

Preface by the Springer TIKM Book Series Editor

Cradles and Arsenals of Democracy in the Twenty-First-Century Europe

We beat the Germans twice and now they are back!

Lady Margaret Thatcher, British Prime Minister, December 8, 1989 (quoted in Volkery 2009)

Helmut Kohl wanted a European Germany, not a German Europe

(Riegert 2017)

As editor of the book series by Springer (a German global publisher) on Technology, Innovation and Knowledge Management, I find this book project particularly challenging, intriguing and inspiring as well as relevant and timely given the social, economic, political and geo-strategic events and trends in Europe and the world.

This is a book about emerging theories, policies and practices on defense and security research and technological development. However, one should perhaps first consider and question the meaning, nature, dynamics and implications of defense and security alongside development and prosperity as well as democracy as a collection of hybrid (public and private as well as collective and individual) goods with substantial market, network and knowledge spillover effects and higher order outputs, outcomes and impacts within and across local, regional, national and transnational ecosystems and the knowledge economy and society at large.

The operationalization frameworks of the quadruple and the quintuple (government, university, industry, civil society and the environment) innovation helices (e.g. see Carayannis, Barth and Campbell 2012) may serve as potential implementation guidelines for some of the models and approaches outlined in the chapters of the present manuscript.

In particular, in the context of the European Project, defense and security have been controversial concepts from the early days given the history and tragic experi-

ence of the two world wars of the twentieth century – in fact, former Chancellor Helmut Kohl’s words on the matter are very poignant and timely:

In a book published in 2014 under the title *Out of Concern for Europe*, Kohl berated his countrymen for “historical amnesia, faint-heartedness, anxiety and complacency.” He goes on in the book to pose a stark question for all Europeans: “Have we forgotten that peace and freedom – the decisive lessons of history – are not a given? Put simply: have we all gone mad?” (Shuster 2017)

So the question remains: What could and should European defense and security mean beyond and besides the existing frameworks of the North Atlantic Treaty Organization and related EU institutions such as the Western European Union and Frontex?

- A Europe where there are close to 180 defense-related technical standards and specifications across European defense companies and systems versus about 30 for the US context.
- A Europe where sovereignty trumps solidarity and where narrowly defined national priorities almost always frame the policy agenda and dialogue.
- A Europe where the vision of Schumann and other founders and architects of the European Project has become victim to greed, fear and hypocrisy.

But it is for these very reasons that this book is especially relevant and useful as a tool to explore options and expand our horizons toward enhancing the potential and relevance of the European Project via a number of axes of integration of European institutions and policy-making instruments and modalities including and pivoting on defense and security which could well serve as supranational ways and means for rapprochement and strengthening of identity of the European countries beyond financial monikers (see Eurozone vs others) or even the European Union itself (see Brexit) as Europe is indeed much larger, broader and deeper than the European Union per se and the European Project should be thought of as only partially relying on the European Union as it has evolved and morphed since the Treaty of Maastricht.

European defense and security as conceptual framework for related theory, policy, practice and even politics could and should include NATO and its partners as well as countries such as Switzerland, Norway and for that matter neighbors to the east under the proper terms and conditionalities. They could and should allow and engage “frenemies” as well as traditional allies and partners (the ongoing drama in Syria is a clear and present illustration for the need, potential and limitations of such an approach – a next-generation “Realpolitik”).

Europe has served as the platform for many conflicts over the centuries and the two biggest ones in history during the twentieth century, but it could also serve as the “bridge over troubled waters” linking all G8/G20 countries not simply as the playground of their geopolitical games and satellite/proxy conflicts. In this context, the Chinese “One Road/One Belt” vision and project that is already under way should serve as a wake-up call as to the need to *think beyond the box*, not just outside the box (see Carayannis 2015) when dealing with the nature, dynamics, chal-

lenges and opportunities of *the redefinition and reinventing of European defense and security as a hybrid (public/private), gloCal (global/local), dynamically adaptive and complex good, not just the readjustment of the scope and scale of policies, institutions and practices*. The transformation of standards, rules and regulations would surely need to be part of it.

The operationalization part of this next-generation “Realpolitik” would pivot around *a fractal, net-centric architecture of government, university and industry cross-sectoral, cross-disciplinary and cross-regional innovation networks and knowledge clusters linking civilian and military R&D centers across European countries and partners on the periphery and beyond* (on fractal net-centric architecture, see Carayannis 2011; Carayannis and Campbell 2012). Civil society should be engaged and empowered to help frame and shape the related agendas and priorities in a proactive and transparent manner as defense and security are public/private hybrid goods with substantial spillovers that transcend all five defense and security engagement domains – *land, sea, air, extraterrestrial space and cyberspace* with collateral synergies as well as impacts and implications for defense and security as well as privacy and other fundamental human rights.

It is indeed around the core of and for the protection of the *fundamental human rights* as defined by national and international law that this entire business of “collective defense and security” should pivot and derive meaning and validation – surely in the context of the polity of developed democracies.

The conceptual design of this book has by intent a “multi-legged T” architecture, namely, a broad foundational theory component on which in-depth specialized and specific themes are developed in the respective chapters.

The intent of the editors has been to produce and provide a theory-developing, policy-making and practice-shaping toolkit for Defence R&D with a Euro-centric perspective.

Elias G. Carayannis

References

- Carayannis EG (2011) The FREIE concept in the context of open innovation diplomacy. Presentation at BILAT 2011, Vienna, Austria. [http://archive.euussciencetechnology.eu/uploads/docs/CARAYANNIS_BILAT_2011_final%20\(2\).pdf](http://archive.euussciencetechnology.eu/uploads/docs/CARAYANNIS_BILAT_2011_final%20(2).pdf)
- Carayannis EG (2015) Arise for growth via thinking-beyond-the-box (TB2) towards the freie architecture. Message posted online at A.R.I.S. blog, 21 February 2015. http://www.dieangewandte.at/jart/prj3/angewandte_aris/main.jart?j-j-url=/blog
- Carayannis EG, Campbell DFJ (2012) Mode 3 knowledge production in Quadruple Helix innovation systems: 21st-century democracy, innovation, and entrepreneurship for development. Springer (Springer Briefs in Business), New York
- Carayannis EG, Barth TD, Campbell DFJ (2012) The Quintuple Helix innovation model: global warming as a challenge and driver for innovation. J Innov Entrep 1(2). <https://doi.org/10.1186/2192-5372-1-2>

- Riebert B (2017) Helmut Kohl, the 'giant', remembered at European memorial ceremony. DW, 1 July 2017. <http://www.dw.com/en/helmut-kohl-the-giant-remembered-at-european-memorial-ceremony/a-39508156>
- Shuster S (2017) German Chancellor Helmut Kohl Nearly Outlived the Europe He Created. Time, 17 June 2017. <http://time.com/4822651/germany-helmut-kohl-europe-union-obituary/>
- Volkery C (2009) The Iron Lady's views on German reunification. Spiegel Online, 11 September 2009. <http://www.spiegel.de/international/europe/the-iron-lady-s-views-on-german-reunification-the-germans-are-back-a-648364.html>

The Emergence of EU Defense Research Policy

From Innovation to Militarization

Karampekios, N.; Oikonomou, I.; Carayannis, E.G. (Eds.)

2018, XXX, 380 p. 34 illus., 25 illus. in color., Hardcover

ISBN: 978-3-319-68806-0