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ECONAISSANCE

The Reimagined School and
the Culture of Entrepreneurialism

Piero Formica

● ● ● EMERALD POINTS

ECONAISSANCE

We know well that the way we measure economic activity and growth, and thus profess to evaluate our performances, has little to offer by way of guidance for how to achieve prosperity and a better world. Yet, the media, the politicians, the business people, and the ‘man in the street’ all keep following with great fervour, as if dancing to somebody else’s tune. So, by when are we actually going to do something about it? In the midst of the present epidemic, people say, ‘we won’t go back to the same again’, but what does that mean? In this unique and unraveling tale, Prof. Piero Formica removes the curtain, peeping into the chamber of *Econnaissance*, and ponders what could possibly get us out of the entangled mess we have created at the interfaces of Economy, Knowledge and Renaissance. This is a book not just worth reading, but to be inspired by, and act upon.

Thomas Andersson, Prof., Dr., President and Founder, Water and Humanity, Muscat, Oman, previously President, Jönköping University and Deputy Director, Science Technology and Industry, OECD.

With *Econnaissance* Piero Formica once again brings his unique combination of wisdom, knowledge of the classics and scholarship to disturb and exercise our minds to re-imagine education in a world where entrepreneurialism can bring new meaning and purpose to teachers, students, practitioners, young old and across all cultural barriers. From the concept of creative ignorance to newly imagined orders of future human connectivity and communitarian behaviour – the essays in this volume will challenge the reader to a stream of individual re-appraisals of ‘what might be’. This will be encouraging as well as exciting reading for all with the courage to enjoin brain circulation and cross borders and boundaries in search of new territory to explore and conquer in life’s journey.

Professor Alan Barrell, Entrepreneur in Residence at Cambridge University’s Centre for Entrepreneurial Learning, Distinguished Guest Professor at Xiamen University in China and Commercial Director of Cambridge Healthcare Ltd.

Econnaissance by Piero Formica is an elegant poetic treatise on the state of the art as well as the future of innovation and entrepreneurship. It is a rather insightful and inciteful perspective on the history and geography of learning and knowledge at the nexus of people, cultures, technology and entrepreneurship.

Dr. Elias Carayannis, Professor of Science, Technology, Innovation and Entrepreneurship at the George Washington University School of Business.

In a time of unprecedented change and uncertainty, Prof. Formica intensely reminds us of our ability to master the challenges of today and tomorrow. Weaving an intense tapestry revealing and connecting past, present and future clues we need to continue evolving, *Econnaissance* allows us not only to re-imagine but also to find comfort and support in knowing that our innate creativity and entrepreneurship that have allowed us to overcome challenges again and again over time. Dr. Oliver Schwabe, Principal Web Weaver, The Open European Network for Enterprise Innovation in High Value Manufacturing.

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PIERO FORMICA

Maynooth University, Ireland



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INVESTOR IN PEOPLE

*To the Community of Maynooth University and the
Contamination Lab tribe who, with creativity and tenacity,
pursue virtues and knowledge in the footsteps of Dante's
rebellious Ulysses and along the Dantean journey of the Irish
poet Seamus Heaney.*

*To Debra Amidon and Esko Kilpi whose creative light
will never cease to shine.*

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ABOUT THE AUTHOR

Piero Formica is a Senior Research Fellow of the Innovation Value Institute at Maynooth University in Ireland and a Professor of Knowledge Economics at the Contamination Lab of the University of Padua, Italy. Professor Formica received the Innovation Luminary Award in 2017 from the EU's Open Innovation Science and Policy Group for his work on modern innovation policy. Previous publications with Emerald include *Grand Transformation Towards an Entrepreneurial Economy: Exploring the Void*, 2015, *Exploring the Culture of Open Innovation: Towards an Altruistic Model of Economy*, 2018, and *Innovation and the Arts: The Value of Humanities Studies for Business*, 2020

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BEHIND THE CURTAIN

Behind the scenes of Econaissance, the interweaving of Economy, Knowledge and Renaissance, are the characters to whom we owe suggestions and impulses that have oriented our thoughts. Our plot covers the tension between the totem of economic growth represented by GDP (Gross Domestic Product) and happiness, the reinvention of education, the evolution of work and the culture of entrepreneurialism with its fallout on entrepreneurship in the making. Let us give them a voice.

Michel de Montaigne (1533–1592) urges us to reflect on the despotic force of custom. It is ‘a violent and treacherous schoolmistress’. As the French Renaissance philosopher recounts in his *Essays* (*Book the First*, Chapter 22 – *Of Custom, and That We Should Not Easily Change a Law Received*), carrying a calf in our arms and, out of habit, daily continuing to do so as it grew up, one will end up with a great ox in her arms. Bouncing this warning on the terrain of the economy, we realise that the GDP, ‘calf’ in the 1930s, has long been a ‘bull’ that, in Montaigne’s words, takes a furious and tyrannical posture.

From his philosopher’s tower, Montaigne again cautions us against the danger we run when

We only labour to stuff the memory, and leave the conscience and the understanding unfurnished and

void. We can say, Cicero says thus; these were the manners of Plato; these are the very words of Aristotle: but what do we say ourselves? What do we judge? A parrot would say as much as that.

Bouncing in the school field, this is a notice of the school pretending to inflate pupils like frogs instead of exerting the imaginative power of their intellect. To emphasise Montaigne and quote Cicero (*De natura deorum*, I, V): ‘The authority of those who teach is very often an impediment to those who desire to learn’.

The arc stretched between solitude and socialisation gives strength to the mind engaged in learning. Jean-Jacques Rousseau (1712–1778) opens a space for dialogue between the value of the economy and the value of nature. The Genevan philosopher pours into his *Reveries of the Solitary Walker*, first published in 1782, the passion for knowing better oneself in isolation and feeling empathy with nature and, therefore, to establish a harmonious relationship with it. Later, the movement of the romantic poets will affirm the hedonistic value of solitude: a legacy to be put to good use to get us all healthy in body and mind out of the social distancing imposed by looming health dangers – lastly, the COVID-19.

A solitary stroll through the broad avenues of Faelled Park in Copenhagen to get some night air is a source of inspiration for German physicist Werner Heisenberg (1901–1976). In the early decades of the twentieth century, to escape from the workplace alone while practising sport or to listen to music was a widespread practice among physicists that had surprising results. They traced out alternative paths to those they had travelled until then, thus changing the soul of physics and proving the usefulness of new theories apparently of no practical relevance.

They remind us to support and encourage socialisation Madame de Rambouillet (1588–1665) and the other ladies who in France and other European countries enlivened the intellectual salons of the seventeenth and eighteenth centuries. There, new paths to progress were revealed by conversing constructively and creatively in a cognitive conflict mode, for unison is a very dull quality in conversation. As written by Montaigne in the *Essays (Book the Third, Chapter VIII – Of the Art of Conference)*,

*When any one contradicts me, he raises my attention,
not my anger: I advance towards him who
controverts, who instructs me; the cause of truth
ought to be the common cause both of the one and
the other.*

Benjamin Franklin (1706–1790), founder in 1727 of the Junto in Philadelphia, and, on the other side of the Atlantic, in Birmingham, from 1755 onwards, Matthew Boulton (1728–1809) and Erasmus Darwin (1731–1802), who laid the foundations of a dinner club, which later became known as the Lunar Society, also performed an equally vital socialising mission.

The voices of René Descartes (1596–1650), philosopher and scientist, in his *Discours de la méthode*, 1637 (*Discourse on the Method*), the essayist Bernard le Bovier de Fontanelle (1657–1757) in *Digression sur les anciens et les modernes*, 1688 (*Digression on the Ancients and the Moderns*) and the writer and poet Cesare Pavese (1908–1950) in his collection of poems *Lavorare stanca*, 1936 (*Hard Labor*) advise us to have a closer look at the depictions of men at work. Fontanelle pushes us forward, towards the time when the moderns (the ideators) will overtake the ancients (the workers) mending their ways. We can already glimpse the figures of the ideators who transfer thoughts from one mind to another.

The mutual exchange makes them acquire new knowledge. The more the knowledge assimilated, the more they are aware that much remains undiscovered. From Descartes, we get insight into the progress traced back to the two figures. Attracted to particular things, or forced to attend to them, the workers occupy fragmented spaces of knowledge. Their capacity to produce progress proves weaker than the potential of the ideators. Untied to a specific discipline, the latter connects all knowledge by opening the 'great book of the world'. The ideators are, in fact, great travellers on a par with Descartes. They mix with people of different temperaments and all walks of life, and they value the many experiences accomplished. Progress manifests itself in the ideators' occupations which are no longer the inhuman toil of which Pavese poetised. Their professions are activities of thought carried out in digital and hybrid form, merging the world of bytes and the world of atoms.

The culture of entrepreneurialism feeds on the thoughts of polymaths, who aim to keep all knowledge under their domain. The German Jesuit Athanasius Kircher (1602–1680), a scientific star of the Baroque age and a traveller in many worlds of knowledge, guides us towards that culture, preparing us to flutter like a butterfly from one field of knowledge to another. As a precursor to the contemporary world, Kircher moved between the study of volcanoes and fossils, the observation of microbes under the microscope, mechanical inventions such as automata, the magnetic clock and megaphone, Egyptology, music theory and comparative religion.

The drafting of Econnaissance ended at the outbreak of COVID-19. In the face of the pandemic, it was shouted out loud: 'Nothing will be the same as before'. Will a crisis of this magnitude accelerate change? In the 1930s, a deep economic crisis aggravated by drought and technological changes in agriculture impoverished many families of farmers in the

Great Plains of America. At that time, John Steinbeck's voice rose in anger. The narrator of the miseries of farm labourers at the time of the Great Depression deprecated the functioning of the economy regulated by profit margin and moulded to the advantage of the economic potentates. In the aftermath of the pandemic, what should 'Nothing will be the same as before' mean? With the voices of the evoked characters in the background, it is on this question that we raise the curtain.

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SETTING THE SCENE

You never change something by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.

—Attributed to Buckminster Fuller,
inventor and futurist.

Climate change, environmental degradation and health care show the other side of economic growth. It is not only related to well-being but can also harm the environment and, therefore, on well-being; hence, the need to balance adaptation of the environment to human needs with the adequacy of food, housing, social needs and desires to the environment. To this end, the technologies that create machines and other devices by applying scientific principles and technique that allows their functioning have a role to play. Such a task has entrepreneurial implications that, depending on the prevailing culture, will more or less conform to the assigned mission. The creative drive exerted by technology will produce the desired result if the cultural terrain is fertile for the birth and growth of humanist and empathic enterprises. Imbued with the

Renaissance spirit, they draw intellectual resources from science combined with art, literature and philosophy and behave altruistically.

Intending to balance the well-having and the well-being, *Econnaissance*, the intertwining of Economics, Knowledge and Renaissance, is a long look to the future that cannot be predicted but is anticipated by building it day after day. It is the dawn of a new Renaissance age that acts on the principles of human knowledge and the economy, shedding light on the culture of entrepreneurialism, too often kept in the shadows. In doing so, *Econnaissance* brings to the reader's attention the figure of the 'ideator', the polymath of the twenty-first century. As educators, scientists, innovators and entrepreneurs, ideators are the ultimate athletes of social progress fuelled by sustainable and environmentally friendly economic development.

The culture of entrepreneurialism is to take care (from the Latin *colere*, whence culture) of the socioeconomic environment while respecting the natural environment. It conceives thoughts that lead to blue actions, associated with the colour of sea and sky (viz, the safeguarding of the Planet) and, in the dark blue shade, to the ideas – the ideator's intellectual momentum – that shape those actions.

The school inherited from past industrial revolutions must be reimagined so that it can be a midwife that helps to give birth from the minds of the students the culture of entrepreneurialism. This culture is now called upon to face the challenges posed by the current technological revolution, which raises the age-old question of how to align the common good with private interests. It is a mission that involves public institutions. As the Dutch doctor and philosopher Bernard de Mandeville (1670–1733) argued, they have the task of promoting a variety of manufactures, arts and crafts as great as human inventiveness.