#### Abstract

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In trying to create the background and scientific 'environs' when Schumpeter's visionary Theory of Economic Development (1912) was published, classical and neoclassical thought as well as Marx's Das Kapital had already been exposed to scholarly scrutiny by the learned community for some time. Rather, it is Schumpeter's truly seminal interpretation of the capitalist process in which the entrepreneur as such takes centre stage as the pioneering and driving force in a dialectic sensein fact, as sort of a villain or the antithesis to the market system. It serves as an element constantly striving to outmanoeuvre the competition and trick the given market conditions, thereby forever challenging the system itself. Schumpeter's vision today, more than ever, can serve as a guide for any entrepreneurially oriented policy formulation.

Key words: Innovation, Creative destruction

#### Izvleček

UDK: 330.83:005 Vizionarska Schumpeterjeva 'Teorija ekonomskega razvoja' (1912) je izšla v ozadju in znanstvenem 'okolju' časa, v katerem so bili tako klasična in neoklasična misel kot tudi Marxov 'Kapital' že dolgo pod znanstvenim drobnogledom. Niti v klasični in neoklasični misli, niti v marksistični viziji se podjetnik ne pojavlja eksplicitno. Schumpeterjevo delo torej predstavlja dejansko izvirno interpretacijo kapitalističnega procesa znotraj katerega ima podjetnik v dialektičnem smislu osrednjo vlogo 'pionirske' in gonilne sile, vlogo neke vrste zlikovca oziroma 'antiteze' tržnemu sistemu. Predstavlja element, ki se nenehno trudi premagati omejujočo konkurenco, 'prelisičiti' dane tržne pogoje in posledično izzivati sam 'sistem'. Schumpeterjeva vizija lahko dandanes, v času dinamičnih sprememb, služi bolj kot kadarkoli doslej kot vodilo pri kreiranju katerekoli podjetniško naravnane politike.

Ključne besede: inovacija, kreativna destrukcija

JEL: B15, O1

PREGLEDNI ZNANSTVENI ČLANKI – REVIEW PAPERS

# INNOVATION AND CREATIVE DESTRUCTION: AT THE CENTENNIAL OF SCHUMPETER'S THEORY AND ITS DIALECTICS

# Inovacija in kreativna destrukcija: Ob stoletnici Schumpeterjeve 'Teorije' in njene dialektike

#### Introduction

In trying to create the background and scientific 'environs' when Schumpeter's visionary *Theory of Economic Development* (1912) was published, classical and neoclassical thought as well as Marx's *Das Kapital* had already been exposed to scholarly scrutiny by the learned community for some time. Yet the entrepreneur does not figure in either classical-neoclassical or Marxian visions. Rather, it is Schumpeter's truly seminal interpretation of the capitalist process in which the entrepreneur as such takes centre stage as the pioneering and driving force in a dialectic sense—in fact, as sort of a villain or the antithesis to the market system. It serves as an element constantly striving to outmanoeuvre the competition and trick the given market conditions, thereby forever challenging the system itself. More pointedly still, it aims to become—when and wherever possible—a monopolist. Relating this to modern entrepreneurship, its pivotal role in a regional and global—or, more specifically, a structural as well as developmental—context, Schumpeter's vision today, more than ever, can serve as a guide for any entrepreneurally oriented policy formulation.

Schumpeter states in the early German edition of his seminal *Theory of Economic Development* (1912)<sup>1</sup> that underlying hypotheses and observations were not invented or fictitious, but taken and gleaned from economic reality in contrast to the then-prevailing equilibrium-oriented and essentially static views of interpreting the market-based capitalist process as "conditioned by given circumstances" (as he subtitled the very first chapter). This resulted in the telling motto right on the title page of the first edition: "Hypotheses non fingo" (which never appeared again in any later issues, including the English translation of 1934; see Annexes 1 and 2).

In hindsight, one might be left wondering as to what makes Schumpeter's early conceived vision of the leadership role of the entrepreneur in economic life still so very topical—if not to say outright indispensable—when explaining the dynamics of the capitalist system. In recognising the role and importance of entrepreneurially driven innovation with related forces of creative destruction as intrinsically market-based phenomena, Schumpeterian notions indeed seem to have gained new momentum in today's economic debate for the very understanding of entrepreneurialism by driven systems, including competitive entrepreneurial behaviour with its emphasis on related entrepreneurial

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<sup>&</sup>lt;sup>1</sup> Newly edited and reprinted with an "Introduction" by J. Roepke and O. Stiller (2006). References and quotations in the following are identified as follows: If relating to the earlier German editions (in particular, the first or second) as *Theorie* followed by year; if relating to the English version as *Theory* (1934 or reprints). Quotations translated from the German editions either omitted or referred to only *passim* in the 1934 English version are marked "transl. J.H.P."

ship education.<sup>2</sup> All of this stands against a bibliographical background of his *Theory*, which—intermittently nearly forgotten, widely misread or misinterpreted—took fully 14 years until its second modified edition, with parts radically revised, in 1926.<sup>3</sup>

Schumpeter explicitly voices his irritation in the foreword to the second edition that readers of the earlier version obviously "mistook" the book as a kind of "history" of economic development in line with the methodologically more descriptive German "historical schools" to which, nonetheless, the very flow and partly rather verbose style of the original text undoubtedly shows a certain affinity. In restating and emphasising the theoretical thrust of his argument, the somewhat lengthy subtitle<sup>4</sup> was added from the second edition onwards (and retained in the English translation as well) to bring home the very essence together with substantial revisions to the core second chapter on "The Fundamental Phenomenon of Economic Development".<sup>5</sup>

In the context of such revisions, Schumpeter-in our view-perpetrated two "sins". First, he tried to schematise, thereby narrowing down by way of kind of "sterilizing", in the second chapter the very role of the entrepreneur to the famous, subsequently referred to "five cases" in "the carrying out of new combinations".6 Consequently, he conveyed a rather bloodless sort of descriptive listing of implied entrepreneurial traits and characteristics lending themselves to a rather limited, yet tempting interpretation as a sort of proxy for defining the "Schumpeterian entrepreneur"-quite the contrast to the full-blooded picture so vividly painted in the original version refraining from such schematisation. Second, he omitted the entire seventh chapter (from 1926 onward),<sup>7</sup> wherein Schumpeter tried to put his vision and overall conceptualisation in a systemic context by way of a "holistic" topping off in form of a socio-economic synopsis to the expositions in the preceding chapters. It seems a pity that the English reader in particular is deprived of a possibly more comprehensive and deeper understanding of the very thrust of the Schumpeterian message even if this chapter (of nearly 90 pages in the German original) admittedly might appear to be less rigorously argued.

#### A Theory against the Mainstream

In order to fully appreciate the very boldness of Schumpeter's message, his Theory needs to be viewed in light of the prevailing mainstream of economic thought at the time of its first publication. Classics and neoclassics-notably of the Viennese marginal ("Grenznutzen") tradition with Eugen v. Boehm-Bawerk and Friedrich v. Wieser as principal advisers to Schumpeter's habilitation at the Vienna University8-were clearly dominating the discipline's common body of knowledge. So too was Marx's quite different, non-market based ("socialist") interpretation of the economic process-all of which Schumpeter was well familiar with, while more specifically having been exposed, of course, to neoclassical thinking in the Viennese academic style. His habilitation thesis as mentioned, submitted in 1908, was indeed devoted to a theoretical treatment and discussion of the state of the art at the time, including a rather shrewd reception and re-interpretation of Walrasian equilibrium as an exposition of "pure economics" on essentially static grounds.9

These scientific environs and ingredients are important to note as points of departure in Schumpeter's own *Theory*, wherein his critical stand against the prevailing mainstream finds ample expression right in the first chapter<sup>10</sup> by pointing at the intrinsically static, "circular flow"-type view of economic life, voicing his discontent over the obvious deficiency of such theorising to adequately capture and explain the underlying dynamics of the market-based "capitalist" process. By contrast, he explicitly commends Marx as—with his (dialectic) methodology—being able to

<sup>&</sup>lt;sup>2</sup> Witness the numerous university chairs and programmes on entrepreneurship having sprung up and continuing to expand over the past decades. Cf. more recently also Thomas K. McCraw (2007) with extensive references to Schumpeter's "Legacy"; or the relevance of innovative elements and factors in the context of the New (endogenous) Growth Theory (cf. P.M. Romer, 1990, et al.), as well as distinct Schumpeterian traits in the relatively new discipline of "Evolutionary Economics".

<sup>&</sup>lt;sup>3</sup> As essentially the basis for the subsequent English translation, published 1934 at Harvard after the third and fourth—both largely unchanged—German printings (1931, 1934).

<sup>&</sup>lt;sup>4</sup> In German: "Eine Untersuchung ueber Unternehmergewinn, Kapital, Kredit, Zins und den Konjunkturzyklus"; in English: "An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle" ("profits" to be understood as entrepreneurial or "private").

<sup>&</sup>lt;sup>5</sup> In German: "Das Grundphaenomen der wirtschaftlichen Entwicklung" (*Theorie* 1912, 103-198; 1926, 88-139; Theory 1934, 57-94).

<sup>&</sup>lt;sup>6</sup> Theorie 1926, 100f.; Theory 1934, 66, in contrast to the German version not explicitly being "listed", but less conspicuously integrated in the text as such (see Annex 3).

<sup>&</sup>lt;sup>7</sup> In German: "Das Gesamtbild der Volkswirtschaft" ("Overall View of the Economy", transl. J.H.P.), *Theorie* 1912, 463-548.

<sup>&</sup>lt;sup>8</sup> Based on his first book, entitled: "Das Wesen und der Hauptinhalt der theoretischen Nationaloekonomie", Leipzig 1908 ("The Nature and Content of Theoretical Economics"), repeatedly also referred to as "Wesen" for short in Schumpeter's subsequent *Theorie*.

<sup>&</sup>lt;sup>9</sup> Cf. Walras, L.: *Elements d'economie pure, ou theorie de la richesse sociale*, Lausanne 1874-77; English translation by Jaffe; W.: Elements of Pure Economics, Homewood, Ill.-London 1954.

<sup>&</sup>lt;sup>10</sup> Entitled "The Circular Flow of Economic Life as Conditioned by Given Circumstances", *Theory* 1934, 3-56; in German: "Der Kreislauf der Wirtschaft in seiner Bedingtheit durch gegebene Verhaeltnisse", *Theorie* 1912, 1-102. Already the "Physiocrates", Schumpeter argues, in grasping "the fact of circular flow ... ipso facto describe a static economy ... And this remained the objective of pure economics to our days." Also with A. Smith, "wherever his arguments rest on firm ground, his view is essentially static ... Wherever he speaks of progress, he never explains this on the basis of economic processes in themselves ..." (*Theorie* 1912, 92ff., transl. J.H.P.)

indeed grasp the intrinsically dynamic nature of "economic development".<sup>11</sup>

Of specific relevance in this very context is Eugen v. Boehm Bawerk's profoundly neoclassical—and pointedly anti-Marxist—*The Positive Theory of Capital*,<sup>12</sup> which for Schumpeter was yet another bone of contention and point of critical departure. Despite its erudite theoretical reasoning, again resting on essentially static grounds, it was bound to miss the intrinsic nature of capitalist dynamics. (For an ingenious early re-interpretation of *The Positive Theory* with Boehm-Bawerk's subtle theorising on the "round aboutness" of capitalist accumulation by his contemporary Swedish economist Knut Wicksell, see graphical illustration, Annex 4.)<sup>13</sup>

It is against such a background and dissatisfaction with mainstream "circular flow" concepts that Schumpeter's own *Theory* evolved and took shape as a theoretical—and in its endeavour similar to Boehm-Bawerk's preceding, albeit static—attempt to, for his part, provide a non-Marxist dynamic interpretation of capitalist development driven by its inherent systemic forces from within.<sup>14</sup>

In the following section, we shall try to pinpoint against such background what seems to emerge as a kind of hidden agenda behind Schumpeter's vision, rendering it such a lasting a legacy for interpreting capitalist development and its dynamics.

#### Toward Entrepreneurially Driven Capitalism

In taking a profoundly critical stand against mainstream statics, Schumpeter in his *Theory* endeavours to depict market-based (long-term) economic development as an everchanging, and as such never toward equilibrium tending, process of economic life in general. This, in fact, constitutes the all-pervading thrust of his argument; indeed, no one apart from Marx in his systemic theorising—has done so before in a similarly rigorous fashion, which no doubt lends such seminal and lasting fascination to his *Theory*.

The essence of capitalist dynamics, in Schumpeter's view, thus boils down to a continuous pursuit of "carrying out … new combinations"<sup>15</sup> as an entrepreneurially driven process that proves "that economic life never is static; it lies in the very nature of development."<sup>16</sup> The question thus arises: Who is "carrying out", what stands for the "new", and how are "new combinations" being carried through?

Schumpeter's straightforward answer to that is that the entrepreneur is being depicted and singled out in the very "Schumpeterian" meaning (or "in our sense", as he repeatedly emphasises). In any given economic moment or situation, according to his argument, there exist "numerous possibilities for new combinations", yet only a small group has the drive and takes "leadership" to, in fact, carrying them through, while "most do not see them".<sup>17</sup> Thus, "... the carrying out of new combinations is a special function ... of people who are much less numerous than all those who have the 'objective' possibility of doing it. Therefore, ... entrepreneurs are a special type, and their behavior ... the motive power of a great number of significant phenomena."<sup>18</sup>

Hence, it is—according to Schumpeter—the entrepreneur (and only he) who "'leads' the means of production into new channels ... drawing other producers ... after him", thereby rendering "a service, the full appreciation of which ... is not so easily understood by the public at large".<sup>19</sup>

From there it follows, "the most typical incorporation of future value creating potentials is a new enterprise ...", and the "specific type" as characteristic for "a special class of economically active individuals has taken on a name of its own, namely **entrepreneur**."<sup>20</sup> The entrepreneur is the driving or leading force in economic life, be it as a "business founder"<sup>21</sup> or as "creative innovator" who

<sup>&</sup>lt;sup>11</sup> "The only major attempt toward the problem of development is the one of Karl Marx... He strived to treat the development of economic life itself on basis of economic theory. His accumulation, his immiserization, his crisis theories follow from pure economic reasoning ... aiming at the evolution of economic life as such ... not just its circular flow ..." (Inovacijski potencial javno-zasebnega partnerstva na področju na znanju temelječih 1912, 98; transl. J. H. P.) And if he "had not been more than a purveyor of phraseology, he would be dead by now. Mankind is not grateful for that sort of service and forgets quickly the names of the people who write the librettos for its political operas." (Schumpeter, 1942, 5.)

<sup>&</sup>lt;sup>12</sup> Translated with a "Preface" by W. Smart, London-New York 1891. German original: "Positive Theorie des Kapitales (1889), as Vol. 2 of "Kapital and Kapitalzins"; a centrepiece until today of neoclassical capital theory, which propelled its author to international fame. Boehm-Bawerk, by the way, as Schumpeter states himself, never really approved of his *Theory* (cf. *Theorie* 1926, "Vorwort").

<sup>&</sup>lt;sup>13</sup> Cf. Wicksell, K. (1893).

<sup>&</sup>lt;sup>14</sup> "By development, therefore, we shall understand only such changes in economic life as ... arise by its own initiative, from within." (*Theory* 1934, 63.) "Development in our sense is then defined by the carrying out of new combinations." (Ibid., 66; with the "five points" to follow, see Annex 3.)

<sup>&</sup>lt;sup>15</sup> *Theory* 1934, 66.

<sup>&</sup>lt;sup>16</sup> *Theorie* 1912, 162 (transl. J. H. P.).

<sup>&</sup>lt;sup>17</sup> *Theorie* 1912, 162 (transl. J. H. P.).

<sup>&</sup>lt;sup>18</sup> Theory 1934, 81f.

<sup>&</sup>lt;sup>9</sup> Ibid., 89; yet, such "leadership in particular … must be distinguished from 'invention'. As long as they (inventions, J. H. P.) are not carried into practice, inventions are economically irrelevant." (Ibid., 88) However: "In as much as the carrying out of new combinations constitutes form and substance of development, so much so is the leader's initiative its driving force." Alas, not all are "equally far sighted and energetic …" (*Theorie* 1912, 162, footnote; transl. J.H.P.)

<sup>&</sup>lt;sup>20</sup> Theorie 1912, 170f. (transl. J. H. P.); or somewhat more barren in the subsequent English version: "The carrying out of new combinations we call 'enterprise'; the individuals whose function it is to carry them out we call 'entrepreneurs'." (*Theory* 1934, 74)

<sup>&</sup>lt;sup>21</sup> In merciless Schumpeterian understanding, if a business founder merely continues to manage his "enterprise ... in simply a static way, he ceases to be an entrepreneur!" His very nature "is linked to creating (to combining, J. H. P.) something new." (*Theorie* 1912, 174, footnote; transl. J. H. P.)

through "anti-hedonist"<sup>22</sup> activity and initiatives creates future values. "They (these values, J.H.P.) correlate with new combinations, ... new combinations translated in value terms ... the shadows of things to come ...".<sup>23</sup>

In carrying out new combinations, the entrepreneur first singles out from a "multitude of various moments ... the related right decision ... which is given to few people only with specific capabilities, and secondly, carries them through. These are the characteristics of our entrepreneur, of our man of action. They are inseparable and of equal importance. And the result is economic development, progress",<sup>24</sup> where development or progress is triggered by "our type" of (Schumpeterian) entrepreneur.

## Uncovering the Subtlety of Implied Dialectics

The role of the Schumpeterian entrepreneur, as inseparably geared to the very essence of economic development, thus resembles a kind of hidden form of what might be called Schumpeterian "dialectics" for interpreting the dynamics of capitalist development from a (non-Marxist) systemic perspective.

The market system itself, under given circumstances, constitutes the thesis; the entrepreneur in the Schumpeterian sense as the driving (also the "creatively destructive") force is the antithesis to the system, ever striving to "out compete" given circumstances by way of new combinations and thus-temporarily at least-trying to be or to become a kind of "monopolist".25 Finally, the synthesis of such a scenario is seen in prevailing market forces tending forever to catch up with and "compete down", temporarily dominating entrepreneurial initiatives and provoking, by force of such process, entrepreneurial creativity yet anew in trying to tackle or outmanoeuvre the system "from within". As such, Schumpeterian dialectics are quite distinct from Marxist dialectics. The entrepreneur in such a scenario takes on the role of unsettling "disequilibrator", as an ever--disturbing element to static or "circular flow" tendencies toward equilibrium in the very sense of "creative destruction", as a mover of forever challenging the system "conditioned by given circumstances",<sup>26</sup> of constantly trying to trick competitive market constraints and forces through innovative "new combinations" providing thus the intrinsic drive for (Schumpeterian) economic development.

Unlike Marx and the classical-neoclassical and as such essentially static concepts, Schumpeter in his *Theory* boldly presents an alternative (non-Marxist) interpretation of the "capitalist" process with the entrepreneur taking centre stage. It is this very boldness that in good measure seems to account for the lasting relevance, if not to say fascination with his *Theory* to date (which will soon be celebrated for the 100-year anniversary since its first printing).

# Legacy and Topical Relevance in Today's Perspective

By provocatively casting the entrepreneur—traditionally considered the epitome of capitalism itself—as sort of villain or antithesis to the market system, with its mainstream proclaimed tendencies toward (static) equilibrium, we can amply testify to the originality of Schumpeter's own theorising. Depicting the specific role of the entrepreneur under systems-related aspects further implies that the very same (capitalist) system essentially derives its inherent strengths and dynamics from ever-self-renewing entrepreneurial drive and initiatives, dynamics, and strength. In the end, the sustained reproduction of the system as such stems from its own forces, or "from within".

Notwithstanding Schumpeter's later scepticism under changed economic conditions in the face of World War II regarding whether entrepreneurially led capitalism could indeed "survive",<sup>27</sup> today we can witness the sheer global revival of Schumpeter's early vision—whether in the form of a new and growing awareness of the need for entrepreneurial initiatives, values, and attitudes as crucial for sustainable development and more broadly based welfare, in recognising the specific relevance of "entrepreneurship education" or the importance of diversified entrepreneurially

based small and medium-sized business structures, or in the context of fostering business start-ups combined with venture capital financing and concomitant tendencies toward privatisation worldwide (including related emphasis on economies "of scope" rather than just one-sidedly "of scale").<sup>28</sup> It all relates to the very notion of Schumpeterian entrepreneurship as reflected in entrepreneurially driven initiatives, creativity, and leadership. Leadership in any market-based system stands for structural diversification, sustained viability and capabilities of success, and sheer systemic "survival" in competitive conditions.<sup>29</sup>

Theory 1934, 94; the entrepreneur is—in a "non-hedonist" way ever being absorbed by "the joy of creating, of getting things done, or of just exercising ... ingenuity." (*Theory* 1934, 93)

<sup>&</sup>lt;sup>23</sup> Theorie 1912, 170 (transl. J. H. P.).

<sup>&</sup>lt;sup>24</sup> Theorie 1912, 177 (transl. J. H. P.).

<sup>&</sup>lt;sup>25</sup> Since, with Schumpeter, "perfect competition" means temporarily having been "suspended whenever anything new is being induced …", thereby providing "the fundamental impulse that sets and keeps the capitalist engine in motion." (Schumpeter, 1942, 104f.)

<sup>&</sup>lt;sup>26</sup> Cf. heading of the very first chapter of *Theory* (in German: "... Bedingtheit durch gegebene Verhaeltnisse"; *Theorie*, both 1912 and 1926).

<sup>&</sup>lt;sup>27</sup> Cf. his famous *Capitalism, Socialism and Democracy* (1942) and numerous related references; it is in this his later work (not in his *Theory*) where Schumpeter explicitly coins the popular and muchcited phrase of "creative destruction" (subsequently back-translated into German as "schoepferische Zerstoerung").

<sup>&</sup>lt;sup>28</sup> Cf. Aiginger/Tichy (1984).

<sup>&</sup>lt;sup>9</sup> Cf. Heertje, (1981); Heertje/Perlman (1993); Heilbroner (1993); Scherer (1992); Scherer/Perlman (1992).

From a contemporary perspective, the relevance and importance of Schumpeter's vision nowadays seems to be demonstrated vividly in the ongoing—and partly still painful—restructuring from a formerly centrally planned to market-oriented systems in Central and Eastern Europe. Through such a transformation, the final verdict over success or failure in large measure hinges on how effectively these economies are able to build and rebuild their decades-long ruthlessly weakened—if not outright ruined—entrepreneurially based business structures as a prerequisite for economic dynamics and sustained development in an increasingly competitive environment with more and more diversified markets.<sup>30</sup>

More than ever, it seems Schumpeter's erstwhile vision can serve as a valuable guide in today's regional and indeed worldwide challenges, as a kind of compass with a view to policy formulation for entrepreneurially conducive framework conditions. More bluntly, it can create conditions wherein entrepreneurial initiatives, creativity, and leadership in the very Schumpeterian meaning can thrive and be adequately rewarded. To conclude on that note, in Schumpeter's own words: "Look around—and you will see, things really are like that."<sup>31</sup> Conforming to his early motto one again: "Hypotheses non fingo."<sup>32</sup>

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<sup>&</sup>lt;sup>30</sup> Cf. Becker/Knudsen (2002); Backhaus (2003); Giersch (1984, 1987); Scherer (1999); Shionoya/Perlman (1994).

<sup>&</sup>lt;sup>31</sup> *Theorie* 1934, "Vorwort" (Preface) to fourth German printing (transl. J. H. P.).

<sup>&</sup>lt;sup>32</sup> See Annex 1; as kind of an invitation to scientifically "creative destruction," Schumpeter summed up the preface to the first edition, wishing for himself "nothing more that this work as soon as possible be rendered obsolete and forgotten." (Transl. J.H.P.). This invitation, after almost 100 years, apparently still holds.

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