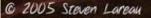
# **LEARNING ENVIRONMENT**

Víctor Molero (2005)

### WHAT ENVIRONMENT?

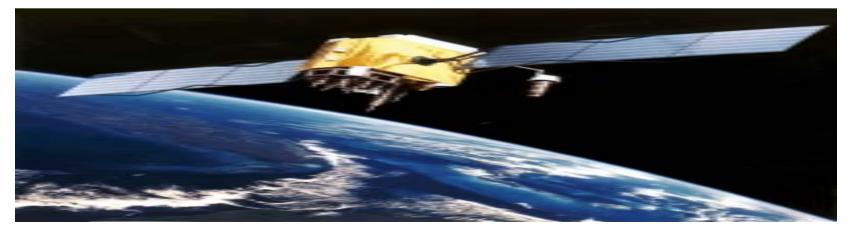




HilltopDesignCon

# **GREAT ACCOMPLISHMENTS**

- In July 19, 2004, scientists from the South European Observatory saw, for the first time in History, a planet from out of the Solar System. It was observed that:
  - The planet is 5 times bigger than Jupiter.
  - Its tempertures are above 1000 Celcius degrees.
  - It is at a distance of 230 light years from the Earth. (El Mundo. 14 de Septiembre, 2004)



# **GREAT ACCOMPLISHMENTS**

- In November 16<sup>th</sup>, 2004, NASA airplane X-43A reached 11.000 km/h.
  - Over three Km/sec.
  - 10 times the speed of sound. (El País. 17 de Noviembre, 2004)



•Singapur commercial airplanes have more computing power in the on-board entertainment system, than in the pilot cockpit. (Wolfe, M.J., "The Entertainment Economy: How Mega-media Forces are Transforming our Lives". Times Books RandomHouse, 1999).

# SOCIAL CHANGE

- Norway Ministry of Economy anounced its wedding commitment with his fiance, a top executive from the advertising sector.
- The Mayors of Paris and Berlin live openly as homosexuals.
- California is the first State in U.S.A. that proposes the recognition of gay marriages.



### **ECONOMIC CHANGE**

- India joins world leadership in software development.
- China goes for world lidership in the textile sector, rivaling with the top world powers: U.S.A and Europe.
- The Japanese stock market lost in just one week of August 1998 more value than that produced by the Rusian economy in one year. (Thurow, L.C. "Building Wealth: The New Rules for Individuals, Companies and Narions in a Knowledge-based Economy". Harper Collins, N.Y., 1999).

# VALUES CHANGE





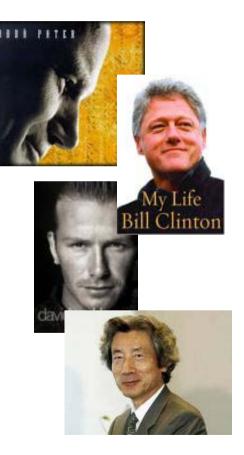


- Problem presented by Singapur Christian Church:
  - "God has a problem of image. Can you help?".
- Solution presented by Reimer Thedens, President and CEO of OgilvyOne Worldwide:
  - Messages through celular phones for specific persons:
    - "¡Thank me, it's Friday!", God.
    - "Even I rested on the seventh day", God.
    - "I want you to come home today", God.

Reimer Thedens, OgilvyOne Worldwide, conferencia en Phuket, 4 de septiembre, 2003)

# VALUES CHANGE

- Bill Clinton received \$ 8 million for his memories.
- The Pope John Paul II, received \$ 8.5 million, less than what he got with the edition of his albun "Abbá Pater".
- 37% of British want to see Beckham's face on ten pound note bills. (Sydsvenskan, August, 2003).
- Juniziro Koizumi, Japanese Prime Minister, is a fan of Heavy Metal music.



# <u>A NEW PLANET: MARKET</u> <u>EARTH</u>



In the beginning of the XX Century only 10-15% of the countries in the world had a market economy.

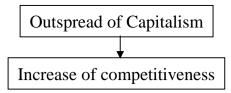
- In the 70's the percentage had increased to 40%.
- Today, it is around 90%.

(*How to Live in a Connected World*, G. Mulgan, HBS Press, Massachusetts 1997.)

# CAPITALISM: THE ONE AND ONLY

- Indian sub-continent: 900 million people.
- Old Soviet Union: 220 million.
- Poland: 55 million.
- Vietnam: 70 mill.
- Pakistan: 130 mill.
- Indonesia: 160 mill.





### IN NORWAY...

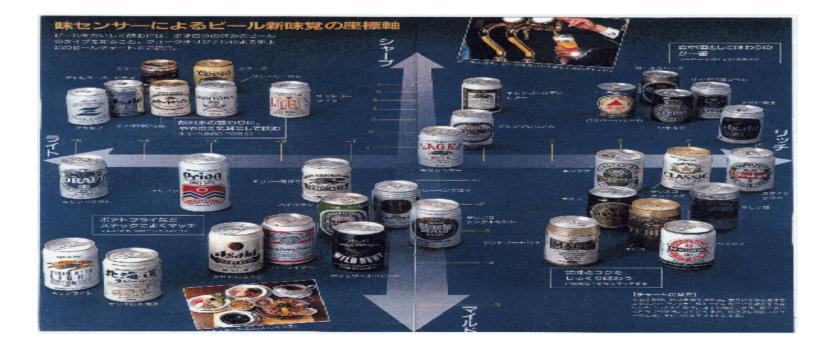


- 4 million people can choose between:
  - -200 different newspapers.
  - 100 weekly magazines.
  - -20 TV channels.

(Geelmuyden y kiese A/S, material de investigación interna, 1997.)

### IN SWEDEN...

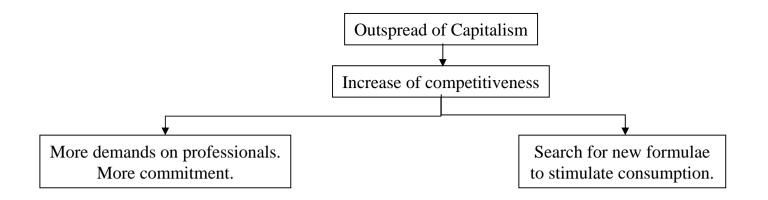
- 9 million people...
  - ...have gone from being able to choose among 50 types of beer to 350, in less than 10 years.



# MUCH OF EVERYTHING

- The average Northamerican supermarket has around 40,000 products.
  - An average family needs 150 products to satisfy 80% of its needs. (Business Week. August, 28th, 2000).
- Amazon.com offered in 2002, more than 150,000 different books about business and investment. (amazon.com).
- <u>www.live365.com</u> offers listening to 40,000 radio stations from all over the world.





# <u>PEOPLE WANT EVERYTHING,</u> <u>AND WANT IT NOW</u>



- "In the future there will be two types of companies: the fast ones and the dead ones" (David Vice President of Northern Telecom). (*Liberation Management*, T. Peters, Nueva York, 1992.)
- "Every year 20% of technical knowledge in Sun Microsystems becomes commercially useless" (Bill Joy, Scientific Manager). (Hamel, 2000).
- Zara, the Spanish textile producer, takes an idea from the design board to the store shelves in 10-15 days. (Fast Company. August, 2000)

# A KEY FACTOR: SPEED



#### Most of Hewlett-Packard's profits come from products which did not exist the year before. (The Digital

*Economy. Promise and Peril in the Age of Networked Intelligence*, D. Tapscott, Nueva York, 1996.)

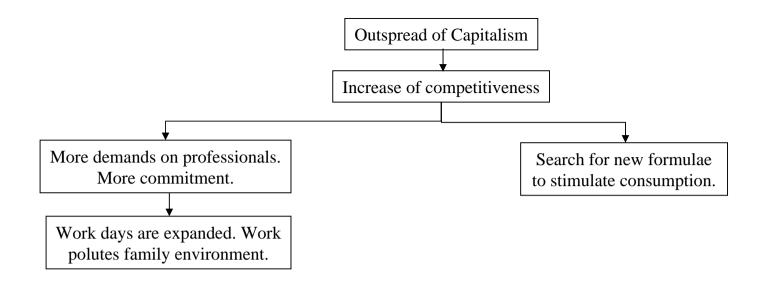


Carly Fiorina

### CHANGE HAS CHANGED

- It is not anymore progressive additions over what already exists.
- It is now discontinuous and abrupt.
  - Cost of decoding a human gene:
    - From millions of dollars to \$100 in just one generation.
  - Cost of storing a megabyte:

- From hundreds of \$ to 0.
- Internet's ubiquity has erased geography from our concerns.



# WORK AND WORK

•Unions have not demanded a reduction in working hours per week since the end of World War II. That clearly reflects the pressure for higher incomes. (Paul McNelis. University of George Town, 2001)

•"… some days I work 14 hours, but most of the time, I do not work more than 12. During the weekend, I rarely work more than 8." Bill Gates. (In the Company of Giants: Candid Conversations with the Visionaries of the Digital World, R. M. Jager y R. Ortiz, McGraw Hill, Nueva York 1997.)



# <u>A NEW RYTHM</u>

- The average Northamerican citizen currently works 25% more than what he did at the beginning of the 70's. (Wired, mayo 1998.)
- A work day in Hong Kong (finance services sector):
  - From 7:00 to 18:00 in the office.
  - Then, free time (gym, movies, etc.) and dinner.
  - Back to work to connect with New York for the openning of the stock market.
  - Result: 15 hours per work day... (Paul McNelis. Universidad de George Town, 2001)



# A NEW RYTHM



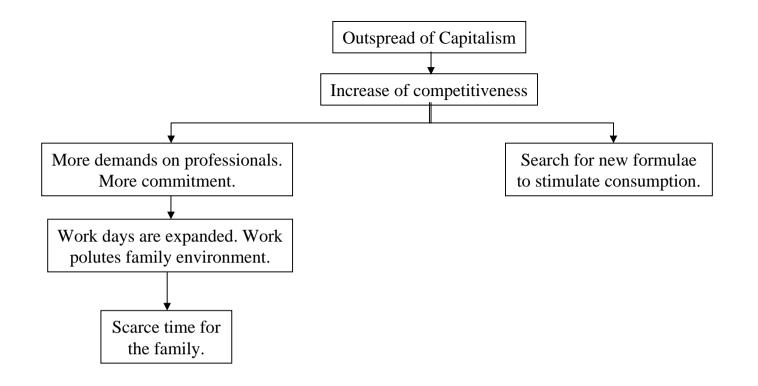
- 37% of Northamericans work more than 50 hours a week.
- 80% of men in U.S.A. work more than 40 hours a week.
- 70% of Northamerican parents complain about the lack of time to be with their children.
- 38% of Northamericans say they feel themselves "accelerated".
- 61% assure that they very rarely have free time.

(Scheier Lee. "Call it a Day, America". Chicago Tribune. May 5, 2002).

# ...FOR MORE MONEY

- In terms of salary, Northamericans are 29% richer than Europeans.
- In terms of free time, Europeans have between 4 and 10 week holidays a year.
- Is 29% of salary capable of buying more joy and happiness? (Jeremy Rifkin, 2004).





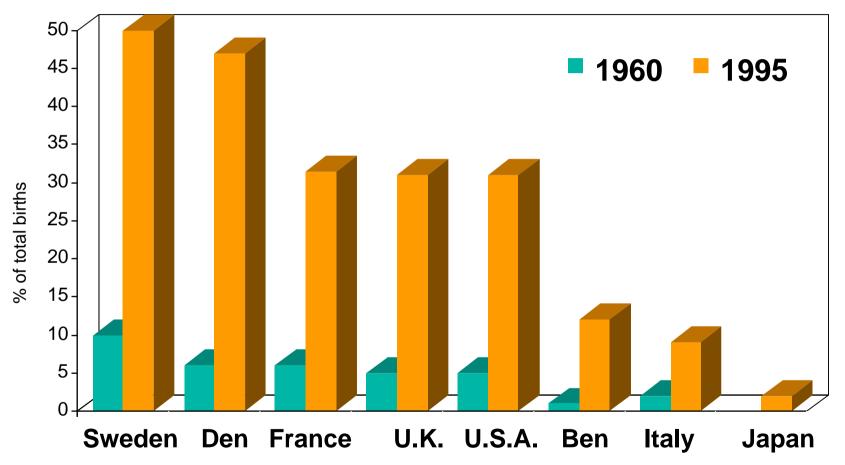
### THE FAMILY



### A NEW FAMILY PROFILE

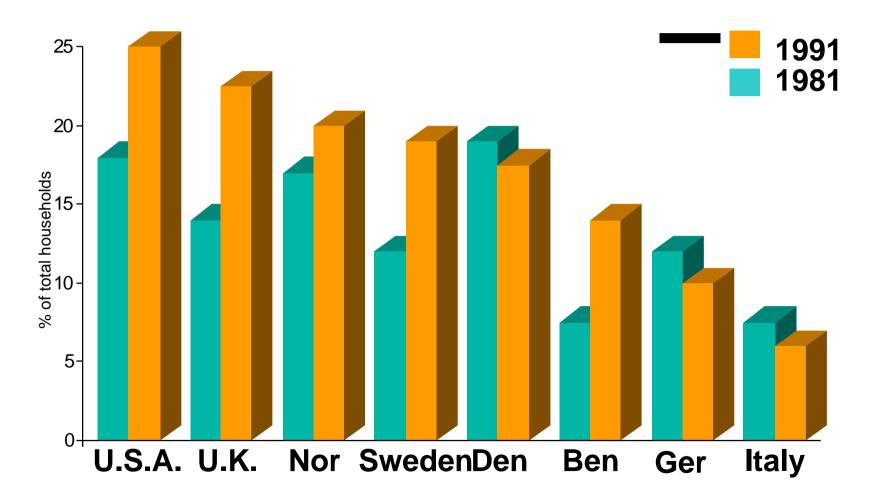
- More than half of the homes in Stockholm are conformed by single people.
  - Over 64% of marriages end in divorce. (Divorce Center, Time, September 25, 2000).
- In North America, the homes with married couples and children are less than a quarter of the total. (Newsweek, June 4th, 2001.)
  Over 30% of children come from single mothers. 16 years ago, the figure was 3.8%. (Newsweek, June 4th, 2001.)
  Unmarried cohabitation between homo or heterosexual people has increased up to 72% during the last decade. (Newsweek, June 4th, 2001.)
  In 1998, 17% of the total of homes with female
  - homosexual couples had children, which means an increase of over 20% in less than 10 years. (Newsweek, June 4th, 2001.)

# <u>CHILDREN OF SINGLE</u> <u>MOTHERS</u>



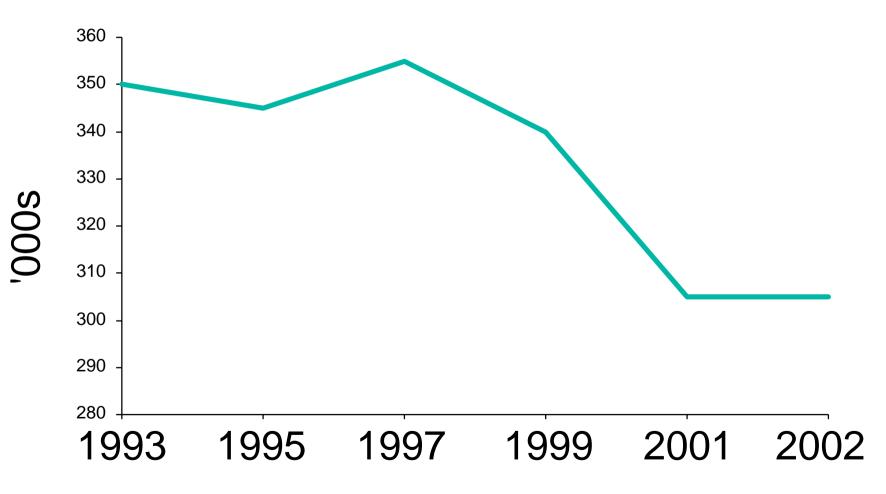
Fuente: The Economist/Senator Moynihan

### **ONE PARENT FAMILIES**



Fuente: UN

### MARRIAGES IN THE U.K. 1993-03



Fuente: Office of Population and Censuses

### THE NEW GENDER ROLES



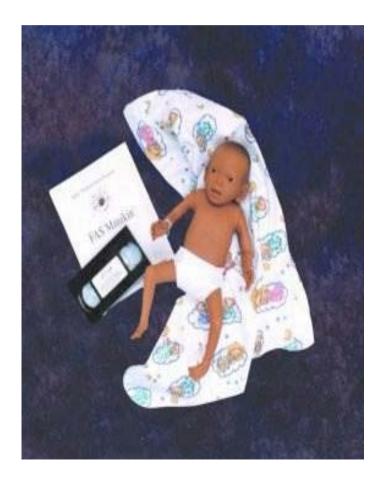
### A LONELY SOCIETY

- 1/3 of British people is not acquainted with his/her closest neighbours, and total indiference, or even open hostility, is more common than good neighbour relations. (Study by Cambridge University published in Daily Mail.)
- It has been estimated that, in Europe, we currently speak to other people less than three hours a day.

• In U.S.A. friendship has become a victim of a way of life permanently short of time. (The Wall Street Journal.)

# <u>AGAINST LONELINESS:</u> <u>CHILDREN AND PETS</u>

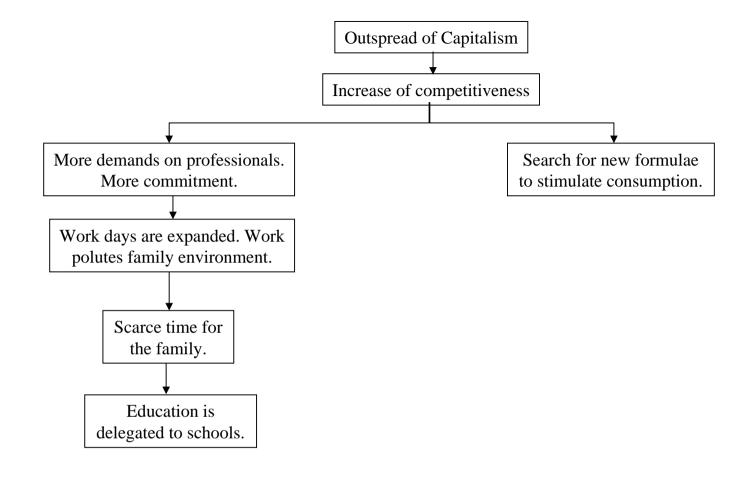
- Mindscape Entertainment (Northamerican software company) has created a CD-ROM with 15 virtual babies that act as real ones: they even spill food over and get upset.
- The CD is aimed at professional women who would like to become mothers, but who do not have time to have a real baby. (Scotish Daily Record.)





# <u>AGAINST LONELINESS:</u> <u>CHILDREN AND PETS</u>

- Omron (Japanese company of electronic devices), assures that their robot cat "Tama" can develop a different personality acording to how it is treated.
  - 70% of women who patted the 'pseudo-cat' during 30 minutes, declared that they felt true love for it. (Mainichi Daily News.)



# M.B.A.'s EVERYWHERE

- Number of M.B.A. Students in British Business Schools :
  - '60: 5,000
  - '99: 75,000

(*The Witch Doctors*, J. Micklewait y A. Wooldrige, Nueva York, 1996.)

- Since the 60's the number of graduates per year in business administration has increased in 1,500%, just in the U.S.A. (Micklethwait, J. and Wooldridge, A. "The Witch Doctors: Making Sense of the Management Gurus". Times Book Random House, 1996).
- In ex-communist Hungary there are 14 different programmes of business administration. (Business Horizons, December 2002).



# <u>EVERY ONE GOES TO</u> <u>UNIVERSITY</u>

• The breach between the average weekly earnings of those who went to secondary school and those who went to university have increased from 28% to 43% in the last 20 years. (Business Week. August 28, 2000)

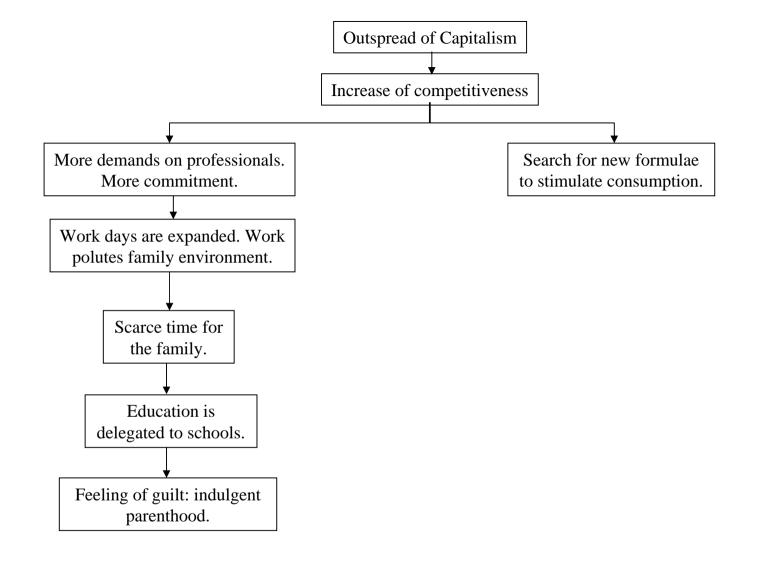


#### A KNOWLEDGE ECONOMY

•30 years ago:
•40% of world population worked as labour force in manufacturing industry.
•Nowadays it is only 16%, and coming down.

• "The knowledge economy represents 80% or more of the total economic activity in the world, which means one of the greatest structural transformations in the last 30 years." (Giddens, 2001)

In a modern company,80% of the tasks performed by its employees depend on their intellect



## **INDULGENT PARENHOOD**

•Average expenditure on toys and games per child in the EU: 243 Euros.

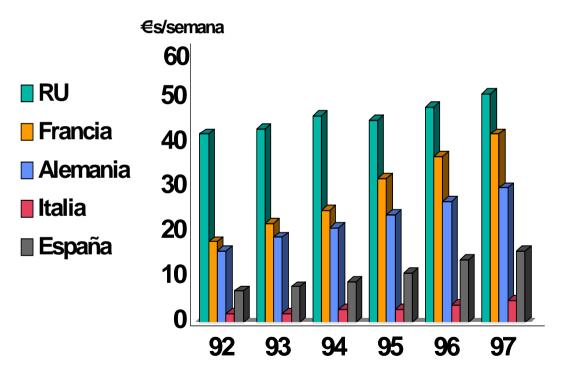
•181 Euros without video games.
•Total EU market for toys in 2003: 18.8 billion Euros (at consumer prices).

•United Kingdom remained EU market leader, followed by France, Germany, Italy and Spain.

> •The top three countries accounted for 59% of all EU sales. (CBI, 2003).



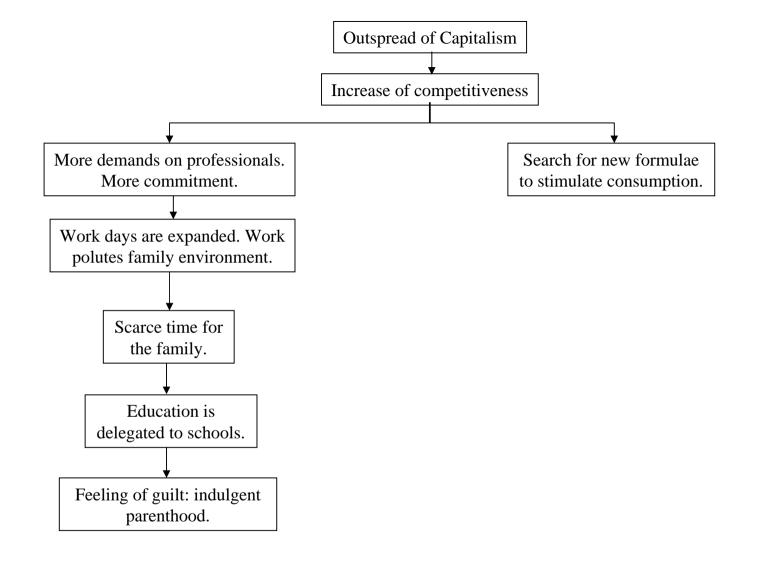
#### <u>MONEY SPENT ON FAST</u> <u>FOOD PER PERSON</u>





#### **INDULGENT PARENHOOD**

• General growth of consumption: 29%. • Adventure trips: 46%. • Chocolate for 'gourmets': 51%. • Pearls: 73%. • Luxury automoviles: 74%. Yatchs: 143%. amedonalds.at



#### <u>SCIENCE AS GENERATOR OF</u> <u>WEALTH</u>

•Between 1900 and 1950, Science was the main source of wealth.

- Bell laboratories.
- Sarnoff laboratories.
- Watson laboratories.

- Compact disk
- Anti-cholesterol drugs
- 747
- Optic fiber
- Voice recognition
- Kevlar
- LCD
- Etc.

#### <u>MARKETING AS GENERATOR</u> <u>OF WEALTH</u>

After the Great War the creation of wealth was linked to the consumption society.

- Coca Cola
- Procter
- Unilever
- Nestlé
- Kellog
- Etc.

- Emphasis was in manufacture and marketing
  - Advertising
  - Distribution
  - Pricing
  - Etc.

#### IMAGINATION AS GENERATOR OF WEALTH



(Virgin, Dell, Ikea, Cisco, Yahoo, South West Airlaines, etc.)

- The starting point is irrelevant.
- Development time is minimun (weeks).
- Clients participate in development with real time feedback.

#### VISIONARIES WITH IMAGINATION



- Bill Gates (Microsoft)
- Ted Turner (CNN)
- Anita Rodick (The Body Shop)
- Andy Grove (Intel)
- Jeff Bezos (Amazon.com)
- Howard Schultz (Starbuck's)
- Mickey Drexler (The Gap)
- Michael Dell (Dell Computer)

#### <u>THRIVING IN PERMANENT</u> <u>IMBALANCE</u>

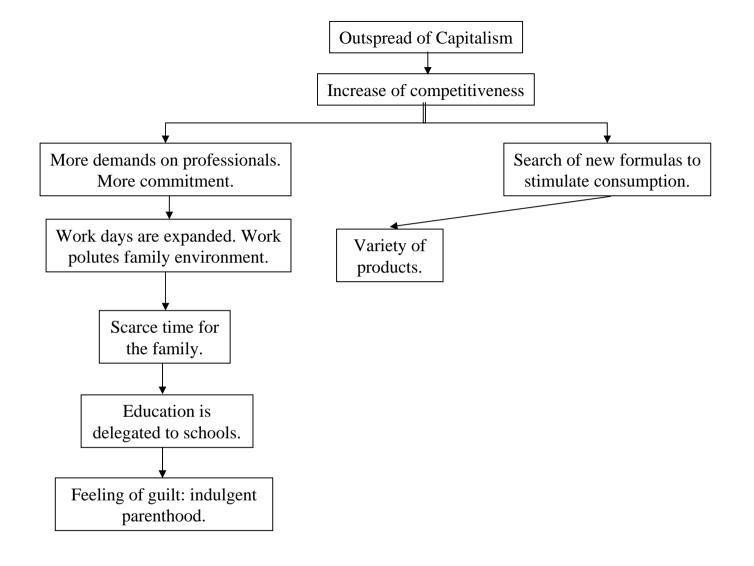
•"First of all, you must enjoy yourself; secondly, you need to put some love into what you are doing. And finally, you have to go in the opposite direction to the rest of the world" (Anita Roddick, President of The Body Shop). (Body and Soul, A. Roddick, Miller, Ebury Press, Londres 1991)



#### <u>THRIVING IN PERMANENT</u> <u>IMBALANCE</u>



• "Sony's key to success; the key to success in business, science and technology is .... never to follow what others are doing." (Masaru Ibuka, co-founder of Sony) (How Sony Keeps the Magic Going, R. Brenton, Fortune, 1992.)



#### FROM DREAMS TO REALITIES

#### <u>DREAMS</u>

- Explore other worlds.
- Overcome old age.
- Transcend distance.
- Transform the environment.

## <u>REALITIES</u> (Pathfinder probe to Mars)

- Cultivation of skin tissue.
- Video conference.
- Virtual reality.
- Internet.

• Store knowledge.

There has never been a lesser distance between imagination and facts.

# A TEXHADDADA

#### **MULTIFUNCIONALITY OF PRODUCTOS**

- In U.K., Marks & Spencer sells panties with "body sensors" that cool or warm according to weather.
- The University of Durham, in U.K., is working on clothes that will not require washing. An invisible anti-adherent surface coating rejects water, dirt and grease.
- A group of Japanesse scientists is developing a textile that protects against odours.
- The MIT, in U.S.A. works on clothes that will think, talk and send information.
- Philips has already desinged a ski jacket that besides transmiting the exact positioning of the skier, it also calls the authorities in case of an emergency.
  - Levy's launched a jacket with celular and MP3 player. Clothes that protect against UVA can already be bought. In Japan there are panties treated with vitamin C. Helmut Lang has designed jackets and sweaters with a devirest the neck on, to relieve back pains and reduce stress.

#### THE BEST IS STILL TO COME

•The integration of technology and genetics is already happening:

## BIOINFORMATICS BIOCOMPUTING

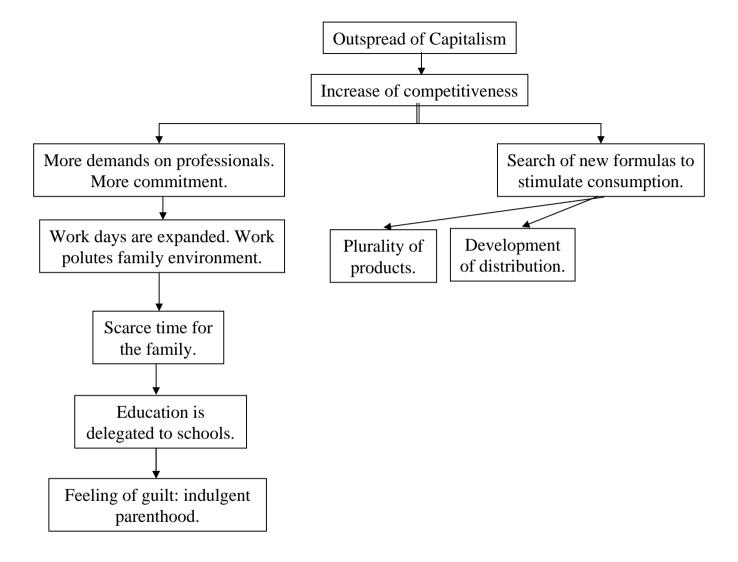
#### BIOSCIENCE

#### BIOENGINEERING









#### THE END OF GEOGRAPHY



Prunes from U.S.A.
Dates from Tunisia.
Apricots from Turkey.
In a French retailer.
...in Spain.

#### **GLOBAL AND LOCAL**



- Massive attraction brands share three characteristics:
  - Global relevance.
  - Local attractiveness.
  - Strong ties with multiple environments.

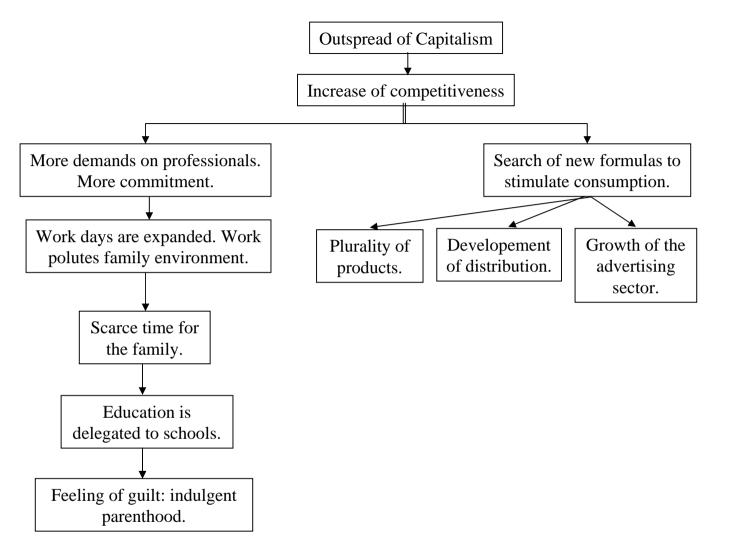


- Most of McDonald's revenues come from out of U.S.A.
  - In Japan: sausages with "teriyaki" sauce.
  - In Norway: the favourite is McLox (salmon sandwich).
  - In Manila: noodles.
  - In India: the Big Mac has been replaced by Maharaja Mac, with lamb instead of beef.
- Global menus locally retouched.

## THE END OF GEOGRAPHY

- Switzerland holds the America's sailing cup.
- The russian group Bering Strait won a Grammy Award in U.S.A. as best country music performers.
- British Futbol League (1999): in the match between the teams of Chelsea and Southhampton, the Chelsea had not a single British player.
  - They had players from Rumania, Holland, Norway, Nigeria, Uruguay, Spain, Brazil, France and Italy.
  - They won by 2-1.





THE POWER OF TELEVISION

- Fox Television received 100 million votes to choose the American Idol of 2002.
  - More than the people participating in the presidential elections of the year 2000. (Fast Company. December, 2002.)



#### THE POWER OF TELEVISION

•In U.K., more people voted in the last episode of the TV series "Survivor" than in the elections to the European Parliament. (Bard, A. y Soderqvist, J., "La Netocracia: el Nuevo Poder en la Red y la Vida Después del Capitalismo". Prentice Hall. Madrid, 2002).



#### TELEVISION: THE TEMPLE OF OUR TIMES

#### CNN EXCLUSIVE

- Television broadcasts wars alive.
- Transforms unknown people into world stars.
- Communicates to audiences spread all over the world.

#### BREAKING NEWS EXPLOSIONS IN KABUL, AFGHANISTAN

CRAMBLED TO TRADE CENTER FIRES, EVENTUAL COL

#### 24 HOURS A DAY, 365 DAYS A YEAR...



## **ADVERTISING CONGESTION**

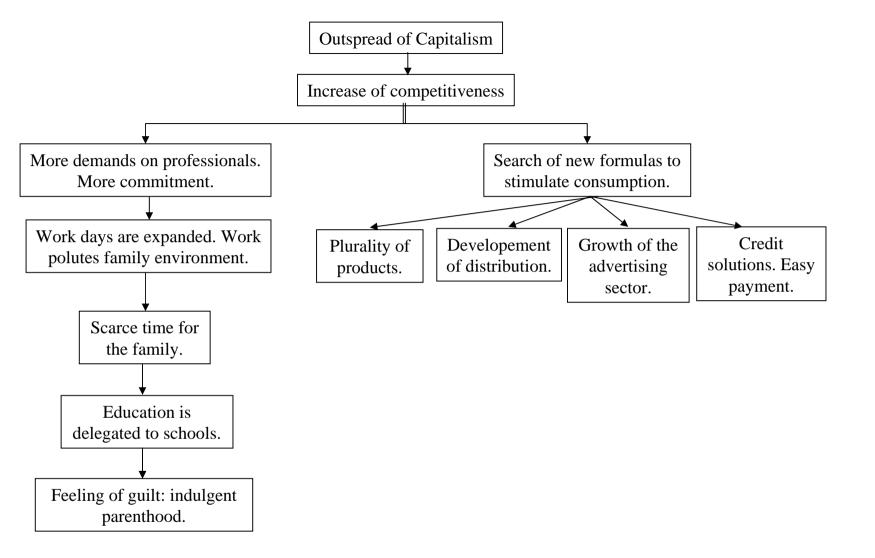
•Northamerican advertising industry moves over 330,000 million dolars a year spreading the belief that anyone can have anything he/she wishes, and "now". Why wait? ("Amusing Ourselves to Death" Neil Postman. New york University).

•Six times more than the national budget for education.

•The avegare viewer sees 247 commercials per day.

•By the time he comes of age, will have seen about 350,000 ads.

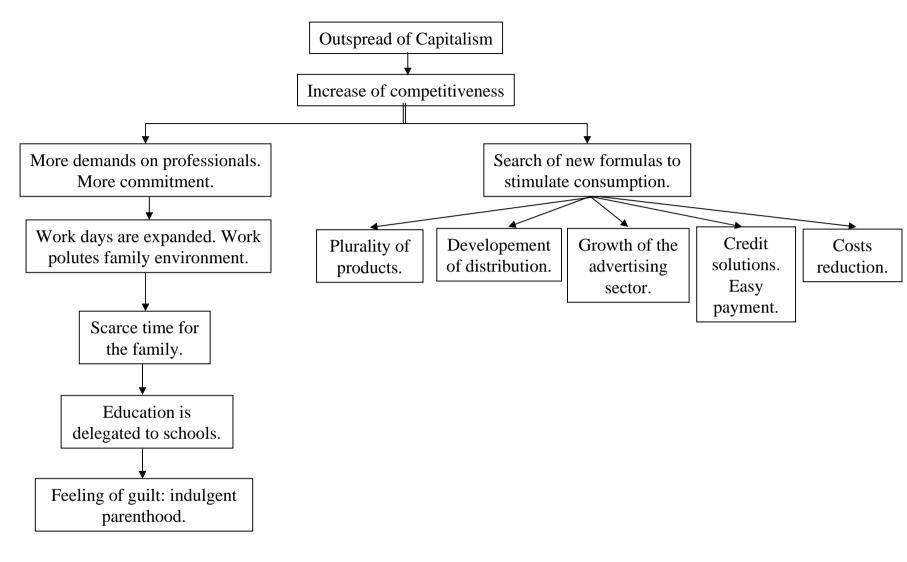
•That's nothing compared to what will happen with the arrival of Internet to TV, with millions of web pages on the screen.



#### <u>A CREDIT CARD CULTURE</u>

Not having money in a particular time can't be an obstacle to buy.
The credit card culture that allows to "enjoy it now and pay later" is being reinforced.

("Amusing Ourselves to Death" Neil Postman. New york University).



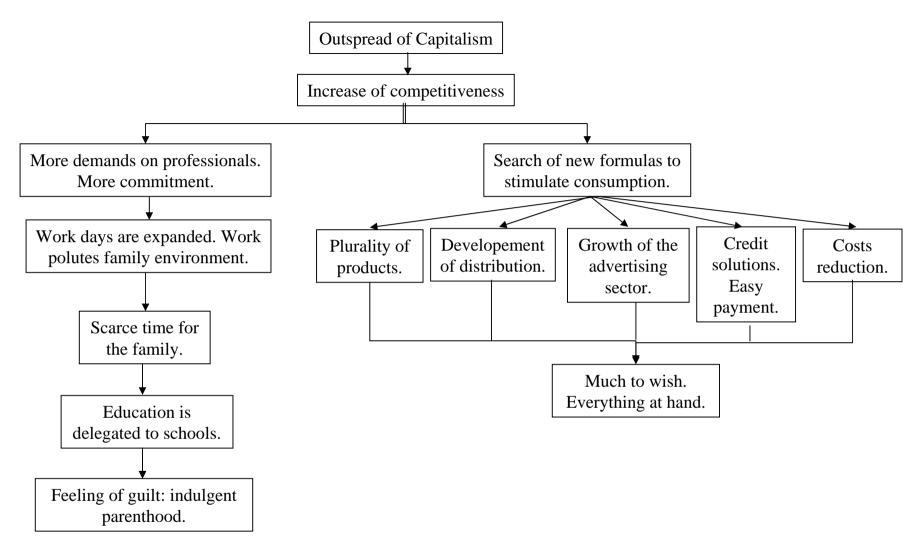
#### DONE WHERE IT'S CHEAP



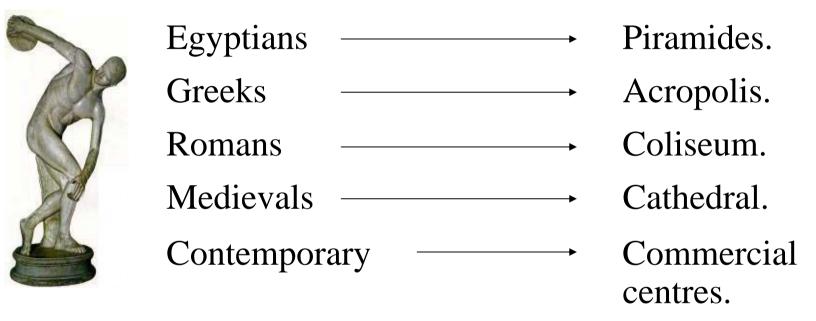
#### DONE WHERE IT'S CHEAP

 The Wall Street Journal is composed in New Nueva Zeland because the end of a work day in New York, coincides with its beginning in the antipodes. (Paul McNelis Universidad de Geroge Town, 2001)

• IBM gathers teams asigning technicians to projects acording to their geographic situation, so that there is somebody working on it 24 hours a day.



#### <u>COMMERCIAL CENTRES</u> <u>EVERYWHERE</u>



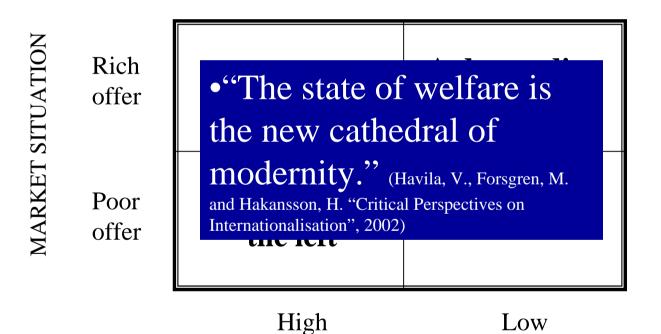
Churches are empty, commercial centres are full. Most major European cities have more gas stations open 24 hours a day, than churches, mosques ans synagogues available at night.

## <u>SHOPPING AS A FORM OF</u> <u>IDENTITY</u>



(Barbara Kruger.)

## EVOLUTION OF CONSUMERS



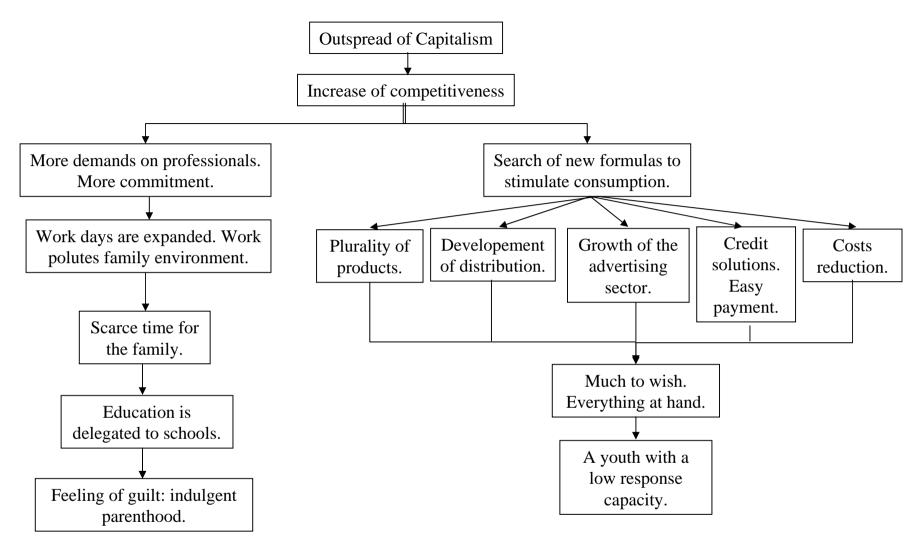
COST OF GETTING INFORMATION

# THE POWER OF CONSUMERS



I New smakers

•"The axis of power has shifted towards hundreds of million users world-wide." (Lou Gerstner, President de IBM of the OCDE conference in Ottawa, en 1999.) (*Fast Company*, enero 1999.)



### **OPINION OF YOUTHS**

Survey on university students in 1st year about their goals in life.

GOALS IN LIFE	Reach a sound financial position	Develop a significant philosophy of life
1968	41%.	75%.
1998	78%.	41%.

(Reich, R.B., "The Future of Success". Alfred A. Knopf, New York, 2000)

# FAITH IN SUCCESS

- 55% of Northamerican youngsters under 30 years old believe that they will be rich some day.
- 71% said that they will not make it in their current jobs.
- 76% of youths with ages between 18 and 29 said that "americans are not willing to work as hard for their companies as they used to in the past."

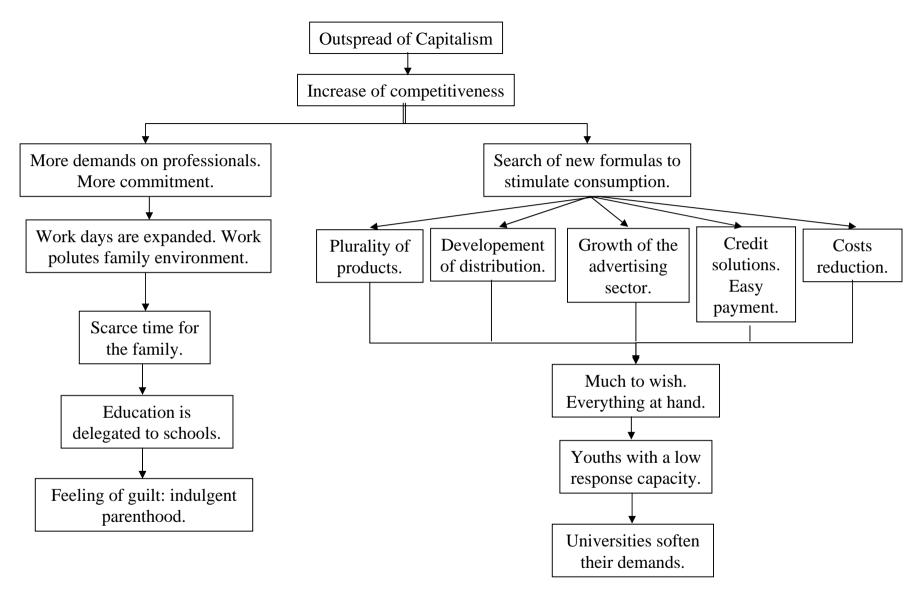


("Newsweek Poll. 750 Adults Nationawide". Princeton Survey Research Associates. June 24-25. 1999).

## YOUTH NARCICISM

- Northamerican youngsters are the children of a media culture...
- The result is that each generation is less bound to, and less capable of, working hard and postpone inmmediate gratifications for the sake of future benefits. ("Amusing Ourselves to Death" Neil Postpara New York University).





### **RELIEVE EFFORT**



A great part of the efforts made in the world of education in the past years has been focused on designing methodologies to relieve the effort of learning.

•"We live between boredom and pain: the least pain, the more bordedom; the least boredom, the more pain..." Arthur Schopenhauer.

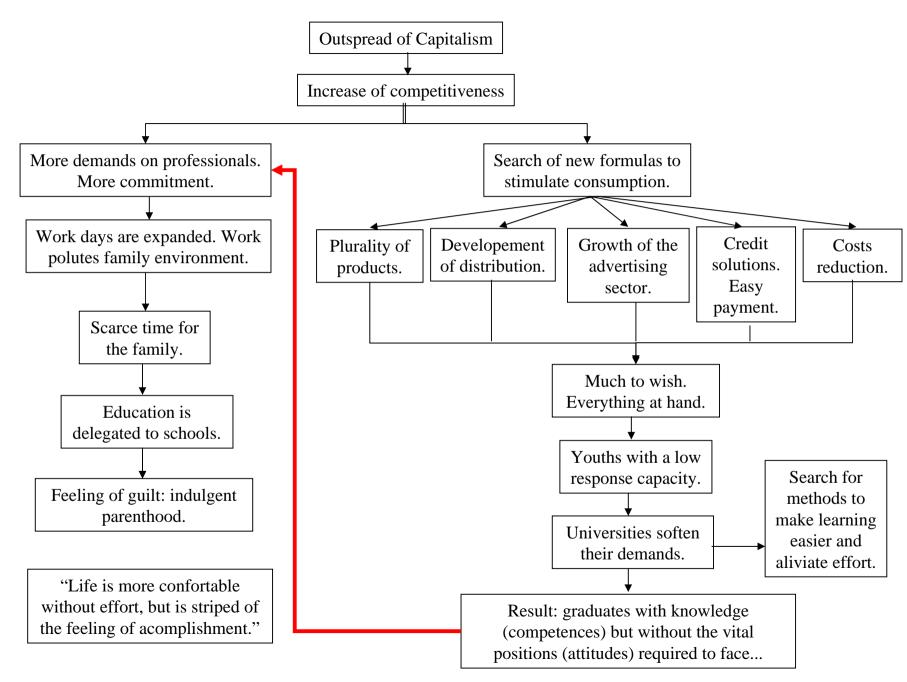
•Life is more comfortable without effort, but it is striped of the feeling of accomplishment.

## **BEING UPDATED**

- The average life of worker's knowledge is about 3,5 years.
- Every 5 years, technology becomes obsolete.
- In the present decade (2000 2010) between 50% and 70% of current technology will be substituted.
- Between 30 and 50% (depending on regions) of the people between 25 and 64 years old, in Spain, have less knowledge than what is necessary to live in present days.

Source: Report 2003 UNESCO.





#### WHERE ARE WE?

PETROCRAD

- Economically speaking...
  - Europe is not in a bad position but,
  - We have to keep up with the challenge.

#### THE GREAT EUROPEAN

### FAMILY

- EU citizens.
  - 455 million people (7% of human race).
- China and India.
  - Both above 1.000 million people.
- U.S.A.
  - 293 million people (4.6% of human race).
- Japan.
  - 120 million people (less than 2.1% of human race).



### THE WORLD'S GREATEST MARKET OF SERVICES

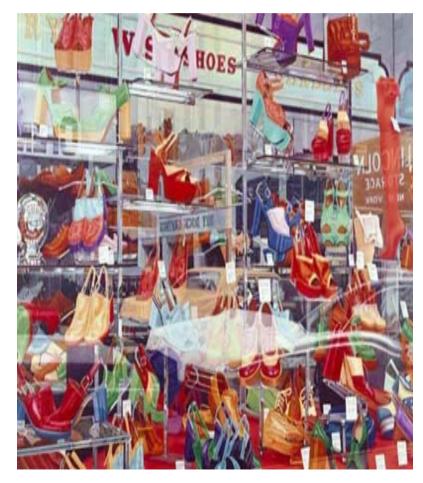
- 1° Europe: 24%.
   (590,800 million Euros).
- 2° U.S.A.: 22%.
  - (550,900 million Euros).
- 3° Japan: 8%.
  - (201,600 million Euros).



("Economic Portrait of the European Union 2002". European Commission. 2002).

# WORLD TRADE LEADERSHIP

- Europe exports more than imports.
- U.S.A. imports more than exports. (United nations Human Development Report: Deepening Democracy in a Fragmented World". United Nations Development Programme. Oxford. U.K. Oxford University Press. 2002).
- UE GDP is almost 6.5 times the GDP of China (with less than half its population). ("The World Economic Outlook (WEO): GDP Current Prices". International Monetary Fund. April 2003).



#### **COMPARING FIGURES**

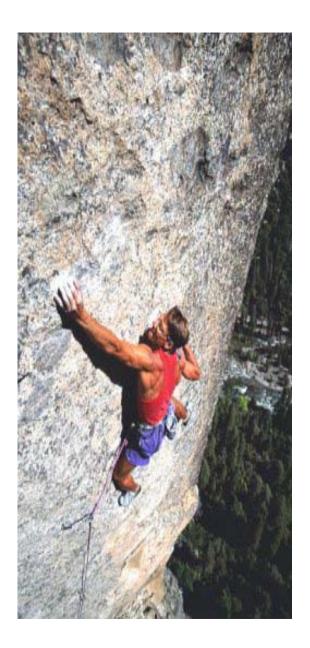
GDP IN EUROPE AND U.S.A. (Billions of dolars)					
EUROPE		U.S.A.			
Germany	1,88	California	1,34		
United Kingdom	1,4	New York	0,79		
France	1,3	Texas	0,74		
Italy	1	Florida	0,47		
Spain	0,56	Illinois	0,46		
Holland	>	New Jersey			
Sweeden	>	Washington State			
Belgium	>	Indiana			
Austria	>	Minessota			
Poland	>	Colorado			
Denmark	>	Connecticut			
Finland	>	Oregon			
Greece	>	South Carolina			

#### **EUROPEAN MULTINATIONALS**

• 61 of the 140 top companies in Global Fortune 500 are from Europe. ("Thte 2003 Global 500". Fortune. July 21, 2003).

Only 50 are from North America.

– Only 29 are from Asia.



### <u>THE</u> CHALLENGES

- We are educating today the persons that, in a near future, should be able to:
  - Break the hegemony of economy.
  - Promote a moral re-arming of society.
  - Consolidate the reconcilitation of family life with work life.
  - Deepen in the use of technology for other purposes besides magnifying benefits, but also to improve "everybody's" life conditions.
  - Re-think the idea of "consumption" and its goals for human beings.