References

Commission of the European Communities, (2001), *European Governance: a White Paper*.

Dacyl J.W., Westin C., eds., (2000), *Governance of Cultural Diversity*, Ceifo Publication n. 84, Stockholm University.

GDRC – The Global Development Research Centre, *Understanding the Concept of Governance*, online: www.gdrc.org.

Koenig M., (1999), *Religion, Multiculturalism and Democracy – the Contribution of International Social Sciences*, Opening Address, The Second Religion and Cultural Diversity Conference, London 31st October 1999.

Portney K.E., Berry J.M., (1999), *Neighborhoods and Social Capital*, paper prepared for inclusion in Virginia Hodgkinson, ed. *Civil Society in the United States*, Ford Foundation.

Subirats, (2001), Final Report Spain, paper prepared as part of the project ‘Social Quality. Governance Models and New Migration Patterns: Local Strategies to Foster Social Cohesion in a Changing Labour Market’ (VS/2000/0312), funded by the Employment and Social Affairs DG of the European Commission.

Thompson S., Dunn K., (1998), *Multiculturalism and Governance: an Australian Perspective*, The University of New South Wales, Sydney, Australia, paper presented to the Third International Metropolis Conference Israel, November 29 - December 3, 1998.

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