



Opinion Article

Awareness Steps and Hints for Total Innovation and Intergeneration Enhancement in Silver Economy

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Abstract

The paper is intended to first, provide an accurate summary of deep-rooted issues related to aging and the digital age in order to, second, provide awareness steps and hints to address the need for total innovation, a need first expressed in the French unique history of silver economy. The demographic transition with its severe aging issues on one hand, the Digital era with its unforeseen damages that induce some technoskepticism on the other hand, constitute the main driving forces that call for awareness efforts and total innovation. Awareness steps to achieve such worldwide sized and locally rooted transformations are based on a 'Global thinking, local acting' orientation. The stake is to preserve from digital age turmoil the social resilience and the technological creation (science, co-design...) along with the industrial capability, that all are peculiarly indispensable to youngsters' employment, intergenerational complementarity and healthy aging. Silver economy is invited to renew itself, as does society as a whole, and to more and more provide mind-stretching analyses and initiatives, while opening up proficient intergeneration-oriented ways of living and acting.

Keywords: Demographic transition; Digital age; Intergeneration; Silver economy; Sustainability, Total innovation

Introduction

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second, provide awareness steps and hints to address the need for total innovation, a need first expressed in the French unique history of Silver Economy (SE). The demographic transition with its severe aging issues on one hand, the Digital era with its unforeseen damages that induce some technoskepticism on the other hand, constitute the main driving forces that call for awareness efforts and total innovation. Awareness steps to achieve such worldwide sized and locally rooted transformations are based on a 'Global thinking, local acting' orientation. The stake is to preserve from digital age turmoil the social resilience and the technological creation (science, co-design...) along with the industrial capability, that all are peculiarly indispensable to youngsters' employment, intergenerational complementarity, and healthy aging. SE is invited to renew itself, as does society as a whole, and to more and more provide mind-stretching analyses and initiatives, while opening up proficient intergeneration-oriented ways of living and acting.

Gathering «types of goods and services for older adults and an aging population, including extending the working life, volunteerism, and active citizenship of older people» [1], the Silver Economy (SE) arena is the crucible par excellence of medical and social care, and also of innumerable digital and robotics tools for healthy aging [2]. Started in the early 2000s in the world, the SE has experienced an exceptional turning point in France since 2013. On that year, the French government launched its French silver economy sector (FSES, fr: Filière Silver économie), a vast national and governmental commitment to foster this multidimensional and supposedly highly promising industrial and economical sector [3]. As hoped, this initiative created an important emulation in the associative world, the social and solidarity economy, and the industrial sectors concerned by aging, health and social participation. It also introduced the «total innovation» dimension of the FSES [2; 3,p.8; 4]. Now, 8 years after its vibrant launch, and despite a huge effort of relaunch in 2018 by a dedicated organization - France Silver Eco (www.france-silvereco.fr) - with the support of the Ministry for Solidarity and Health, this French SE program is still waiting for its complete economic and social success. However, this relative stagnation of SE is by far not specific to France since SE deeply suffers from the global economic slowdown. Moreover, the adoption of technologies for aging in place and active aging appears to be quite laborious: It faces a certain long lasting rejection and technoskepticism, as a Silver economy survey of care stakeholders and support structures in France recently confirmed: The «French opinion - professionals perhaps even more than users - has a strong reluctance towards the technologies applied to gerontology, perceived as dehumanizing, even infantilizing, even if it is more a perception than a reality» [5, p.10].

Issues Calling for Total Innovation

Demographic transition and severe aging issues

The enthusiasm of SE seems to cloud persisting social and economic flies in the ointment. The main two of them seems to be:

- First an intergenerational issue: i.e., the little influence it has, until now, regarding the growing economic problems of youngsters.

Recently, the covid-19 pandemic has exacerbated these problems: Young people are likely to financially suffering more than old people from the pandemic crisis [6]. Moreover, social workers for homecare aide have chronically underpaid jobs [7], a situation the pandemic has worsened [8]. Such a SE's weakness regarding youngsters' economic problems is likely to feed the latent intergenerational misunderstandings and conflicts, and so accentuate an already menacing generation gap.

- Second an enduring mistreatment issue: In contrast to its inaugural «total innovation» endeavor, SE features a weak commitment vis-à-vis long-lasting mistreatments of all types regarding old frail or vulnerable people. Now, these mistreatments are in the limelight since several years. Hence the resounding 'Opinion 128' entitled «The Ethical Issues of Ageing. What is the point of concentrating the elderly all together in 'residential homes'? What incentives for society to become more inclusive of its elderly population?» published by the French 'National Consultative Ethics Committee for health and life sciences' (NCEC) [9]. Going far beyond the mere description of misfortune suffered by some frail people in care homes, the Opinion expresses an unprecedented call for urgent and radical changes in all the aging related issues and at all levels of the society. It invites to thinking differently about aging for restoring frail and vulnerable older people their full place in the society. In this regard, it calls for a profound change of mentality and even vocabulary regarding elders, finally bringing about an epistemological revisiting of the whole health system, and a renewed training of health and social actors, for creating new forms of solidarity, and significant strengthening of the policies accompanying aging [10]. It calls also to give «another meaning to the expression "silver economy", in other words reach beyond the concepts of "products" and "markets" attached to this wording so that we rethink and reintroduce humanism» [9, p.10]. It also pinpoints that «older people (...) make us think about the meaning of life in general and of our own lives in particular», and then «It would not be out of place to consider people who have reached a certain age as individuals whose age, precisely, carries with it a form of wisdom and perspective» [9, p.39]. Finally, it recalls that «we are confronted with an ideology lauding individualistic and activist values for active and productive citizens in the name of a sacrosanct economic vision so that each one of us is, above all, a consumer, a player in the process of economic growth» [9, p.39]. Such a dense analysis published in 2018 put forward urgencies that has been dramatically increased by the pandemic, and that bursts in renewed terms at the international level [8,11].

Digital era and technoskepticism issues

Although bringing incommensurable advantages, the digital era unveils number of negative effects such as the techno stress [12], numerous fields of contention seminal to human cultures [13], digitization of the political «by which the act of government is reduced to an adjustment of means for the realization of an aim» [14], etc.. It also conveys or amplifies the before mentioned ones regarding the demographic transition. For instance, the environmental burden of digitalization is moving forward [15], while the digital overconsumption [16] raises lots of health, social and ethical problems [17], the digitation and robot invasions inevitably raise questions about unemployment [18], dispossession of citizenship, and dehumanization of everyday life: «the generalization of devices of digitization currently deployed

to conduct public action allows those in government to take more and more decisions without bothering to collect the advice of those who are affected or mistreated by these decisions» [14]. This double-bind effect of digital and robotic technologies is henceforth universally acknowledged, and even «the Need for 'Techno-Supporting Skeptics'» is recognized in the upper reaches of management [19]. Thus, the traditional 'technology push model' does not make any more receipt in the arena of health and social care. It brought about so much disappointments and discrepancies that it has induced a counter current of technoskepticism within the professionals of the sector [18]. To such an extent that such a technoskepticism now infringes FSES as witnessed in its recent report on 'digital and technological innovations in facilities and services for the elderly': «Twist, first, the neck of all 'technoskepticism'» was the opening objective of the report [5, p.2], however without political or epistemological arguments to reach such a radical target. Without discrediting nor ignoring the current efforts of the French SE sector (cf. the above mentioned abundant web site), it must be stressed that dispelling this endemic technoskepticism requires more than orders. Rather, it calls for understanding some deep-rooted issues of our post-modern world, for the sake of thriving in the three intertwined transitions: green, digital, and intergenerational (rather than 'demographic').

Awareness Steps to Total Innovation

Global thinking, local acting

Overcoming the deep and intertwined problems that affect the above outlined aging and digital driving forces worldwide requires some sort of 'global thinking and local acting' that is developing today in many areas. Such a maxim translates into numerous hints, some of which being fundamental, other ones more subtle. Whilst numerous innovations are presented with fine words by smooth talking persuaders, global thinking and local acting demands primarily to face up the truth regarding consequences of technological and industrial developments on society, and to lay emphasis on the importance of frank thoughts and words. It is only from these straight forwardness and intellectual honesty that deep and sustainable innovations should be conceived and popularized. Besides, given the notions of both «global» and «local» may have respectively a geographical or conceptual meaning, 'Global' may refer whether to worldwide scope realizations or to wide scope concepts, while «local» may also refer whether to located actions or to innovation specific to one area or another. So, thinking innovation globally means viewing innovation as joint action, that is to say innovation for knocking ageism and generational conflicts, while resolving the silver economy stagnation, while also putting an end to adverse technoskepticism. Now, why talking about adverse technoskepticism? Because, as above mentioned, there is a need for a supportive technoskepticism by which techno-supporting skeptics [19] can emphasize positive technology [12].

Coping with disembedded economy and adverse technogenesis

Tackling the contradiction between humaneness and technological progress is one of the major civilizational tasks that SE should get on with the job. There are two opposing points of view:

- First; the viewpoint of the absence of dehumanization, as illustrated by the following SE statement: «the argument for dehumanization does not seem very strong, since digital tools and social robots

must make it possible to do more and instead carry the possibility of reaching new qualitative objectives, including in relational terms» [5,p.17]¹

- Second, the viewpoint of contradictory demands: «society demands two contradictory things: that medicine remains human and at the same time, technical performance. But I think the two are contradictory » [20]² ; D. Sicard also advocates:«to take care is therefore to assume our profession to make it perhaps the last bulwark against the indifference of our world, the last refuge of the humanity of our society» [21].

These words reflect an undeniable truth which denotes a broader global malaise of society. Tackling the contradictions and dilemmas facing humanity today and providing a cogent momentum to deep innovation require to take a step back on the current situation. As advocated by several authors, the current challenges are rooted essentially in the industrial revolution and its consequences and failures. As stated by Karl Polanyi, the political and economic origins of our time [22] stem in the 19th century when «a gradual unfolding of the forces of technological progress transformed the lives of the people» [22, p. 169]. One of the main identified failures is the erosion of social coping mechanisms (social capital) that prevailed before the development of the industrial age. Such a social capital was severely compounded by the industrial revolution during the 19th century: «the industrial age made it increasingly difficult for individuals to take full responsibility for themselves. (...) In the modern industrial age, individuals are buffeted by forces beyond their control» [23]. Polanyi and his team thoroughly elucidated how these social links were progressively and ruthlessly destroyed by the new market system introduced by industrial technology: «if the breakdown of our civilization was timed by the failure of world economy, it was certainly not caused by it. Its origins lay more than a hundred years back in that social and technological upheaval from which the idea of a self-regulating market system sprang in Western Europe» [22, p. 5]. B. Stiglitz called this phenomenon of separating the natural economy from the natural caring behavior and coping relations, the «disembedding of economy»: «Rapid transformation destroys old coping mechanisms, old safety nets, while it creates a new set of demands, before new coping mechanisms are developed» [23]. Hence the current apparent «indifference of our world», and caring as one of «the last refuge of the humanity of our society» (cf. D. Sicard, supra). Known in particular as «Great transformation» [22,24], the upheaval introduced by the industrial revolution in the 19th century have been multiplied and compounded by the advent of cybernetics and intelligent technologies during the last century, along with their explosion as a 'digital age' in recent decades. N.K. Hayles describes how the technogenetic spiral (the process of co-evolution of humans and their tools) changes disciplinary assumptions and practices in the field of Humanities since the emergence of the Internet and digital media [13]. The co-evolution of humans and techniques, or technogenesis, that exists since the beginning of mankind, have been marked by several revolutions. The last of them may be seen through the lens of the digital revolution, which is characterized by its twofold consequences: extraordinary positive consequences in medicine, education, etc., and, on the other hand, deeply worrying potentials: dictatorial government, criminality, terrorism, digital mental manipulation and loss of autonomy, etc. [25]. Let us call the latter adverse technogenetic spiral or adverse technogenesis. One thesis of

the present article is that such an adverse technogenesis, because it is mainly unconscious [13], partly explains the diffuse technoskepticism that persists namely among health and care professionals.

Revisiting silver economy

How to give «another meaning to the expression “silver economy”» as eagerly sought by NCEC (cf. supra). The best studies on the meaning of the silver economy hasten to associate it with all the elements that it lacks and to bring it closer to other economies. A. Klimczuk for instance proposes, as a first practical recommendation, to «further promotion of the silver economy in association with the creative economy as well as social and solidarity economy (...). Each of these economic systems supports and uses different forms of older people's capital» [1]. The SE must renew itself - as does society as a whole with regard to aging [9] - to open up to total innovation and radical intergeneration oriented concepts such as the economy of the contribution [26,27], the re-embedding of economy and work [28,29], integrative objects [30], creative economy and creative industries advocated by the United Nations [31], etc. The SE should more and more provide mind-stretching analyses and initiatives. Besides, the pandemic has dramatically boosted such mind-stretching initiatives (e.g., [32]). The SE should focus essentially on youngsters' needs of informed and competent reply of elders regarding their employment issues, especially regarding health and social positions: «the most useful occupations are the least paid and least considered. What matters most to our ordinary but also intellectual lives, what makes it possible - caregivers, cleaners, garbage collectors, cashiers, delivery workers, truckers - is actually the least important in the value scale that we have collectively validated» [33]³. Being mainly focused on elders' needs for physical independence, security, and cognitive rehabilitation (that are of course important), the silver economy is still lagging behind deep societal innovations, when SE should serve as an innovative platform for promoting creative economy and industry, and a totally renewed envision of future.

Revisiting technology

The challenge today is to preserve the technological creation (science, design, invention, co-design...) and the industrial capability (economy, market...) in the cadre of a global change that « puts the economy on a path toward shared prosperity» [24], and to articulate local and macroeconomic practices differently by rethinking the territory and the locality [27]. And this despite the shady future of the digital age [34], and the dramatic drift of the word 'technology' towards a sense of destructive super-powers conferred by industry and business abuses. In this regard, the development and take-up of valuable healthy aging and aging in place technologies requires a dual approach combining both a re-evaluation of the very meaning of technology in the field of health and solidarity, and a research and development policy in line with the 'care necessity pull' driving force. Such a perspective includes debates, education and evaluation, along with an appropriate regulatory framework. It should be co-driven by health and social caregivers' representatives, in close relationship with scientists, designers and various stakeholders. The sole abolition of the techno-push trend should strongly reduce the adverse technoskepticism that infringes right meaning, design and use of advanced technologies.

1 Personal translation from French

2 Personal translation from French

3 Personal translation from French

The re-evaluation of the very meaning of technology is today well underway. For instance, in the continuum of health and solidarity fields, it has been proposed to revive the original meaning of the word ‘technology’ [2,4]. To get back in touch with the meaning of *tekhne* (or *technê*; from ancient Greek *τέχνη*: Science, art, craft), the main etymological root of the word, makes it possible to pull back the veil that covers this word since the advent of the industrial era. In the 17th century, ‘technology’ encompassed all the characteristics and resources that allow craftsmen and artists to produce a work or an object. For instance, studying the art of medicine was medical technology, the art of living was life technology... Actually, technology means the multiple ways for empowering people through art, science, and employment. Such a revival would blow up any ‘techno’-skepticism, and re-install health and care workers as artists of health and care. To that end, no doubt these professionals or volunteers would demand the best tools. Hence the renewal of the whole technogenesis process.

Conclusion

What must be remembered from this reflection is that the malaise of our society is not irretrievable, that its roots and its remedies are increasingly identified and shared, and that it is the awareness of all this that allows to escape from dictatorial ways of thinking and acting, and so to open ways for deep innovation. Given innovation is its mainstay, silver economy has to integrate complex notions such as «disembedded economy» and «adverse technogenesis» to put its inner demons (such as technoskepticism) to flight. It has also to initiate total innovations that aid youngsters, and to associate with new forms of economy and social resilience.

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