

# **Reinvent and Reorganize the Work in Time of Crisis A memetics Perspective for Implementing Solutions in Education and Coaching**

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## **Introduction**

We start regarding the culture as a collective heritage to be shared.

As the genetic heritage describes our physiologic evolution, our cultural heritage witnesses our knowledge evolution.

From this perspective, which kind of development do we figure out as single individuals, organizations, as humankind?

We are seeking visions and behaviors, which may more properly represent the evolutions of a complex society where the human beings seem to be more victims than creators.

We continue to seek new points of reference, to define more and more sophisticated parameters to measure the quality of live, the performance of a company, an educational path, the welfare of a community.

Each reference system imposes borders within which rules and exceptions cohabit. And in such scenario the environment looks like an artificial frame, conditioned itself from our reference system.

Any invention, discovery or innovation is perceived as an overcoming of a previous solution.

We see often the solutions as detached and not as connected events, a lot of us consider them as overcome and not as insertion of our knowledge... why?

Our culture evolves by subsequent refinements, always adding and never deducting knowledge.

Therefore why do we believe that progress just means to do something that did not exist earlier? Isn't it a fact that not always and not all of us are able to see already existing solutions?

*The Culture is a Renewable Commons, the unique resource that – if and when is consumed - expands itself in time and space.*

Starting from this simple definition, anyone may find the personal appropriate code to review his behaviours, the way to rethink the imposed limits by the current economical and social background and the way to redefine our own role inside this environment.

I designed a simple method to make solutions to economic issues, mixing natural models to evolutionary approach: the *Eco-Cultural Systems*. And I'm refining it implementing cultural projects.

I started to work on eco-cultural systems three years ago, after reading *Governing Commons* by Elinor Ostrom... and only few months ago I discovered she already wrote with Charlotte Hess the following book: *Understanding Knowledge as a Commons* ... I'm reading it now. This is a little evidence that problems and solutions already exist: someone finds them before, someone after, someone ever... but what is important is to reuse and refine this important heritage.

Three sections compose this paper:

- The first one describes the current situation in Italy, through a synthetic presentation of statistical data regarding: work, employment and school.
- The second one shows briefly the Eco-Cultural Systems (ECS) model.
- The third one lists the running ECS.

The ECS approach transforms our perspective on business, on social and on no-profit models: from Projects to Communities.

In Italy, Adriano Olivetti was the first to build a Company like a Community: he believed in the strong role of knowledge as a stimulus for people to wake up a spontaneous and personal burst to changes and transformations.

He never received the support of politics, of entrepreneurship and even of Italian intelligentsia, but the extraordinary results of his Company in the decade from 1950 to 1960 are still acknowledged as example of a cultural revolution: a sum of value innovations in organization, in business processes and in talent management.

We are awash with abundance of knowledge: in these last 50 years many developments and interdependences in every disciplines have been achieved, and now a ‘systemic’ approach to the complexity is described as a ‘natural’ approach.

The “Culture” like a “Single Object of Study” has the support of a new science: Memetics. It provides rules, models, examples and exceptions to understand the evolution of human culture.

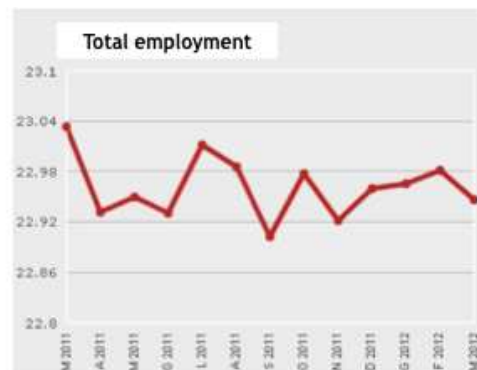
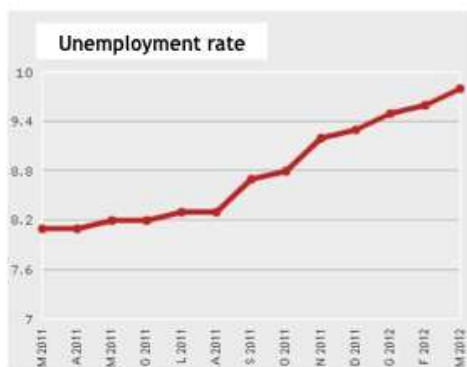
Applied Memetics can help us to rethink and reinvent spaces for developing social and economic alternatives, because the current solutions are not enough to give everyone an opportunity.

### Overview on crisis – The Italian Landscape

In 2011 Italy made a population census and the provisional data show residents in Italy are 59,464,644, 28,750,942 males and 30,713,702 females and the foreigners are 3,769,518.

As in the rest of world, from 2001 till today the unemployment rate is grown year per year, and in this last 12 months is dramatically risen at 9,8%.

At the same time the ongoing disruption in employment shows a large uncertainty.



(source: [www.istat.it](http://www.istat.it))

The offer of “conventional” work (temporary or permanent) is lower than work demand.

In terms of work value, the Italian Statistics Institute (ISTAT) registered the following data:



(source: [www.istat.it](http://www.istat.it))

We earn less and spend more for consuming what we produce.

The running companies are 4,383,544, with 17 million of workers. With an average size of 3.9 employees per firm.

The micro-enterprises (fewer than 10 employees) represent the 94.8% of total, with the 47.5% of employees and the 25.5% of the value added.

The services sector, with 75.5% of firms, 62.4% of employees is the most important sector of national economy in terms of quantity.

In the micro-enterprises the 64.2% of employment is based on independent work.

Is our structure adaptable to this crisis? The response seems to be: “yes, little entity is simpler to manage, easier to adapt to environment transformation... and globalization is an environment transformation”.

ISTAT statistics show the exporting manufacturing firms have a higher labor productivity if compared to those exclusively oriented to the domestic market, with a positive differential in all classes of firms: survival is guaranteed to those who adapts themselves to an environmental transformation.

If our organizations are adaptable for shape and dimensions to this crisis, what perspective are we building for youth generations?

With the bad record of 35.9% Italy is in fourth place among 33 OCSE countries in the ranking of youth unemployment and we have the same position for the 'Neet', young totally inactive: neither at school nor at work.

Education and training systems are not able to facilitate the development of multiple skills, to prepare the youth generations to face the problems posed by global environment and by this economy crisis.

Without an adequate effort in school research and experimentation, we cannot fight the bad results of the students, we cannot reduce the discomfort of teachers, and we cannot remedy the injustices and imbalances in our country.

We have to learn and spread how to adapt ourselves to fast and global changes: this was the first drive of innovation.

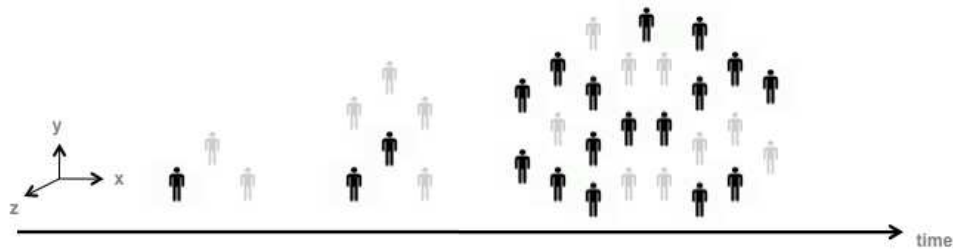
With the collaboration of friends, teachers, volunteers, professionals, entrepreneurs we have rethought our approach to consumptions, to welfare policy and bureaucracy, in public as in private organizations.

Through little communities in schools, in SMEs and in no profit associations we are transforming step by step our vision of work, learning and lifestyle:

- implementing cultural projects with different relationship between people, environment and technologies,
- thinking ourselves as elements in Eco-Cultural Systems,
- building consciousness that everyone can and must contribute to change, seeking new organizational behaviours.

To build our projects, we have used these basic principles of Memetics:

1. the culture evolves through the reproduction of its elements (Memes).
2. we are the vehicles that: Replicate, Transmit and Spread these elements.



We are special vehicles: we can select what we want to replicate, transmit and spread... and starting from this consciousness, we can select those memes what can help us to set up a change in our approach to the problems.

The ECS model allows seeing ourselves like elements of the solution.

### The eco-cultural systems' model

Imagine human culture like an enormous channelization of many flows, that -as a fluid- changes shape, direction, and dimension. We call a single flow: *Cognitive System*.

During various temporal moments these flows can amplify or reduce them, can deviate from the original channelization, can mix themselves with other flows.

If we look frontally a slide of a single vessel, we can see it contains other small tubes, each of which represent a *Cultural Dimension*.

Then, imagine that we can observe a section of one of this cultural flow at time  $T_0$ : the cultural dimensions of this slide  $S_0$  do not interact very well among themselves. There is much distance between one dimension and another.

Suppose we are able to make two sections in two other times  $T_1$  and  $T_2$ . The improvement may occur in two complementary directions:

- cognitive gap between dimensions tends to fill itself ( $S_1$ )
- cognitive system tends to amplify itself, adding new cultural dimensions ( $S_2$ )

$S_2 \supset S_1 \supset S_0$ : this improvement must be a continuous process, because this model is based on a "relative" concept, limited from my personal ability to see it... in general each model is incomplete: in any time we will find cultural dimensions to add to those we already know.

In education and coaching to improve means to reduce the gap between school, work and private life; reduce the misunderstanding among individuals, amplify the ray of action of schools, companies, enterprises and organization in general.

There doesn't exist a compact system without interconnection of its parts; there doesn't exist a whole system without an environment.

The completeness of a living system is built in an unpredictable way, day by day; how much more it is difficult to reduce a system to an input-output control so much more this is comparable to a living system. We have to move our model to a higher level.

Try to imagine ourselves as cultural systems and simultaneously as an elements of a larger cultural system.

To see a person as a cultural system we can consider his/her cultural dimensions, as: memories, passions, prejudices and preconceptions.

At the same time this person can be represented as a cultural dimension in a larger cultural system, where other elements coexist, may be other individuals, or other environments: family, school, office. These are our *Eco-Cultural Systems* (ECS).

If we accept this model, how can we describe the interactions between a single cultural dimension with itself, with the other ones and with the environment?

If we think about what happens to us when we read a book (or watch a movie or listen a song), when we meet an old friend, when we start a new job, we can imagine that our cultural dimensions are increasing because we are adding new information to that we already have. We feel emotions that awake old memories and creating new ties.

The cultural flows evolve depending on events that are not predictable and that we could distinguish in:

- "Endogenous", which enable - at the level of a single ECS - the expansion, contraction, creation or destruction of some cultural dimensions.
- "Exogenous", which place a whole eco-cultural system in comparison with other cultural dimensions.

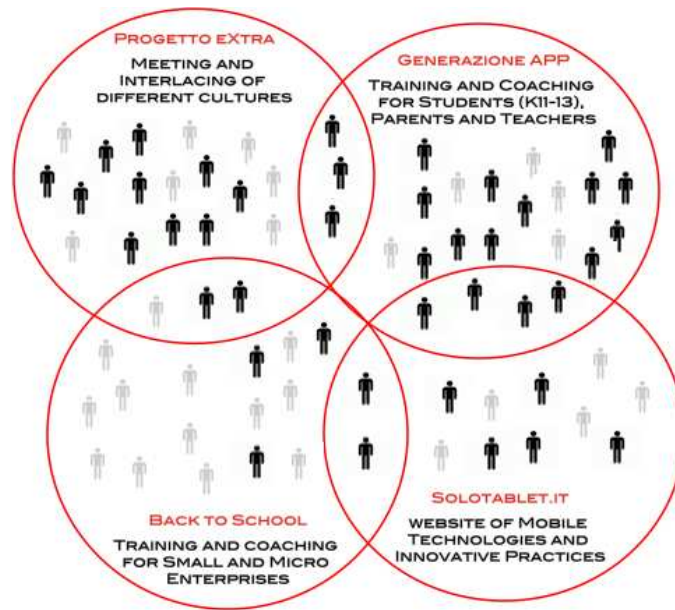
The combined action of these events contributes to the evolution of our eco-cultural systems.

### **The eco-cultural systems' examples**

To build our ECS in education and coaching I used this simple path:

- [1] Select some disciplines: design and development; technologies and communications; organization; economy; education; cognitive science; sociology.
- [2] Test the heuristic interlacing between disciplines.
- [3] Select models into cultural dimensions:
  - how the systems think (Richard Dawkins, Pascal Jouxte)
  - how to govern commons (Elinor Ostrom)
  - how to implement a depression economy model (Paul Krugman)
  - how to make competition irrelevant (W. Chan Kim, Renée Mauborgne)
  - how to change the way we learn through digital technologies (Clayton Christensen)
  - how to point out the different talent of people (Howard Gardner)
  - how to define recursive design and development processes (Bruno Munari)
- [4] Select models and adjust them to our local environments.

All this ECS prototype are based on collaboration: products and services barter, resources and knowledge (ICT, locations, books, etc...) sharing, spontaneous and mutual aid, peer to peer approach in organization.



Hereafter the most representative examples based on ECS model are briefly described.

### ***Progetto eXtra***

This project is born in 2006 from the initiative of two persons in a little town near to Milan (Tavazzano). Its aims were:

- fuses the cultures through languages courses, information and support on Italian laws and institutions,
- reduces the gap between Foreigners and Italians thanks to a melting pot of events (music, gastronomy, literature, etc.).

Based on voluntary services, this project is totally free. It can rely on the support of local administration that provides spaces, tools and commodities.

The community is focused on closing the Italian language gap and on spread the Italian laws, rules and services, in order to help the people just arrived in Italy.

Thanks to word on mouth, new people participate to Progetto eXtra's initiatives and the community is grown rapidly, involving more than 380 people in six years.

Some initiatives are born spontaneously: friendship, work relations, cultural exchanges and so on.

Right now Progetto eXtra is a community where:

- we exchange knowledge and experiences.
- we do barter of products and services.
- we forge personal and business relationships between Italians and Foreigners.

## **Generazione APP**

The project started in October 2011, in a secondary school at Mulazzano, a little town near to Milan, with the following aims:

- increase the knowledge and usage of new technologies in schools: social network, cloud computing, APP & Tablet,
- provide new formats and tools for students, teachers and schools' managers.
- close the gap in communication styles between young and adult people.

This school has L.I.M. (multimedia interactive board) in each class, has computer labs and access to Internet, but teachers use them as an up-grade of same teaching programs and methods.

Managers, teachers and parents don't know digital technologies, they don't use smartphone or tablet, they don't share contents in clouds or in social networks... but the students do it!

Children teach how to use technologies to their teachers, their parents, in a "peer to peer" exchange, with an infectious enthusiasm. In fact, thanks to students, a FB Community is born and up to date *Generazione APP* has 115 members: students, teachers and parents.

I delivered three different lessons on 'augmented didactics':

1. Social Network: how we change the way we communicate,
2. Art&Tech: how we can use the technologies to do an artwork and to discover art evolution,
3. MusicAPP: how we can play and how we can see music.

During this activities, youths with problems in the 'ordinary disciplines' achieved good results, because they used different learning approaches and because I was not there to judge them.

Thanks to interesting results teachers have started other spontaneous initiatives.

Take a consideration: in Italy we call '*scuola dell'obbligo*' (= obligation school) the schooling from 6 to 18 years... so, what love for culture can grow people if they are forced? This means that we have to change also the way we control and evaluate the knowledge: and this is the next step of this community.

Right now we have tools and technologies that make feasible a 'learning by doing', that allows to access knowledge through different way.

## **Back to School**

I started in 2010 a set of initiatives for Italian Small and Micro Enterprises, in order to:

- Release value innovation practices (new business, new behaviours, new technologies)
- Investigate new Business Models (barter, resources sharing, on-line collaboration)
- Innovate internal and external business processes

The project started organizing free seminars on methods and practices of innovation. The first two initiatives involved 50 people interested in investigating value innovation.

During these meetings, entrepreneurs, professionals and managers from different sectors confronted each other on problems and solutions.

Thanks to their interest, coaching e training activities have been delivered in five companies (2 medium, 1 small and 2 micro Italian SMEs) using barter and resources sharing.

Little by little the interest in these models is decreased... right now only two (micro) companies are still working with me using this approach.

We haven't achieved good results in this field, mainly because:

- Management training and coaching for Italian SME are still considered as a loss of time or sometimes simply a way to obtain funds.
- Italian SME are still reluctant to test this kind of new business models, even if Italian law recognizes and regulates the Barter as any other kind of business agreement.

Also in this case, the group size and the word of mouth have played a key role: professional and managers have change this model to adapt to their supply chain, making little and strong communities that share services, knowledge, infrastructures.

Finally, these initiatives have enabled me to acquire a wealth of knowledge on micro and small enterprises, that I'm telling through [www.solotablet.it](http://www.solotablet.it), the latest ECS example, described in the next section.

### ***Solo Tablet***

SoloTablet is a portal for spreading knowledge in technologies and in their impact on organization.

Born from an idea of one person, this project:

- provides a knowledge repository on Tablet/APP/Cloud Topics for the Italian Market (4.000 articles , 500 podcasts, 8 thematic blogs),
- allows the meeting between technology offers and demands,
- tells stories about changes and evolution in different aspects of organization: business, school, lifestyle.

The website is rapidly growing (2012 average data):

- daily accesses: 900,
- page views per user: 2.5
- time on site per user: 120 sec
- most popular blog: *At school with tablet* (average: 590 views in a month, 27 “i like” per news).

The competence network runs good and shares risks and opportunities.

Products and services barter, on line collaboration and knowledge sharing are the foundations of this community: all editors are volunteers, the company making facility and application management is self-financing through advertising and the registered users (more than 300) help us to spread contents on social networks.

### **Conclusion**

Our experiments pointed out and confirm the consistency of the memetics approach, interlacing different disciplines and different approaches in real environment and communities.

The structural variables that influenced our eco-cultural systems' are: group size, heterogeneity of the members and type of environment problems.



Why the most ‘strong’ community is Generazione APP? Because: the future of childhood is the primary interest for parents and teachers, because the different role and competence of teachers, parents, students are more clear that in other contexts and because schools are very closed with local problems and communities.

Use conflicts to collaborate: as learned from Blue Ocean Strategy and their experiences, defining and building environments where competition is irrelevant is possible.

Thanks to disruptive technologies (as shown by C. Christensen) we can personalize teaching and learning, building different solutions: at schools, in the companies, in our life. Youths with problems in the ‘ordinary disciplines’ achieved good results using different learning approaches. And adults need to have tools for planning and making personal learning process.

New technologies allow to multiple intelligences to come out easier and to work all together for building common solutions to common problems.

As Krugman noted, “eat without paying” is possible, changing relationship between work, interest and value... there are a lot of solutions that require only to be tested: barter and resources sharing are two examples of this.

But, “we see what we know”: we see only a part of the complexity and to reduce the gap between visions and reality we have to collaborate. Conflicts resolution, learning through a recursive approach to all disciplines, making organization without ‘fixed’ hierarchy are of course value innovation in training and coaching... why?

As pointed out from E. Ostrom studies, the effective management of cultural evolution is based on: Trust, Reputation, and Reciprocity. In a peer-to-peer approach and without hierarchical dependencies people are really committed and their contribution adds values, always.

## **Bibliography**

- [1] Elinor Ostrom, *Governing Commons. The Evolution of Institution for Collective Action*, (Italian Edition, Marsilio, 2006). ISBN: 978-88-317-9051-2
- [2] Paul Krugman, *The Return of Depression Economics and Crisis of 2008*, (Italian Edition, Garzanti, 2009). ISBN: 978-88-116-0093-0
- [3] Serge Latouche, *The Invention of the Economy*, (Italian Edition, Bollati Boringhieri, 2010). ISBN: 978-88-339-7006-6
- [4] Gabriele Lolli, *Under the sign of Godel*, (Italian Edition, Il Mulino, 2007). ISBN: 978-88-151-2023-6
- [5] Douglas R. Hofstadter, *I'm a strange loop*, (Italian Edition, Mondadori, 2010). ISBN: 978-04-650-3079-8
- [6] Pascal Jouxte, *Memetics: the Genetics Code of Culture*, (Italian Edition, Bollati Boringhieri, 2010). ISBN: 978-88-339-2062-7
- [7] Richard Dawkins, *The Selfish Gene*, (Italian Edition, Mondadori, 2009). ISBN: 978-01-928-6092-7
- [8] Geert Hofstede, *Cultures and Organizations: the Software of Mind*, Mc Graw-Hill, 2005. ISBN: 978-00-714-3959-6

- [9] Maria Montessori, *The Absorbent Mind*, (Italian Edition, Garzanti, 1999). ISBN: 978-88-116-7502-0
- [10] Maria Montessori, *Secret of Childhood*, (Italian Edition, Garzanti, 1999). ISBN: 978-88-116-7503-7
- [11] Howard Gardner, *Five Minds for the Future*, (Italian Edition, Feltrinelli, 2007). ISBN: 978-88-071-0424-4
- [12] Noam Chomsky, *Problems of Knowledge and Freedom: the Russell Lectures*, (Italian Edition, Il Saggiatore, 1997). ISBN: 978-88-565-0205-3
- [13] Alessandro Ferrara, *The Force of the Example: Explorations in the Paradigm of Judgement*, (Italian Edition, Feltrinelli, 2008). ISBN: 978-00-071-0436-7
- [14] Bruno Munari, *From a thing born an other thing. Notes for a design methodology*, (Italian Edition, Laterza, 2008). ISBN: 978-88-420-5117-6
- [15] Emilio Renzi, *Comunità Concreta: Work and Thought of Adriano Olivetti*, (Italian Edition, Guida, 2008). ISBN: 978-88-604-2454-9
- [16] Clayton Christensen, *Disrupting Class. How Disruptive Innovation Will Change the Way the World Learns*, Mc Graw-Hill, 2011. ISBN: 978-00-715-9206-2
- [17] John Withmore, *Coaching*, (Italian Edition, Sperling & Kupfer, 2006). ISBN: 978-88-655-2008-6
- [18] James Webb Young, *Technique for Producing Ideas*, (Italian Edition, Lupetti, 1995). ISBN: 978-88-863-0227-2
- [19] W. Chan Kim, Renée Mauborgne, *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant*, (Harward Business School Press, 2005). ISBN: 978-88-453-0848-2
- [20] Peter Senge, *The Fifth Discipline* (Italian Edition, Sperling & Kupfer, 2006). ISBN: 978-84-757-7351-3
- [21] Arie de Geuss, *The Living Company. Habits for Survival in a Turbulent Business Environment*, Harward Business School, 1997. ISBN: 978-08-758-4782-5