

Chapter 1

An Economic & Philosophical Introduction to ‘Sustainable Innovations’ in Plant Varieties

Knowledge of the historic and philosophical background gives . . . independence from [the] prejudices of [our] generation. . . .—Albert Einstein

1.1 *Shiva*: A Symbol of ‘Sustainable Innovation’

Shiva, a prominent God in eastern mythology, is a well-known symbol of the opposite but complementary forces of both destruction and creation.¹ Schopenhauer, in his famous work, *World as Will and Idea*, describes the various adornments of *Shiva* (a necklace of skulls, the serpent, the *lingam* or sign—understood by western philosophers as a phallus) and concludes that he is a symbol of both death (destruction) and generation (creation).² The allusion to *Shiva* as a symbol, rather than as merely an individual, results from the mention of *Shiva* within the Vedic scriptures as *Shiva tatva* (i.e. essence or energy), which manifests in various forms.³ It is perhaps not surprising, therefore, that modern physicists, who have said that ‘[a]s the Cosmic Dancer, *Shiva*. . . sustains through his dance the endless rhythm of the universe. . .’,⁴ further state that ‘every sub-atomic particle [in creation] not only

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¹Heinrich Zimmer, *Myths and Symbols in Indian Art and Civilization* (Princeton, Princeton University Press 1946) 124–125.

²Arthur Schopenhauer, *World as Will and Idea*, vol 1 (first published 1909, Richard B. Haldane and John Kemp trs, The Project Gutenberg Ebook # 38427, 2011) 356 <<http://www.gutenberg.org/ebooks/38427>> accessed September 11, 2015.

³Sri Sri Ravi Shankar, *Shiva: The Eternal Joy* (Bangalore, Vyakti Vikas Kendra India Publications 2008) 4, 7–8.

⁴Fritjof Capra, *The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism* (USA, Shambhala Publications 1999), 90.

performs an energy dance but is also an energy dance; a pulsating process of creation and destruction.⁵

This *Shiva tatva* or energy that *Shiva* symbolizes is witnessed within man as an individual, within societies and communities, and within nature: At the level of the individual, *Shiva's* presence or power is felt in the form of improvements in man's material circumstances, transformations in his understanding or appreciation of concepts, and in the dawning of wisdom in man's intellect resulting in transformations (for the better) in his very character or personality.⁶ In traditional religious and spiritual ceremonies in India, therefore, people pray to the *Shiva tatva* if they want a change in their material circumstances or to overcome miseries.⁷ So also, in societies and in nature, the cycle of destruction and (re)creation that *Shiva* symbolizes, is responsible not just for changing seasons and changing moralities (value systems), but for the continuation of life itself⁸ and even for its evolution into higher states of consciousness. In this context, the *Rig Veda* states ‘be grateful to the Lord of Death, the destroying power of God, as He delivers us to death once again for ultimate salvation.’⁹ Noted scholars of Vedic philosophy thus describe the concept of *Pralaya* (during which *Shiva* is known to open his infamous third eye) as this process of destruction and recreation or regeneration and say: ‘Only if there is dissolution of the old can there be scope for regeneration of the new.’¹⁰ Other scholars have also likened *Shiva's* destructive energy with release,¹¹ or as a necessary step in the process of transformation.¹²

It is perhaps not surprising, therefore, that ancient Vedic scriptures that are popularly considered polytheistic, give *Shiva* the stature of the highest God.¹³ It must be noted of course, that despite having the appearance of being polytheistic,

⁵Fritjof Capra, *The Tao of Physics*, 244.

⁶Sri Sri Ravi Shankar, *Shiva: The Eternal Joy*, 13. Also, Ananda Coomaraswamy, *The Dance of Shiva: Fourteen Indian Essays* (The Sunwise Turn Inc. 1918) 11/14 <http://www.orientee-occidente.com/PDF/The_Dance_of_Siva.pdf> accessed September 11, 2014.

⁷Sri Sri Ravi Shankar, *Shiva: The Eternal Joy*, 13.

⁸Fritjof Capra, *The Tao of Physics*, 242. Also, Satguru Sivaya Subramuniyaswami, *Dancing with Siva* (USA, Himalayan Academy 2003) 123 <www.himalayanacademy.com/media/books/dancing-with-siva/dancing-with-siva.pdf> accessed September 11, 2014.

⁹Vyakti Vikas Kendra, *Timeless Wisdom: A Book of All Religions* (Bangalore, Vyakti Vikas Kendra India Publications 2003) 9. Also Fritjof Capra, *The Tao of Physics*, 87–91.

¹⁰D.K. Hari and Hema Hari, *Understanding Shiva* (Bangalore, Sri Sri Publications Trust: Bharat Gyan Series 2010) 5.

¹¹Heinrich Zimmer, *Myths and Symbols in Indian Art*, 154.

¹²Sri Sri Ravi Shankar, *Shiva: The Eternal Joy*, 10, where the author says “*Shivaratri* (the night of *Shiva*) has been connected with destruction. Transformation can only happen when something is destroyed. You can call it destruction or transformation – change from something to something better.”

¹³Heinrich Zimmer, *Myths and Symbols in Indian Art*, 128–129 where the author relates the mythological story of the appearance of *Shiva* during an argument between *Brahma* (the creator) and *Vishnu* (the sustainer) as to who was the originator of the Universe, and *Shiva* appears in the scene to reveal himself as the origin of them both.

Vedic scriptures (which form the root of what is known today as ‘Hinduism’) talk only of one consciousness or one divinity. It has, for example, been said that: ‘To understand how the Hindus can cope with this multitude of divinities, we must be aware of the basic attitude of Hinduism that in substance all these divinities are identical.’¹⁴ Sri Sri Ravi Shankar, an authority on Vedic knowledge, further clarifies this apparent contradiction as follows:

We eat wheat in many forms [e.g. pasta, noodles, bread, cake etc.]. In the *Advaita* (non-dualist) tradition, we recognize that all these are but one substance – wheat. So also, God is one, but exists in many forms. In *Dvaita* (dualist tradition), however, we focus and admit the differences [bread cannot be pasta and vice versa]. *Dvaita* exists within the *Advaita*.¹⁵ (Translated from Hindi; Emphasis added)

Accordingly, within this essentially monistic philosophy, there is a clear classification of *Shiva* as the supreme Lord. Sri Sri Ravi Shankar himself states elsewhere that:

In the *Rig Veda*, in the 18000 shlokas (verses), there is no mention of any other God except for Lord *Shiva*. He is the Lord of Lords. . . . [I]n any war of the *Asuras* [(demons)], *Brahma* and *Vishnu* approach *Shiva* for protection. . . . exemplifying that he is the supreme Lord.¹⁶

This apparent hierarchy can perhaps be explained by the fact that of utmost importance in the image of *Shiva* as a creator and destroyer is that He creates and destroys not merely for the sake of creation and destruction, but with the intention of replacing that which is undesirable, with that which is (more) desirable.¹⁷ In the famous image of *Nataraj* (the dancing *Shiva*) for example, *Shiva* is depicted as dancing on top of what appears to be a baby, but is actually a demon¹⁸ named *Apasmara*—a symbol of utter inertia, dullness, or inactivity.¹⁹ On the one hand, the energetic dance of *Shiva* on *Apasmara* can be considered a commonplace symbolic victory of good over evil; on the other hand, the more specific imagery of *Nataraj*

¹⁴Fritjof Capra, *The Tao of Physics*, 91.

¹⁵Sri Sri Ravi Shankar, *Dvait aur Advait: A Discourse (in Hindi)* [MP3] (Rishikesh, Vyakti Vikas Kendra Publications 2001).

¹⁶Sri Sri Ravi Shankar, *Shiva: The Eternal Joy*, 13.

¹⁷Thomas K. Seung, *Nietzsche’s Epic Of The Soul: Thus Spoke Zarathustra* (Oxford, Lexington Books 2005) 222–224.

¹⁸The Sanskrit word for demon is *Asura*. *Asura* also means “one who is strong and has got enormous power and one who uses this power forcefully for selfish or conceited purposes.” DK Hari and Hema Hari, *Understanding Shiva*, 45.

¹⁹Sri Sri Ravi Shankar, *Good and Evil: A Discourse* [Audio CD] (Bangalore, Vyakti Vikas Kendra, Saregama India Ltd. 2005) cf. Thomas K. Seung, *Nietzsche’s Epic Of The Soul: Thus Spoke Zarathustra*, 223 who refers to the demon as being a symbol of ignorance or that of the individual self and considers *Shiva* as a symbol of the universal self or universal consciousness. Also, Satguru Sivaya Subramuniyaswami, *Dancing with Siva*, xxxix who describes *Apasmara* as a symbol of a soul bound by the veil of duality.

exemplifies how *Shiva tatva* can transform dullness or inertia into a creative and beautiful dance (perhaps akin to converting potential energy into kinetic energy).²⁰

It is interesting that prominent commentators have explained the symbol of *Nataraj* as being a depiction of the totality of opposites that together comprise ‘existence’- in the whole picture, dullness plays a part, it is not the dance alone that is important:

Nataraj is the dancing *Shiva*. Under his feet there is a demon. This is a symbol. The demon is called *Apasmara*, meaning utter inertia. *Nataraj* is total consciousness, consciousness that is full of vibrancy and dance, and that steps on *Apasmara*, the inertia. This means the opposite values are co-existing; under the feet of the dance is the inertia, dullness. That gives the whole picture. In the wholeness, dullness is a part.²¹

Accordingly, it has been said that the perpetual continuation (in some form or the other) of the ‘bad’, or less desirable, is inevitable and even necessary for the parallel continuation of the ‘good,’ or the more desirable:

Imagine in this world there is no misery at all. Do you know, . . . all the good qualities would also disappear. I am sure this is a tough truth to accept. . . it is not too pleasant. For good qualities to exist, for compassion to exist, service to be there, for kindness to be there, its opposite is present in the world. Suppose there is no suffering, on whom will you be compassionate? Will you be compassionate on one who is very happy? What would happen to the quality of compassion? How will you even know compassion?.... Opposite values are complementary.²²

In the imagery of *Nataraj*, therefore, the ‘undesirable’ trait, namely inertia, is never completely destroyed: the less desirable *dullness*, symbolized by the demon *Apasmara*, is fully overpowered by its symbolic crushing under the feet of *Shiva* during the course of the graceful and creative dance of *Nataraj*. However, the dullness inevitably returns after the dance, having now assumed a less severe form than its original demonic version. The return of this transformed/evolved version and quantity of dullness or inertia is necessary, for example, to permit rest and rejuvenation, and the continuation of the graceful dance thereafter.

Within the broader Vedic or Hindu philosophy, therefore, where the soul, like energy, can neither be created nor destroyed,²³ the role of *Shiva* is to transform the soul (or matter) from one state, to a higher, more evolved state, through the cyclical process of birth (creation) and death (destruction), until it reaches the highest

²⁰Sri Sri Ravi Shankar, *Good and Evil: A Discourse*, and also, Ananda Coomaraswamy, *The Dance of Shiva: Fourteen Indian Essays*, 14/14.

²¹Sri Sri Ravi Shankar, *Good and Evil: A Discourse*.

²²See Sri Sri Ravi Shankar, *Good and Evil: A Discourse*.

²³Satguru Sivaya Subramuniyaswami, *Dancing with Siva*, 542. Also Vyakti Vikas Kendra, *Timeless Wisdom: A Book of All Religions*, 47, translating the *Srimad Bhagvad Gita*: “It (the Spirit) cannot be cut, burned, drenched or dried because it is eternal, changeless, all-pervading, stable and immovable. . . Just as a person casts off worn-out clothes in order to don new ones, so the embodied Spirit discards old bodies and enters new ones.”

possible state of evolution, i.e. *Moksha*,²⁴ *Nirvana* or liberation.²⁵ The dynamics of creation and destruction as symbolized by *Shiva* is therefore ‘evolutionary’ both in its nature and its ultimate purpose: He transforms even that which is undesirable or less desirable, into something more desirable.

1.2 *Shiva* to Schumpeter: Revisiting ‘Creative Destruction’

It is now variously opined that the Eastern symbol of *Shiva* has inspired, and/or finds parallels in, several Western works—not just those of theologians and philosophers,²⁶ but also economists. From the perspective of intellectual property law and innovation, with which this book is primarily concerned, of greatest interest are recent works that trace Joseph Schumpeter’s concept of ‘Creative Destruction’ to the symbol of *Nataraj* via the writings of various renowned scholars: Johann Gottfried Herder (1744–1803) is known to be one of the first to have brought Indian myths into German philosophy via his writings.²⁷ Arthur Schopenhauer²⁸ and Jacob Burckhardt also allude to the Eastern symbols, including those of *Shiva* in their political and philosophical writings. Frederick Nietzsche, a student of Schopenhauer, brought what are now considered close parallels of *Shiva*’s mythological symbols, including the cycles of creation and destruction, into deliberations of Western morality via his famous work *Also Sprach Zarathustra*. In *Zarathustra*, Nietzsche’s *Übermensch*, the one who will’s and brings about change or transformation, has been likened to Schumpeter’s entrepreneur who also, by his will, brings about innovation in society.²⁹ Johann G. Herder, Arthur Schopenhauer and Jacob

²⁴*Moksha* has been defined as “self-realization through liberation – the liberation from earthly bondage by realizing the divine in the human, the spiritual, in the physical, and the *Atman* or soul in the mind-body complex.” L.N. Rangarajan (ed), *Kautilya’s Arthashastra* (India, Penguin Books 1992) 1.

²⁵Satguru Sivaya Subramuniyaswami, *Dancing with Siva*, 522 and 536.

²⁶Claudia Crawford, ‘Nietzsche’s Dionysian Arts: Dance, Song, and Silence’ in S. Kemal, I. Gaskell and D.W. Conway (eds), *Nietzsche, Philosophy and the Arts* (Cambridge, Cambridge University Press 2002) 317–323, where the author finds similarities between the symbols of *Shiva* and those of Nietzsche’s *Zarathustra*. Also, Thomas K. Seung, *Nietzsche’s Epic Of The Soul: Thus Spoke Zarathustra*, 264.

²⁷Hugo Reinert and Erik S Reinert, ‘Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter’ in Jürgen G. Backhaus and Wolfgang Drechsler (eds), *Friedrich Nietzsche (1844–1900): Economy and Society* (Springer 2006) 59.

²⁸See Arthur Schopenhauer, *World as Will and Idea*, 356.

²⁹Hugo Reinert and Erik S. Reinert, ‘Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter,’ 56–57. Also, Jan Fagerberg, ‘A Guide to Schumpeter’ in W. Østreng (ed), *Confluence. Interdisciplinary Communications 2007/2008* (Oslo, Centre for Advanced Study 2009) 21 where the author states that according to Schumpeter, entrepreneurs are needed because of the prevalence of inertia or “resistance to new ways.” This is similar to the symbolism of *Nataraj* where enthusiasm or energy is needed to overcome the demon of inertia.

Burckhardt explicitly mention Eastern thought, including the image of *Shiva* and his dual role of creator and destroyer, within at least a part of their philosophies and political/economic ideologies. Jacob Burckhardt, for example, states:

Not without cause do the Indians worship Shiva, the God of destruction. Filled with the joy of destruction, wars clear the air like thunderstorms, they steel the nerves and restore the heroic virtues, upon which states were originally founded, in place of indolence, double-dealing and cowardice.³⁰

Scholars further opine that Joseph Schumpeter’s seminal work *Capitalism, Socialism, and Democracy*, where the term ‘Creative Destruction’ first appeared, ‘was taken over almost entirely from [Werner] Sombart’s writings.’³¹ The parallels that can be found in the works of Werner Sombart to *Shiva*’s symbolisms on the one hand, and to Joseph Schumpeter’s ‘Creative Destruction’ on the other, are, in fact, quite undeniable.³² Written a good 30 years before the publication of Schumpeter’s *Capitalism, Socialism and Democracy*,³³ Werner Sombart’s *War and Capitalism*³⁴ contained the following statement, describing what is termed herein after as ‘destructive creation’ (although the term ‘destructive creation’ has not been explicitly used to characterize the works of these authors, the book uses this term to describe these authors’ description of the dynamics of creation and destruction within the limited contexts of the given quotes, for the purpose of convenience and brevity):

Again, however, from *destruction* a new spirit of *creation* arises; the scarcity of wood and the needs of everyday life... forced the discovery or *invention* of substitutes for wood, forced the use of coal for heating, forced the invention of coke for the production of iron. That these events, however, made possible the enormous development of capitalism in the 19th Century, is beyond doubt for any well-informed person. Thus even here, in this decisive point, the invisible threads of commercial and military interests appear closely intertwined. (Emphasis added).³⁵

Even before Jacob Burckhardt and Werner Sombart’s works, within socio-political literature, one of the most famous quotes of Mikhail Bakunin states:

³⁰As quoted in Hugo Reinert and Erik S. Reinert, ‘Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter,’ 58.

³¹Hugo Reinert and Erik S Reinert, ‘Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter,’ 57.

³²Günther Chaloupek, ‘Long-term Economic Perspectives Compared: Joseph Schumpeter and Werner Sombart’ (1995) 2(1) The European Journal of the History of Economic Thought 127.

³³Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (First published 1942, Harper Perennial Modern Thought edn 2008).

³⁴Werner Sombart, *Krieg und Kapitalismus*, (War and Capitalism) (Leipzig, Duncker & Humblot, 1913) as cited in Hugo Reinert and Erik S Reinert, ‘Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter,’ 72.

³⁵As quoted in Hugo Reinert and Erik S. Reinert, ‘Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter,’ 72. Also, Günther Chaloupek, ‘Long-term economic perspectives compared: Joseph Schumpeter and Werner Sombart.’

'The passion for destruction is a creative passion, too!'³⁶ Schumpeter, it is said, borrowed substantially from the above ideas to propound his now famous concept of 'Creative Destruction.'³⁷ That Schumpeter does not cite, quote, or even mention Werner Sombart in the book that introduced the world to this concept, may be a result of Sombart's 'fall from fame' and respect following his 'open embrace of Nazism.'³⁸ From Schumpeter's earlier writings, however, it is clear that he was familiar with Sombart's work and indeed studied it closely.³⁹

According to Schumpeter, the nature of capitalism, and of innovation, which is an essential and even central characteristic of capitalism, is such that in it, old products and consumer goods, methods of production, markets, and even entire economic structures are constantly 'destroyed' by the creation of new ones. He stated:

The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates. [...] The opening up of new markets, foreign or domestic, and the organizational development [...] illustrate the same process of industrial mutation [...] that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of *Creative Destruction* is the essential fact about capitalism. It is what capitalism consists in and what every capitalist concern has got to live in.⁴⁰

Schumpeter's views on the nature of capitalism and the 'Creative Destruction' inherent in it allude directly to the nature and consequence of the innovative process or of innovation itself. New goods, new industries, and new methods of production, all of which fall within the broad concept of 'innovation',⁴¹ come into the market and 'destroy' or replace the old processes or products. Creativity, therefore, by its very nature, leads to destruction: destruction particularly, of that which was unnecessary, less desirable, less attractive, or less efficient.

³⁶Sam Dolgoff (ed) 'The Reaction in Germany: From the Notebooks of a Frenchman' <<http://www.marxists.org/reference/archive/bakunin/works/1842/reaction-germany.htm>> accessed October 10, 2015 (reproducing *Bakunin on Anarchy*, 1971).

³⁷Hugo Reinert and Erik S Reinert, 'Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter.'

³⁸Hugo Reinert and Erik S. Reinert, 'Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter,' 72. Also, Reiner Grundmann and Nico Stehr, 'Why is Werner Sombart Not Part of the Core of Classical Sociology: From Fame to (Near) Oblivion' (2001) 1(2) *Journal of Classical Sociology* 257.

³⁹Joseph A. Schumpeter, 1927/1954, 'Sombarts Dritter Band' in idem, *Dogmenhistorische und biographische Aufsätze* (Tübingen: J.C.B. Mohr), as cited in Günther Chaloupek, 'Technological Change and Economic Development in Werner Sombart's Concept of Economic System' (13th Annual Conference of the European Society for the History of Economic Thought, Thessaloniki, April 2009) <www.chaloupek.eu/explorer/SombTech1stDraft.doc> accessed September 14, 2014.

⁴⁰Joseph A Schumpeter, *Capitalism, Socialism and Democracy*, 83.

⁴¹Jan Fagerberg, 'Innovation: A Guide to the Literature' in J. Fagerberg, D. Mowery, and R. Nelson (eds), *The Oxford Handbook of Innovation* (Oxford, Oxford University Press 2004) 6.

1.2.1 *Shiva, Sombart & Schumpeter: Identifying the Differences*

Despite the identification by noted scholars, of at least an apparent similarity or link between the evolutionary creation and destruction symbolized by *Shiva Nataraj*, Sombart and Burckhard’s ‘destructive creation,’ and Schumpeter’s ‘Creative Destruction’ (as discussed above), in the discussion that follows, the book finds that the latter two theories depart significantly from the ideology and philosophy that constitutes (at least in part) their foundation. In other words, there are several important differences between them. Although a focal point of each theory is to highlight the mechanism (and the relevance) of innovation, differences can be seen, for example, in the temporal manifestation of that which is created, vis-à-vis that which is destroyed:

In the symbol of *Nataraj*, creation and destruction are almost simultaneous, thereby appearing to be a fluid and even continuing transformation of one form into another.⁴² In Sombart’s and Burckhardt’s versions, however, destruction appears to precede and ‘force’ creation: *because* of the overuse (leading to scarcity) of wood, coal was discovered; *because* of the destruction resulting from war, a new wave of creation became necessary. In the Schumpeterian version on the other hand, it is *creation* that necessarily precedes destruction: by virtue of creation (innovation), the product or process that pre-existed the innovation eventually dies a natural ‘death’ (e.g. resulting from its obsolescence). Thus for example, the innovation of digital cameras saw the gradual and eventual demise of the market for Polaroid cameras.⁴³ The evolution of text messaging on cellular phones made pagers largely redundant.

Further, Sombart and Burckhard appear to use their theory of ‘destructive creation’ to glorify destruction as being the central act responsible for bringing about (and indeed even inspiring) creativity in society.⁴⁴ In Schumpeter’s ‘Creative Destruction’, we see the opposite—it is the act of creation (innovation) that is given center stage. The resulting and automatic destruction of the ‘old’ or less desirable is inevitable, and perhaps even necessary.⁴⁵

⁴²Sri Sri Ravi Shankar, *Good and Evil: A Discourse*. For example, in the symbol of *Nataraj*, the creation of a dynamic dance, simultaneously or automatically leads to the destruction of inertia, thereby making the process of creation and destruction appear to be a transformation of an inert energy to a dynamic one.

⁴³Henning Hof, ‘After Polaroid, Keeping Instant Photography Alive’ *Time Magazine Business and Money* (July 21, 2009) <<http://content.time.com/time/business/article/0,8599,1910536,00.html>> accessed September 14, 2014.

⁴⁴Reiner Grundmann and Nico Stehr, ‘Why is Werner Sombart Not Part of the Core of Classical Sociology.’

⁴⁵However, it is noteworthy that Schumpeter, like Sombart also glorifies the destructive forces of war in writings that predate the appearance of his celebrated book ‘Socialism, Capitalism and Democracy’— See Thomas K. McCraw *Prophet of Innovation: Joseph Schumpeter and Creative Destruction* (Cambridge, Massachusetts and London, England, Belknap Press of Harvard University Press 2007) 95.

In the image of *Shiva Nataraj*, however, neither destruction nor creation alone is exalted to a position of prominence. What is emphasized is the parallel but transient suppression of that which is less desirable, to permit the creation of something that is more desirable. In this process, the less desirable (trait) is not destroyed forever; it is rather permitted to evolve. The centerpiece of *Shiva*’s creation and destruction is therefore transformation aimed at overall sustainable evolution.

In the symbolism of *Shiva* therefore, the destruction is never complete or permanent. The aim is for the *whole* to reach the ultimate truth or perfection. In Sombart’s and Burckhardt’s versions on the other hand, the destruction is complete and permanent. It is also a destruction of that which was, and perhaps continues to be, desirable. For example, although the creation (or discovery) of coal is desirable, the destruction (by over use) of wood was never desirable. Similarly, the lives of people and properties that are destroyed (prematurely) by war were always desirable and their destruction, caused by war, is permanent.

In Schumpeter’s ‘Creative Destruction’, the destruction may or may not be complete and permanent—there is always a possibility that the old re-appears, perhaps in an improved version or by virtue of its antique value. In Schumpeterian ‘Creative Destruction,’ therefore, while there is no forced destruction of the less desirable, there is nonetheless, a possibility that the old is completely destroyed, *inter alia*, due to obsolescence.

1.2.2 *The Sustainability of ‘Creative Destruction’*

As noted above, scholars trace Schumpeter’s work directly to the works of Sombart (and to the symbolism of *Shiva*) and identify parallels and similarities between several aspects of their work and ideologies: For example, it has been argued that the ‘strongest parallels and similarities between Sombart and Schumpeter can be found in the driving forces of the transformation process.’⁴⁶ Both Sombart and Schumpeter were of the view that transformation or innovation happens because bringing about transformation via creation and destruction is man’s duty and his innate nature. According to Sombart, this is brought about by man’s *Gottähnlichkeit*.⁴⁷ For Schumpeter, this is the innate nature of the entrepreneur—he innovates because he finds joy in innovating.⁴⁸

⁴⁶Günther Chaloupek, ‘Long-term economic perspectives compared: Joseph Schumpeter and Werner Sombart,’ 132. Also, generally, Hugo Reinert and Erik S. Reinert, ‘Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter.’

⁴⁷Günther Chaloupek, ‘Long-term economic perspectives compared: Joseph Schumpeter and Werner Sombart,’ 132.

⁴⁸Hugo Reinert and Erik S. Reinert, ‘Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter,’ 60–61. The symbol of *Shiva Nataraj* also suggests that creative and destructive forces that lead to transformation are part of the innate nature and abilities of human beings. See Sri Sri Ravi Shankar, *Good and Evil: A Discourse*.

Furthermore, both Sombart and Schumpeter state that innovation (or creation and destruction) is the nature of capitalist society as a whole; the tendency of capitalist society is to destroy the old with a view to renewing itself and ensuring its own continuity and importance.⁴⁹ In other words, according to both Sombart and Schumpeter, the driving force of transformation in a capitalist system is capitalism’s own quest for self-preservation, via its ‘mania for innovations’ aimed at making ‘extra profit.’⁵⁰ In his book ‘Business Cycles’, for example, Schumpeter said:

Without innovation, no entrepreneurs; without entrepreneurial achievement, no capitalist returns and no capitalist propulsion. The atmosphere of industrial revolutions – of ‘progress’ – is the only one in which capitalism can survive.⁵¹

Here again, therefore, we see some differences between the symbol of *Shiva* on the one hand, and the Schumpeterian preoccupation with innovation on the other; while Schumpeter associates creative destruction and industrial innovation with ‘self-preservation’ of Capitalist societal structures, the symbol of *Shiva* exalts creativity and destruction within individuals and within society, with the aim of facilitating not only innovation and preservation of (capitalist) societal structures, but also transformation and sustainable ‘evolution’. In this context, it is interesting to note that a significant point of similarity between Sombart and Schumpeter is that both, while considering creation and destruction to be inevitable (and in Schumpeter’s view, even desirable) in a capitalist society, saw within this model of creation and destruction, a non-sustainability: Both were of the view, albeit for different reasons, that capitalism was doomed to failure.⁵²

Sombart was of the view that capitalism would fail in the long run because productivity in the primary sectors, namely sectors such as agriculture that provide raw materials for industrial activity, would stagnate. In other words, the production of finished goods would not expand due to the lack of a parallel and ‘proportional expansion of the primary sector.’⁵³ Sombart therefore recommended

⁴⁹Günther Chaloupek, ‘Long-term Economic perspectives Compared: Joseph Schumpeter and Werner Sombart,’ 136.

⁵⁰Günther Chaloupek, ‘Long-term Economic Perspectives Compared: Joseph Schumpeter and Werner Sombart,’ 136.

⁵¹Joseph Schumpeter, *Business Cycles* (1939), as quoted in Thomas K McCraw, *Prophet of Innovation: Joseph Schumpeter and Creative Destruction*, Preface.

⁵²Günther Chaloupek, ‘Long-term economic perspectives compared: Joseph Schumpeter and Werner Sombart,’ 131, where the author states, “. . . capitalism was doomed due to its success, not its failure.” Commentators have, however, opined that Schumpeter was merely being sarcastic when claiming that capitalism was doomed to failure and that socialism would succeed. Thomas K McCraw, ‘Introduction to the Harper Perennial Modern Thought Edition’, in Joseph A Schumpeter, *Capitalism, Socialism and Democracy*, XXIII.

⁵³Günther Chaloupek, ‘Long-term Economic Perspectives Compared: Joseph Schumpeter and Werner Sombart,’ 132.



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