Entrepreneurial education and interdisciplinary negotiation

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Abstract: This article aims to encourage reflections on entrepreneurial education and the contribution of interdisciplinary negotiation in this context. It presents an overview of entrepreneurship in Brazil and offers possibilities for taking entrepreneurial education to a variety of educational areas, schools, and corporate environments.

Key Words: Education; interdisciplinarity; entrepreneurship.

1. Introduction: Education and Entrepreneurship, how to establish a connection?

“Teaching based on specialization, that is, mental and memory restriction, should give place to a teaching open to solidarity, exchanges, imagination, and inventiveness. The essential analytical spirit should be complemented and compensated by the synthesis spirit, the wish for highlighting the moving and making up parts of knowledge.” George Gusdorf

Education, in the 21st Century, will be based on four fundamental pillars: learn to learn, learn to do, learn to live together with others, and learn to be. Educational institutions should change their paths in order to find alternatives and methods that ought to foster, not only technical knowledge, but may also promote the individual’s full development, awakening in him or her, abilities for building up ethical, political and human relationships, essential tools that make up the essence of citizenship, and which are the basis for any intended development throughout life, that is, providing that within and with a view to continuing education.

The concept “Entrepreneurship” was made popular by the economist Joseph Schumpeter, in 1950, as being a pivotal part of his Creative Destruction Theory, according to Schumpeter, the entrepreneur has to be a versatile character, a person who has the technical abilities to know how to produce, and has to have a capitalist mind to gather financial resources, organize internal operations, and sell the company products or services. In fact, Schumpeter, wrote that for a society to be considered capitalist, one has to know if it has trusted their economical process to private businesspeople.

Later, in 1967, by Kenneth E. Knight, and in 1970 by Peter Drucker, it was introduced the concept of risk, an entrepreneur must take risks in whatever business deals he is involved. In 1985, Gifford Pinchot introduced the concept of Intra-entrepreneuership. An enterprising person, but within a company or organization.
Currently one of the most accepted definitions is given by the entrepreneurship scholar and researcher, Robert Hirsch, in his book, “Entrepreneurship”. According to him, entrepreneurship is the process of creating something different and with added value, by dedicating time and the necessary effort, by taking the related financial, psychological and social risks, and reaping the personal and economic rewards that result from them.

Financial satisfaction is the result of an attained goal (i.e.: a new product or a new company) and not an end in itself. Entrepreneurship is the main factor for promoting social and economic development in a country. Identify opportunities, seize them, and get the resources to change them into profitable business, that is the role of the entrepreneur.

I believe that the connection to be established between entrepreneur and education should be the constant search for innovation one that changes learning spaces into more humane spaces and adds something to the development of a nation.

“Innovation comes from ideas connected in a network by a society committed to the exercise of citizenship and to the development of a conscious citizen, who worries about his problems, has some knowledge, attitudes and motivations, and who is always in search for solutions that will guarantee the balance of the relationship between humanity and its environment, in such a way that the future generations do not fall victim of destructing actions taken by men themselves, actions that would endanger our own common future.” (GUEVARA et al, 1998)

2. Entrepreneurship in Brazil

Entrepreneurship started to gain strength in Brazil back in the 1990s, during the economic opening. The coming of imported goods helped to control prices, a basic condition for the country’s growth, but it also brought some problems, some industry segments could not compete with the imported goods, for instance, toys and textile products. In order to get in synch with the rest of the world the country started to change, companies of all sizes and segments had to be modernized so as to be more competitive and to start growing again. The government began a series of reforms to control inflation, adjust economy, and in a few years the country achieved stability, had a better economic planning and gained respect. Economic growth was back. In 2000 only, more than one million jobs were created. Foreign investors started to invest money back in Brazil and exportations increased. Those companies together employ over 40 million workers.

2.1 Concept Definition

The etymology of the word entrepreneur take us to France, where it was first used around the XVII or XVIII centuries, with the aim of designating those people who were daring and that stimulated economic progress through new and better ways of acting and working. In that time, the capitalist and the entrepreneur were finally set apart and differentiated, probably due to the beginning of industrialization, which was, at that time, being spread throughout the world by the Industrial Revolution.

As stated by Robert Menezes: “Entrepreneurship is personal learning, impelled by motivation, creativity and initiative, it aims to reach vocational awareness, perception of opportunities and the building up of an ideal life project.” and “Entrepreneurship is the art of making things happen with motivation and creativity.”
In agreement with what Eder Luiz Bolson said, we may say that “Entrepreneurship is an educational movement that intends to develop business-minded people, enterprising people and business planning people.”

According to Louis Jacques Fillion the entrepreneur is the person that images, develops and makes his visions come true.

Jeffry Timmons considers that the entrepreneur is someone capable of identifying, seizing and taking advantage of opportunities, always trying to manage resources to change them into successful businesses.

The abilities required by an entrepreneur can be classified in three areas:

1. Technical: Entails writing skills, being able to listen, take in and analyze information, means to be organized, know how to lead people and to work in teams.

2. Management: knowledge in the areas involved in creation and management of the company (marketing, business administration, finance, operational functions, production, decision making, planning and controlling).

3. Personal characteristics: To be disciplined, to be risk-taking, to be innovative, to be daring, persistent, to be a visionary, to have drive, to be bold, to be humble and most of all to be passionate about what he or she does.

2.2 Brazil’s Entrepreneurship Profile

In a report summarizing the main contents and topics approached by the publication “GEM – Global Entrepreneurship Monitor: Empreendedorismo no Brasil 2011”, the result of an international research, in which Brazil participates for the 12th time, we have a research excerpt on how Brazilian entrepreneurship is seen in Brazil. Ranking only behind China and the US, Brazil has some 27 million people with their own business or involved in the creation of their own business. In absolute numbers, it ranks third in a research conducted in 54 countries, which are surveyed and analyzed yearly.

![Figure 1 – Entrepreneurs in Brazil](image-url)
More than half of the 27 million Brazilian entrepreneurs, 14.4 million, are between 25 to 44 years old. Other 3.4 million are in average up to 24 years old. Six million are between 45 and 54 years old, and 3.3 million are over 55 years old. The monthly income earned by half of these entrepreneurs, is about 3 minimum wages. One third of them earns between 3 to 6 minimum wages, and less than 15% has an income of more than 6 minimum wages per month, that comes from their own business.

Since 2003, entrepreneurs driven by opportunity have made up the majority of entrepreneurs in Brazil, the relation between opportunity versus need has been greater than 1.4 since 2007. In 2011, Brazil once more exceeded the ratio of two opportunity entrepreneurs for each entrepreneur by need, which had already happened in 2008, and in 2010. In 2011, for each entrepreneur by need there were 2.24 others driven by opportunity. This number is similar to the average gotten by the countries which participated in the study this year, which is 2.2 opportunity entrepreneurs for each entrepreneur by need.

The research shows that in Brazil, businesses are started more because entrepreneurs detect an opportunity for business. For each company opened because of the need of a worker to invest in his own business, there are at least 2.24 others opened due to the vision of the entrepreneur, who saw or foresaw a market opportunity.

Gender: Historically, Brazilian women are considered very enterprising, they are among the most enterprising in the world. They have achieved the fourth highest TEA, among the 54 countries analyzed in a 2011 research. Among the start-ups, 51% are men and 49% women, keeping a balance between genders in terms of national entrepreneurship.

Age: In 2011, it had been observed that the age range in which we may find the largest concentration of start-up entrepreneurs is between 25 to 34 years old. Among the established entrepreneurs the age range is within 45 to 54 years old. That means that among Brazilians within the 25 to 34 age range, some 4.9 million were involved in some sort of enterprising in 2011, amongst the established ones, 3.6 million are in the 45 to 54 age range.

3. Negotiation and Interdisciplinarity as fundamental for entrepreneurial education

According to FAZENDA (2000) interdisciplinarity is a new attitude towards knowledge, an opening for a better understanding of hidden and non-hidden aspects of the act of learning, evidently questioning them. It demands full immersion in the routine work, during teaching practice. The metaphor that supports, determines and helps in the establishment is that of the “look” or “glance” at, a metaphor that feeds on a varied, diverse mythical nature. They identify the principles: they are affection and boldness, they impel you to intersubjectivity exchanges and to partnerships.

Action, in interdisciplinarity, means active attitude and it is in accordance with the etymological meaning of the word negotiation.

“Action is a manifestation of a force, of an energy, it is the capacity of acting or practicing; to be able to do something, of assuming an active attitude. Action is intrinsic to the other categories of interdisciplinarity, being present in the construction of a theory, in new directions given to itself an on the practice of its concepts.” (FAZENDA, p. 120, 2001)
One of the qualities of the interdisciplinary negotiator is the ability to innovate by selecting ideas, in which practical knowledge would mean reaching a plateau for those who are not afraid of reviewing old knowledge and practices, and also to incorporate to their ideas necessary innovations for making up a collective build-up of a Project.

In order to start this dialogue on negotiation, we have to understand the meaning of the word *negotiate*, etymologically speaking it comes from the Latin word *negocium*, formed by putting together two terms: *nec* (no, not) and *ocium* (idleness; rest), that is, to put into action, to engage in activity, or *negotior, áris, átus sum, ári* (to deal), meaning to negotiate actions; conduct business; to make pacts; take steps to solve or do something.

Negotiation is a form of action that moves us towards interdisciplinary attitude, by ethically trying to find possible ways to make people feel part of something greater, to be set in a context, of having a role, or having the feeling of belonging.

I consider the existence of conflicting interests to be natural, since having common interests does not necessarily mean to think alike. There is obviously a need for talking your intentions over, talk about the objectives of both interested parties, with a view to finding a middle ground that will be good for all, discussing things while facing a conflict, eliminating possible confrontation scenarios, after all, war and violence are diseases that can be prevented or avoided.

> “Letter for a World without Violence – violence is a disease that can be prevented 10th: The political instruments that had given birth to a non-violent world are democratic institutions that work and the dialogue based on dignity, knowledge and commitment, conducted at aiming the balance of interests of the involved parties, and, whenever possible, they should include mankind as a whole, and nature.”

> Letters to ASHRAM – 1930 – Mahatma Gandhi (1971, Editora Hemus)

In my opinion negotiation may contribute in an interdisciplinary way by making the people involved in the processes, aware that knowledge might come from multiple places and it is essential to open up for them, letting them flow, in a bold way, stimulating ideas to crop up, considering and valuing all points of view.

### 4. Key Elements for Interdisciplinary Negotiation

> “The space is not the environment (real or logical) in which things are presented, but the place where the position of things make them possible, that is, instead of thinking of it as some sort of ether, into which all things are surrounded, or conceive it abstractly with a characteristic that makes it known and common, we should think of it as the universal power of its connections.” Merleu-Ponty

I believe that interdisciplinary negotiation could be better analyzed if one considers two aspects which are separated and might happen simultaneously on the spiral of interdisciplinarity with a probable chronological time organized, but tuned to a kairotic harmonious time.

In such a fashion were developed two new competencies for professional and educators, for the 21st century, broadening the Education pillars of Jacques Delors:

**Internegotiation**: the perception of the whole by intuition and partnership. How much we should stimulate, and be stimulated in order to promote actions for the benefit of the group. The will and the relations that are part of it. Humility to be open and try to access varied spaces. Listen in an inclusive way.
Intranegotiation: Self-Knowledge and Recognition. Self-awareness, to know his own limits and the recognition of the other. How much we can contribute to and receive from the other, when it comes to knowledge. Silence and reflection are necessary in order to see yourself as belonging to the group and to recognize yourself within it.

The four elements which I am going to address are always present in interdisciplinary dealings, having as a core, professional and ethical relationships. By keeping tabs on these starting points and adding up your talent and experience, you will be empowering yourself to make deals in a more humane way and with a greater chance of attaining common set out goals.

Authorship and Recognition: In an attempt to translate things into interdisciplinarity, it is important that the negotiation is authentic, real, and that agreements must be fair, as long as it respects the objective criteria. It is very important, in an interdisciplinary negotiation, to recognize your knowledge and that of the other, and also to recognize your authorship and that of the other, legitimizing whoever has it or not.

Knowledge-Knowledge: In an interdisciplinary action, as it could be seen, the element information is seen as a feeder of facts, and not of assumptions, once it is known that the better negotiators are those who move humbly in the field of knowledge and are not afraid of searching and sharing information.

The intellective competency of interdisciplinarity might contribute to the individual that will negotiate within the knowledge-knowledge basis, so within the person, with this competency, we may notice that his reflexive ability is so strong and always present, that it imprints this habit on his daily life, be it in an educational or in a business environment.

Analytical par excellence he favors all the activities that try to foster reflexive thinking. Commonly seen as a philosopher, or an erudite, soon gains the respect not only of their students but also from their peers – it is that person who everybody asks for advice or look for whenever they have doubts or problems. He or she is the being of a consolidated wait, he sows, sows and sows, leaving the harvest for the others. He helps to organize ideas, to classify them and to define them.

“Freedom is not worth having if it does not include the freedom to make mistakes.” Gandhi

This ability is in keeping with the action-reaction-action that involves learning. Learning with interdisciplinary negotiation is to look at the practice and reflect about new possibilities. How would that conversation have developed if it had been conducted in a different way? How would have been the conclusion of that work if the dialogue had been based on acceptance, respect and humility?

It is important to review our attitudes not for self-punishment, but to discover our own inner workings, to understand why we adopted that attitude. To realize yourself as a human being, that errs, is flawed, but is always trying to be analytical and thoughtful in order to make a better tomorrow for yourself and for everyone.

Wait: Supported by waiting, which is the basis of interdisciplinarity, once you have a negotiation process, you know that should be assigned a time for planning, a time to act, a time for assessment and a moment that we should simply wait. We should expect a new time, which is not chronos, controlling time, but kairos, a sort of time that subverts the original order of
Chronos, which takes advantage of unpredictability, a flowing time. With Chronos we submit ourselves to schedules, timetables, with Kairos we surrender ourselves to creation. (Garcia, 2000).

**Inclusion:** To be part of a certain event, focusing on the substance of the negotiation, in which we can say that interdisciplinarity is the starting point for individual and collective learning spaces, allowing themselves and giving others a sense of belonging. Openness to include people, points of view, and opinions.

The possibility of negotiation with interdisciplinary action allows us to think about moments of reflection and exchange, without being necessarily attached to any processes. In that way, phases and steps of a negotiation don’t have to be discarded, but they take up a secondary role, and start being imaginary and in a circular movement, as with the interdisciplinary spiral, where the negotiation will move, inspired by attributes which will manifest themselves, in all situations, simultaneously or not.

Chart 1 – Interdisciplinary Negotiation Spiral – Interdisciplinary Negotiation Stages.

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<thead>
<tr>
<th>Chart 1 Interdisciplinary Negotiation Spiral</th>
<th>Interdisciplinary Glance</th>
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<tr>
<td><strong>Preparation</strong></td>
<td>Get ready for dialogue, get to know what the other has experienced throughout his career or life. Rely on your intuitive, intellectual, practical, and emotional competencies, be humble and most of all know how and when to listen.</td>
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<tr>
<td><strong>Openness</strong></td>
<td>To be open and value yourself and the other. Moment for sharing ideas and collective creation and construction of proposals. Self-knowledge, acknowledgement of you and of the other. Establish partnership.</td>
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<tr>
<td><strong>Listening</strong></td>
<td>To support yourself on Interdisciplinary categories: detachment and humility. Listen more, give fewer opinions, allowing the other to open up and talk about his/her needs and expectations, and also, later on, allowing him/her to listen. Try to find a common ground, and similar ideas.</td>
</tr>
<tr>
<td><strong>Presentation</strong></td>
<td>Present facts and proposals, showing clearly and objectively all the points defined by the interested parties. Remind yourself of the importance of silence and of being a good listener.</td>
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<tr>
<td><strong>Awareness</strong></td>
<td>Moment to clarify doubts. Respect other people opinions. Present your point of view proposing real arguments. Try to earn the trust of the other with actual reasons. Acceptance and respect.</td>
</tr>
<tr>
<td><strong>Flexibility</strong></td>
<td>Make it clear in the proposal the possibility of reversible points. Belonging.</td>
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<tr>
<td><strong>Recording</strong></td>
<td>To register or record all the activities so as to reflect upon the practice and resume actions during the process.</td>
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5. **Final Considerations**

Recent surveys in the USA, have shown that to be successful in business depends mostly on our own behavior, characteristics and attitudes, and not as much as from our technical and management abilities, as it was commonly thought not long ago. Only 14% of the entrepreneurs...
in Brazil have a college degree, 30% haven’t even finished elementary school, while in developed countries 58% of the entrepreneurs have a university or college degree. The higher the educational level the greater will be the proportion of opportunity entrepreneurship.

Thus, interdisciplinary negotiation comes to help the professional and educational entrepreneur by casting a glance at the body, mind and soul.

An interdisciplinary negotiation inspires itself in silence and feeds on respect. As if they were fractals\(^{16}\), with millions different forms but very similar. Having a fractional dimension is not enough to be considered a fractal, the object has to be self-similar: its parts have to look like each other and represent the whole. This is the sort of negotiation I defend: self-similar people whose build-up parts are similar and together these people may try to achieve, through collective construction, the whole.

As stated by Ivani Fazenda, an interdisciplinary spiral, such as Physics, does not make itself up linearly, but by points. The points articulate themselves gradually, not at once, but all the points that appear have something to do with the previous ones. The first point is the first question asked by the investigator through work or life experience. Life experience leads to living things through your senses and with all its subtleties, and as you experience the knowledge you start in a path towards reflection about what you had lived, and on that path we end up meeting
theoreticians from different fields of knowledge. The spiral grows and spreads out as you go back to personal awareness. Then it happens as within a fractal that has been built in an interdisciplinary negotiation, with its self-similar movements, that unites knowledge and reinvents stories, tying up similar points in the search of the whole, according to the five principles of the interdisciplinary theory.

Interdisciplinarity is something that you learn by practicing, by living, it is not taught; therefore a new positioning in relation to educational practice and life is demanded, for interdisciplinarity is a transformation engine, even for social change, in which, communication, dialogue, and partnership are fundamental for that to happen. What is needed is integration, that moment during the interdisciplinary process in which there is discipline organization, within a program of studies, it is about knowing and relating contents, methods and theories, it is integrating partial knowledge with specific knowledge, trying to reach understanding of the knowledge in its entirety. We mentioned integration of knowledge with the movement of (re) construction, which through new questionings, new searches, changes the understanding of the present reality.

Notes

1 Georges Gusdorf was a French philosopher and epistemologist, he was from a Jewish family, originally from Germany, and was born near Bordeaux in 1912. He died on 17 October 2000. The work of Georges Gusdorf is marked by Søren Kierkegaard and the Swiss Protestant theologian Karl Barth influences. He was a student of Gaston Bachelard, at the École Normale Supérieure (ENS) in Paris, where he was the prefect of studies, he also studied at the Sorbonne under the direction of Brunschvicg in the 1930s - the era of Andrew Lalande and Émile Bréhier. Between 1940 and 1945, during the war, he was taken prisoner in Lübeck, northern Germany. It was during these years of detention that he experienced an intellectual sociability that his academic career would not give him, according to him, that is, renovation or change. After the war, he was appointed professor at the University of Strasbourg, occupying the chair of general philosophy and logic. He then published a thesis, The Discovery of The Self, the matrix for his future work on memory and written during his long captivity in Lübeck. In 1950, he returns to ENS, he then succeeded Merleau-Ponty, and became master of Althusser and Foucault. Captivity, for Gusdorf, was also an opportunity to focus on a gender of writing which ordinarily does not attract philosophers: autobiography. Georges Gusdorf also remained committed to a clear vision of man, which is conditioned by the body and the world in which he lives, but who is also able to detach from the determinism and may produce works which manifest his freedom. These works cannot be reduced to formal schemes, they express a personal being and with it a whole world that we can never fully dream of or understand, and it varies not only with individuals, but also with the times. From 1966 to 1988, he published fourteen volumes(Payot) of extensive encyclopedic research: The Humanities and Western Thought. In 1968, outraged by the student revolt, he moved to Laval University in Quebec City, but returned to Strasbourg, once the dust settled. George Gusdorf somehow foresaw this explosion in his book L’Université en Question, published in 1964. Georges Gusdorf taught at the University of Texas in Austin and at HEC Montreal. Available on http://fr.wikipedia.org/wiki/Georges_Gusdorf

2 In accordance with a Jacques Delors report: “Educação um Tesouro a Descobrir” (UNESCO, 1996).

According to Houaiss (an important Portuguese language dictionary), innovation means “action or the effect of innovating”, which can be defined as “to make new, to renovate, to restore” and “to introduce novelty, to do something in a way that was not done before”.


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Entrepreneur, founder of five companies and university professor. Engineer from the Federal University of Santa Maria, RS, MA from North Dakota State University in the United States. His entrepreneurial experience is interesting and diverse. It is a scholar of entrepreneurship that always encourages people to plan and implement their own businesses. Brazil is a member of the World Future Society. He is the author of the book “Tchau, Patrão!” – Published by SENAC.

Louis Jacques Filion is Professor of Entrepreneurship at the Rogers-JABombardier HEC Business School in Montreal. His specialty is in the area of entrepreneurship. His academic background includes a Bachelor (BA Classics) by St-Laurent College Faculty (University of Montreal -1966), a degree (BA Honours) in Political Science (1968) and a Masters Degree (MA) in International Studies (1974), both from the University of Ottawa, an MBA by H.E.C. Montreal (1976) and a Ph.D. in International Studies and Entrepreneurship from the University of Lancaster, UK (1988).

Jeffry A. Timmons is considered one of the world’s leading authorities on entrepreneurship. He holds a doctorate in business administration, emeritus professor of entrepreneurship at Babson College and author of New Venture Creation, one of the top ten list of Inc. magazine from the U.S.

The Global Entrepreneurship Monitor - GEM a non-profit research project that aims to generate and disseminate information on entrepreneurial activity worldwide. It was started in 1999, the result of a partnership between Babson College and London Business School. In Brazil, the GEM is conducted since its inception by the Brazilian Institute for Quality and Productivity - IBQP, with technical and financial support of several national institutions, notably the SEBRAE as a partner since 2001. In 2011, the IBPQ partnered with the Center for Entrepreneurship and New Business at Fundação Getulio Vargas for the results to be analyzed jointly by both institutions. This year, 2011, the GEM research, with the participation of 54 countries, which have carried out two major research activities: data collection among the population aged between 18 and 64 years, and obtaining opinions of professionals and entrepreneurs about existing conditions in the countries for the development of new business. Specifically with respect to the GEM research in Brazil, were interviewed 2000 individuals aged 18 to 64 years, representative of the population in this age group and 36 professionals from various segments of Brazilian society, related to entrepreneurship, reported their visions on the conditions for enterprising in Brazil. GEM groups together the economies of participating countries on three levels: countries driven by factors, countries driven by efficiency and countries driven by innovation. The factor-driven economies are dominated by subsistence agriculture and extractive business, with a strong economic base built on natural resources.
dependence on labor and natural resources. In economies driven by efficiency development is characterized by industrialization and by gains in scale economies, with a predominance of large capital organizations. As development unfolds, businesses are more knowledge-intensive and the service sector expands, featuring innovation-driven economies. For the GEM research in 2011, 7 countries were from the group factor, 24 countries from the group efficiency and 23 from the group innovation. Brazil belongs to the group efficiency.


15 Wait: to allow time to go by, especially while staying in one place without doing very much, until someone comes, until something that you are expecting happens or until you can do something.

Wait: c.1200, “to watch with hostile intent, lie in wait for,” from O.N.Fr. waitier “to watch” (O.Fr. gaitier, Mod.Fr. guetter), from Frankish *wahton (cf. Du. wacht “a watching,” O.H.G. wahten, Ger. wachten “to watch, to guard;” O.H.G. wahhon “to watch, be awake,” O.E. wacian “to be awake;”.

General sense of “remain in some place” is from late 14c.; that of “to see to it that something occurs” is late 14c. Meaning “to stand by in attendance on” is late 14c.; specific sense of “serve as an attendant at a table” is from 1560s.


Kairos (καιρός) is an ancient Greek word meaning the right or opportune moment (the supreme moment). The ancient Greeks had two words for time, chronos and kairos. While the former refers to chronological or sequential time, the latter signifies a time in between, a moment of indeterminate time in which something special happens. What the special something is depends on who is using the word. While chronos is quantitative, kairos has a qualitative nature.[1] Kairos (καιρός) also means weather in both ancient and modern Greek. The plural, καιροι (kairoi or keri) means the times. kairos is “a passing instant when an opening appears which must be driven through with force if success is to be achieved.”[2]

Kairos was central to the Sophists, who stressed the rhetor’s ability to adapt to and take advantage of changing, contingent circumstances. In Panathenaicus, Isocrates writes that educated people are those “who manage well the circumstances which they encounter day by day, and who possess a judgment which is accurate in meeting occasions as they arise and rarely misses the expedient course of action”.

In Christian theology, kairos means “the appointed time in the purpose of God”, the time when God acts (e.g. Mark 1.15, the kairos is fulfilled). It differs from the more usual word for time which is chronos (kronos).

In the Kairos Document, an example of liberation theology in South Africa under apartheid, the term kairos is used to denote “the appointed time”, “the crucial time” into which the document or text is spoken.” Available on http://en.wikipedia.org/wiki/Kairos.

16 Fractals are objects generated by repetition of recurrent processes, presenting self-similitude and infinite complexity. Different definitions of fractals appeared along with the development of its theory. The basic notion was introduced by Benoît Mandelbrot, that used the neologism “Fractal”, which came from the Latin adjective fractus, which means “irregular” or “broken”. http://www.fractarte.com.br/artigos.php
References


