EXPLORING THE CULTURE OF OPEN INNOVATION: TOWARDS AN ALTRUISTIC MODEL OF ECONOMY

EXPLORING THE CULTURE OF OPEN INNOVATION: TOWARDS AN ALTRUISTIC MODEL OF ECONOMY

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The Innovation Value Institute of Maynooth University and the EU Open Innovation Strategy and Policy Group are communities of innovators who believe in the cultural values of open innovation for altruistic purposes. They are privileged spaces for debate in the spirit of transdisciplinarity that animates its culture of innovation. We dedicate this book to our colleagues.

> Piero Formica and Martin Curley January 2018

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Foreword

This important volume, *Exploring the Culture of Open Innovation: Towards an Altruistic Model of Economy*, is a vital and stimulating contribution to our understanding of open innovation and how it can be fostered and promoted. Curated and edited by two of the most prominent scholars in the field, with strikingly original and insightful contributions from leading thinkers, the breadth and diversity of perspectives offered are the book's greatest strength.

Exploring the Culture of Open Innovation considers how open innovation is changing, accelerating and pervading, fuelled by the transformative power of digital technology and advances in the science and art of innovation. The work presented represents an important shift in thinking: as the Quadruple Helix conceptualization of innovation systems (academia, enterprise, state, civil society) emphasizes the role of the citizen, this volume foregrounds citizenship and culture as key to our understanding of the nature and process of open innovation.

The power and agency of the citizen, and how that agency is shaped by culture, define a society and its capacity for sustainable innovation. This book causes us to think more about the nature of the society in which open innovation can flourish, and the importance of pluralism, dialogue and democracy. We are prompted to value the voice of the individual, cherish the spark of creativity that emerges from the different charges of distinct cultures and see the extraordinary benefits of the free and open flow of people and ideas.

These chapters cause us to reflect on the influence of culture (whether expressed at the level of the individual, the organizational collective, the city, the province, the state and the global region), and how innovation is shaped by and reflexively shapes those cultures. More widely, open innovation is a means of challenging and redistributing power and, in that context, the unique capacities of those who speak the language of more than one discipline and access the wisdom of more than one culture are privileged.

The direction taken by this book, to value the utopian and altruistic, resonates with the concerns of learners in the twenty-first-century university. It is a source of optimism that the modern learner is keen to explore the insights, approaches and tools of different disciplines, the

shades, nuances and riches of different languages, the practices, artefacts and wisdoms of different cultures, and above all the joys of their intermingling. It is with great excitement that we realize that education for open innovation, and hence for individual and societal well-being, fosters such divergent curiosity. It is challenging for educators and educational systems to support such divergence systematically, but the rewards are extraordinary. This volume supports the efforts of any actor who seeks to support open innovation and realize its benefits.

> Philip Nolan President, Maynooth University Maynooth, Republic of Ireland April 2018

Preface

In his 1891 essay *The Soul of Man Under Socialism* Oscar Wilde wrote, 'A map of the world that does not include Utopia is not worth even glancing at, for it leaves out the one country at which Humanity is always landing. And when Humanity lands there, it looks out, and, seeing a better country, sets sail. Progress is the realisation of Utopias' (Wilde, 1915, pp. 28–29). And, not to be outdone by Oscar Wilde, the Argentinian poet Juan Gelman, in a speech given on 27 September 2003 in acceptance of the Lerici-PEA Prize, said, 'Maybe the function of Utopia is found in its failure, and after the failure each time a better one is born, the function is found in its being more cause than effect, the engine of a voyage towards an horizon that always recedes by one step, after each step forward of humanity'.¹

The words are high-sounding, and this is what they are meant to be. This book – *Exploring the Culture of Open Innovation: Towards an Altruistic Model of Economy* – perhaps sounds, in its sub-title, a trifle utopian. But, after the recent failures of economics, we need to direct our eyes towards different horizons. The 'failure of economics'? – yes, and the 'Queen question' pointed to that failure: Queen Elizabeth was visiting the London School of Economics in November 2008, right in the middle of the turmoil on the international markets, and posed an innocent question: 'Why did nobody see it coming?'.² And, now, the Queen could pose another question: 'Why did nobody see the wave of populism coming?'. Both 'Queen questions' – the actual and the putative – are aimed at two distinct failures of the standard economic models: the lack of understanding of the interactions between financial conditions and the real economy on one side and the culpable ignorance of the effects of growing inequality on economic activity on the other.

For several years now those engaged in the field of economics have come to realize that the cogs and wheels of *homo oeconomicus* do not reflect what happens in the real life of *homo sapiens*. This realization has given birth to 'behavioural finance', a branch of economics that is,

¹See http://www.lericipea.com/ for details of the Lerici-PEA prize.

²See, for example, https://www.ft.com/content/50007754-ca35-11dd-93e5-000077 b07658

however, essentially 'micro', and does not face up to more fundamental questions about what makes an economy tick.

The concept of 'open innovation', around which this book revolves, sets out to describe and promote the conditions that foster a more collaborative and creative economic environment. It does so being mindful that such conditions are also essential for mending and stitching a social fabric that has been torn by recession and inequality.

Anthropological studies have highlighted 'collaboration' as the essential trait which led to man becoming the dominant species on the third planet. We have to rediscover this trait in our economic systems – it is well known in the famous 'industrial districts' of Italy, where a peculiar mixture of competition, collaboration and emulation, through the sharing and exchange of ideas – even with potential rivals – carries the day. In his 1890 study *Principles of Economics*, Alfred Marshall could observe, even then, that in the industrial clusters,

The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvements in machinery, in processes and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own and thus it becomes the source of further new ideas. And presently subsidiary trades grow up in the neighbourhood, supplying it with implements and materials, organizing its traffic, and in many ways conducing to the economy of its material. (Marshall, 1890, p. 332)

Nothing is new under the sun. As Piero Formica reminds us, the Renaissance *bottega* (workshop), the 'ancestor' of today's innovative co-working spaces, was an open culture crucible 'in which master artists were committed to teaching new artists, talents were nurtured, new techniques were at work, and new artistic forms came to light with artists competing among themselves but also working together' (Formica, 2016).

The dichotomy between individual creativity and teamwork is largely unresolved. Finding the right mixture is a work in progress. One negative extreme can be evoked by the biting irony of Monty Python in the film *The Life of Brian*: BRIAN: You've got it all wrong. You don't need to follow me. You don't need to follow anybody! You've got to think for yourselves. You're all individuals!

CROWD: Yes, we're all individuals!

BRIAN: You're all different!

CROWD (in unison): Yes, we are all different!³

The other extreme belongs to a utopia which reproduces at the national level the best features and best practices of the best 'Valleys' and 'Districts' of our world.

Stefano Mancuso, a scientist with the University of Florence, operates at the forefront of 'vegetal neurobiology' and sees the design of open innovation, a design that looks to the future responding physiologically to changes in the environment, as comparable to the architecture of plants whose lifestyle is cooperation 'without organs or command centres'. This reminds us of a wonderful book by Eugène N. Marais, a South African naturalist. *The Soul of the White Ant*, published in 1937, is a passionate, insightful account of the world of termites, where unconscious, genetically entrenched collaboration is at the centre of incredible engineering feats. The extraordinary psychological life of the termite led Marais to formulate his theory that the termite nest is similar in every respect to the organism of an animal and the whole is more than the sum of the parts: namely, it is the 'soul' of the termite colony.

Many fascinating contributions appear in this present book. Edna Pasher and her co-authors offer case studies of open innovation in action, in Haifa and Bremerhaven. In Haifa, the municipality identified the need to create better collaboration among all stakeholders in the education system. The concept of 'communities of practice' was introduced, encouraging stakeholders to volunteer to improve processes that would benefit the children in their neighbourhoods. 'We believe', Pasher et al. write, 'that bottom-up ideas passionately led forward by people who care enable better communication and, hence, a better learning process. With the help of those passionate volunteers we created more than 100 educational communities in the spirit of the African proverb "It takes a village to raise a child"'.

³See http://www.montypython.com/film_Monty%20Python%27s%20Life%20of% 20Brian%20%281979%29/14 for details of *Life of Brian*.

Another contributor, Leif Edvinsson, describes the many-faceted 'experiential value' at the centre of the gaming, media, or fashion sectors: a value for which metrics can be formulated. By doing so, with a systematized approach it will be possible to navigate this intangible, soft dimension of intellectual capital. In 1494, Fra' Luca Pacioli, a great friend of Leonardo da Vinci, invented double-entry accounting: but another value, the experiential one, can be inserted into the balance sheet, thus updating the 1494 traditional one-dimensional accounting practice which, today, is increasingly distorting our view. This approach goes beyond accountancy: on the level of society as a whole it will also provide us with the means to navigate the uncharted waters of societal and social innovation.

In his chapter, 'The evolution of business species: a Darwinian metaphor', Vincenzo Nicolò addresses the possibility that open innovation will lead towards an altruistic model of the economy. Currently, the allocation and delivery of resources occur, in most cases, through competitive mechanisms that rely on the self-serving behaviour of economic agents. The outcome? Inequality and the concentration of power and wealth in the hands of increasingly narrow minorities. But, Nicolò argues, a different outcome is not impossible....

Jay Mitra proposes a novel form of entrepreneurship and offers a conceptual framework for a better understanding of the emergence of 'citizen entrepreneurship'. This is a concept that refers to a unique form of the democratization of opportunities, combining, recombining and mobilizing resources among users and producers: the outcome is a citizen-led system of governance of the entrepreneurial process. Consumers, intermediary users and producers share knowledge, resources, ideas and technologies.

Bror Salmelin describes the transition from single-helix roadmap innovation to Open Innovation 2.0. While innovation is about making things happen in new and better ways, a substantial take-up is always part of the process.

In Open Innovation 2.0, all four stakeholders (industry, academia, the public sector and the users/citizens) are seamlessly integrated into the process. So, we can see at an early stage how developments are shaping or are being taken up by the end users; often, the end users also have a co-creator role. The development track therefore has a higher success rate, 'and the feedback from the (emerging) market is rapid: fail fast – scale fast'.

Another contribution of particular interest is that from Diego Matricano, who sets out to summarize 'the state-of-the-art of

open-innovation culture at social, organizational and individual levels' and who considers 'how an OI culture developed at company level may serve to drive its development at the social and individual levels'. It is possible that organizational open innovation culture will end up driving the development of social and individual cultural settings. Many companies worldwide are currently involved in open innovation processes through which they aim to collect innovative insights and ideas from the crowd. Is it possible that an open innovation culture already exists is widespread and is shared among subjects involved in knowledge ecosystems? Perhaps so; but only if the context supports open innovation, and if the crowd is inclined towards it, can open innovation processes be successful.

Open innovation is a horizontal approach that aims to transform not only the economy but also polity and society. An interesting example is provided by a recent form of financing: crowdsourcing. Peter Robbins looks beyond the purely financial attraction of crowdsourcing (a way to provide capital to small borrowers while bypassing the banking system and the stock market) and sees it as a means of harnessing the 'wisdom of the crowds', collecting ideas for improving the social fabric and societal infrastructure. A past echo of crowdsourcing can be found in a famous phrase from John Kennedy's inauguration speech in 1961, on the first day of his Presidency, as quoted by Peter: 'Ask not what your country can do for you; ask what you can do for your country'.

Fabrizio Galimberti

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