What would Max Weber Say about Public-Sector Innovation?¹

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Introduction³

When there are 20,000 new apps emerging monthly in the Apple app store, and even if only few of them make money or are sold for a fortune, it is easy to think that technological development and innovation are driven by the private sector. It is indeed a commonplace to view either behemoths like Apple or Google or small startups like WhatsApp as highly creative and coveted workplaces. In the same breath the government is described by such adjectives as slow, rigid, expensive. This is one of the key drivers of the currently popular public-sector-innovation discourse: public-sector organizations should be more innovative, exciting places like Apples and Googles; in a word, they should be less bureaucratic and hierarchical, less Weberian (Bason 2010).

There are three objections to this view, all saying in different versions that the question as such – why is the government not more like Apple – is wrong to begin with. First one argues that the government deals with entirely different phenomena than the business sector; second one argues that much of the business creativity and innovation is in fact paid by the government in one form or another; and the third argument is based on the observation that innovations in the public and private sectors are quite profoundly different in nature and impact.

The first set of arguments is well summarized by Joan Robinson: "It is a popular error that bureaucracy is less flexible than private enterprise. It may be so in detail,

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but when large scale adaptations have to be made, central control is far more flexible. It may take two months to get an answer to a letter from a government department, but it takes twenty years for an industry under private enterprise to readjust itself to a fall in demand" (1946, 177). The second set of arguments is exemplified by Mariana Mazzucato's discussion of what is actually inside Apple's products: she lists 13 basic technological solutions inside Apple's flagship products such as the iPod, the iPad and the iPhone that all were significantly funded and often also developed by the (US) government and its various agencies. These technologies include: internet, cellular technology, microprocessor, micro hard drive, liquid-crystal display, signal compression, lithium-ion batteries, DRAM cache, click-wheel, SIRI, multitouch screen, NAVSTAR-GPS (2013, Chapter 5, Figure 13). Mazzucato does not deny Apple's ingenuity in designing remarkable products from existing technological solutions; she rather emphasizes the differences in mode of supporting technological development and innovation: governments are good at taking on long-term risks, the private sector excels at driving innovation further by means of competition, adaptation, etc. The third set of arguments - that public- and private-sector innovations are profoundly different – is what concerns us here in more detail.

To start with, scholarly literature on public-sector innovation (PSI hereafter) has been tormented since its inception by recurring bangs of consciousness: is there such a thing as public-sector innovation to begin with?⁴ If we cannot delineate and define public-sector innovation, then the concept – PSI – will denote any good idea or positive change in the public-sector organizations as innovations and "will lose credibility because it has no meaning" (Lynn 1997, 98; Pollitt 2011).

The aim of this article is to, first, give a brief overview of prevailing attempts to conceptualize (define) public-sector innovation and, second, contrast it with older literature on innovation (Tocqueville, Weber, Schumpeter); this inter-generational discussion shows that the older discussions of PSI have more profound and nuanced views that have all but vanished from today's conceptualizations. Thus, while we cannot know what Max Weber would have said about PSI, it seems worthwhile for us to engage in a dialogue with him and his contemporaries.

Public-sector innovation: What is it?

By and large we can divide scholarly efforts to delineate and conceptualize public-sector innovation into three periods: 1) *the Schumpeterian period*: innovations and the public sector are related to a larger theory of how evolutionary change takes place in societies, mainly associated with Schumpeter (1912, 1939); 2) *the organizational-theory period*: innovations in the public sector are similar to innovations in private companies, mostly associated with early organizational theory and with

⁴ Lynn (1997) gives an overview of early literature on the topic.

Wilson (1989); 3) *the autochthonous-theory period*: the most recent trend to disassociate public and private-sector innovations.

The Schumpeterian period is characterized by Schumpeter's theory of innovation, which in fact is an application in economics and business of his wider theory of how evolutionary change takes place in societies. Alas, Schumpeter never really developed his wider theory of social change (see also Andersen 2009). In his 1939 Business Cycles, Schumpeter states, in a footnote, that he "believes, although he cannot stay to show, that theory [of innovation] here expounded is but a special case, adapted to the economic sphere, of a much larger theory which applies to change in all spheres of social life, science and art included" (1939, 97). His 1912 Theorie der wirtschaftlichen Entwicklung/The Theory of Economic Development⁵ apparently assumes a similar theory, without going into greater detail, either. We can deduce that what Schumpeter meant by this larger theory of change in social life is that change is driven by entrepreneurial, creative persons, or "new men", as he called them in 1939, that look for "new combinations", that is innovative solutions, and thus bring forth evolutionary changes, entirely new ways of doing things (in business, politics, art, science, etc.) that will spread, in some cases more than others, throughout the given sphere of life.⁶ Some of these changes will change value systems and disrupt incumbent hierarchies.7

In the economic sphere, such individuals drive innovations and, thus, economic growth. The role of the public sector in entrepreneurial innovation is two-fold: first, the public sector can take on the role of the entrepreneur (in fact, Schumpeter argues that in socialism, as there is no private ownership, the state will be the sole innovator; 1912, 173); second, innovations in businesses can also be "called forth" by governments (1939, 84).

In sum, what we can take from Schumpeter is that ever since early theories of innovation, the public sector has had a dual character vis-à-vis innovation: it itself can be changed by innovators, and the state can play a crucial role for business innovations, as well (either by directly leading or indirectly supporting entrepreneurial activity). Interestingly, this foreshadows rather closely the currently emerging

⁵ We use the German original first edition here, as in later editions (that served as the basis for English translation as well) these discussions were cut by Schumpeter; so, e.g., the second chapter of the original edition runs to almost 100 pages, the English translations carries only half as many. In this chapter, Schumpeter discusses his theory of innovation.

^{6 &}quot;Das erste Moment, die Freude am Neugestalten, am Schaffen neuer Formen der wirtschaftlichen Dinge ruht auf ganz denselben Grundlagen wie das schöpferische Tun des Künstlers, des Denkers oder des Staatsmannes" (1912, 142).

^{7 &}quot;Sie werden Neues schaffen und Altes zerstören, kühne Pläne irgendwelcher Art konzipieren und durchführen, deren Originalität aller Erfassung zu spotten scheint, ihre Mitbürger ihrer Herrschaft unterwerfen, vielleicht die nationale Politik und Organisation beinflussen, den 'natürlichen' Gang der Wirtschaft durch gesetzliche und ungesetzliche Mittel und jedenfalls anders als durch 'Tausch' abändern usw" (1912, 157).

conceptual dichotomy between innovations *in* the public sector and innovations *through* the public sector (European Commission 2013).

The organizational-theory period. Research explicitly dealing with innovation in the public sector goes back at least to the 1960s; however, its inception seems somewhat accidental in nature. Researchers in organization theory dealing with innovation and how organizational structure supports creative work and novel ideas often did not differentiate between public and private-sector organizations (this non-differentiation goes, in fact, back to Taylor's Principles of Scientific Management as well as to Weber's bureaucracy as an ideal type for both public and private organizations). For instance, Thompson talks explicitly about business and government organizations and their "capacity to innovate" (1965, 1), and defines innovation as the "generation, acceptance, and implementation of new ideas, processes, products or services. Innovation therefore implies the capacity to change or adapt" (1965, 2; see also, e.g., Mohr 1969). Much of the subsequent management and organizationtheory literature dealing with innovation moves effortlessly from the private to the public sector and back and deals, in fact, mostly with the paradox of managers calling for innovative ideas that end up meeting resistance in implementation, often from the same managers or organizational structures (Lynn 1997). This strand of research dealt mostly with diversity of tasks and incentives in an organization (Becker and Whisler 1967 is a good overview). One of the key figures in this tradition is James Q. Wilson, whose definition of (public-sector) organizational innovation remained largely the same from the 1960s to the 1980s: "real innovations are those that alter core tasks; most changes add to or alter peripheral tasks" (1989, 225). Wilson, without referring to Schumpeter, understood these alternations in core tasks to be evolutionary in nature and in impact: "Government agencies change all the time, but the most common changes are add-ons; new program is added on to existing tasks without changing the core tasks or altering the organizational culture" (ibid.). Thus, there is a rather extensive literature that emerged from organization theory that incidentally or purposefully deals with public-sector innovation, where the latter is defined more or less similarly from the 1960s to the 1990s. This literature uses more or less varied Schumpeterian notion of innovation, but it almost does not differentiate at all between the private and public sectors, and thus innovations in any organization can be defined as significant and enduring changes in core tasks. This way innovation should be different from incremental changes in organizations (public or private) and in fact is similar to (technological) breakthroughs familiar from the private-sector evolutionary literature (see, e.g., Lynn 1997, who explicitly uses the concept of breakthrough).8

The autochthonous-theory period. In the 2000s, literature dealing with publicsector innovation tried to move away both from private-sector Schumpeterian approaches emphasizing novelty in action and from organizational-level changes towards innovation genuinely attributable to the public sector and towards discussing innovations in public services and governance (See, e.g., Hartley 2005; Moore and Hartley 2008; also Pollitt 2011). However, while there is a distinct attempt to discuss public-sector phenomena (i.e. decentralization of agencies or regions) and move away from the private-sector categorization and concepts (such as product, service etc. innovations, life cycles and trajectories), there is hardly any substantial change in terms of conceptually differentiating public-sector innovations from the privatesector ones. The main tenets are still changes that are new to the organization and that are large and durable enough (e.g. Hartley 2005, 27; Moore and Hartley 2008, 5). Hartley, for instance, delivers a useful discussion of the difference between public-sector innovations in traditional, new-public-management- and network-based paradigms of public administration (2005, 28-30). Yet, her conceptual framework is hardly different from Wilson's. Similarly to organization-theory literature, also the most recent literature on public-sector innovation sees innovations in public sector in the end as something different from incremental improvements that can also fail and not lead to better public service. Thus, e-voting would constitute a real innovation for most public-sector researchers, and yet some would argue that this innovation did not really bring any improvement or at least that the jury is still out. However, in most cases the line between innovation or not, improvement or not, is not only tenuous at best, often it seems plain arbitrary. Moore and Hartley (2008), for instance, use contracting-out and private-public partnerships as examples; in other words, public-sector innovation is another term for NPM-style reform practices 9

However, in contrast to earlier periods of public-sector innovation concepts, and with the exception of Lynn (1997; see also Lynn 2013), the current period of scholarship pays much less attention to the evolutionary character of changes de-

⁸ Ironically, while this is indeed important for the early Schumpeterian literature, from the 1970s and 1980s onwards, evolutionary economics develops complex theoretical frameworks that show how routine-based individual skills and company-level behavior leads towards a higher level of complexity and helps to explain how Schumpeterian creative destruction shapes economies and competitive environments (See Dosi 1984; Nelson and Winter 1982). This leads to learning economies and national systems of innovation approach that seek to explain innovations not only as breakthroughs but indeed as incremental everyday changes in company routines, learning and various levels of interactions (e.g. user-producer; see Freeman 1982 and 1987; Lundvall 1992). Thus, the evolutionary economics dealing with private-sector innovations moves almost exactly in the opposite direction as the emerging public-sector literature during the 1980s.

⁹ See Drechsler (2005) on the role academic and policy-talk fashion plays in such relabeling practices

scribed as innovations. This is not to say that there is not an acute awareness that one has to differentiate ordinary change from innovation. For instance, Osborne and Brown 2013 argue, "the management of innovation is an entirely different task from the management of developmental change" (2013, 3); Lynn similarly concurs that all non-transformative change is "innovation lite," which is indistinguishable from ordinary change" (2013, 32). Yet, how this transformative change in fact works in the public sector – and differs from typical private-sector dynamics – remains almost always under discussed. Even the most advanced concepts of public-sector innovation do not address in detail how selection mechanisms and other processes take place that would enable us to distinguish innovations from ordinary changes. What makes one reform or new service an innovation, and the other not? Often there seem to be normative connotations involved in distinguishing innovation from change: as innovation is good, a successful reform must be innovative.

On the other hand, *evolutionary* dynamics dominate private-sector-innovation literature, evident in such concepts as backward and forward linkages, increasing returns to scale, first-mover advantage, winner-takes-all markets, imperfect competition, externalities, etc. (most present already in Schumpeter, especially in his 1939 *Business Cycles*). In fact, innovation research in the private sector is all about evolutionary change: how and why certain products, services, technologies, technology systems, but also organizational forms and institutional frameworks become dominant over others that in turn become obsolete or vanish altogether (Nelson and Winter 1982, Perez 2002, etc.). The role of technology, particularly large-scale shifts following technological revolutions that lead to whole new paradigms, is difficult to underestimate here.

However, such evolutionary practices and processes are simply much less evident or even lacking in the public sector. Moreover, many of these processes would also not be desirable in the context of public organizations, such as monopoly rents garnered by first movers or undercutting the same first movers by imitation. There is hardly any competition within the public sector for such evolutionary processes to take place. The way innovations diffuse in the market environment, via imperfect competition and imitation, is hardly a way for public-sector innovations to emerge and to diffuse. Furthermore, in business innovations, there are lots of failures at innovations and lots of losses through innovations or imitations by competitors. Again, these phenomena seem not to be present in the public sector or present themselves in a different form.

That is not to say that there is no evolutionary change in the public sector. As we have seen above, almost all literature on public-sector innovation *assumes* that there is evolutionary change, but conceptualizing the evolutionary changes in the public sector seems to have been lost in private-sector terminology. The key lesson from previous literature, accordingly, seems to be that we should not attempt to look for similar processes to take place within the public sector; rather we should

try to focus on evolutionary processes within the public sector that originate from the logics of the public sector and pertain to such phenomena as power, legitimacy and trust.

Public-Sector Innovation: No theory for old men?

This is arguably exactly the topic of perhaps the earliest "discussion" on public-sector innovation, namely between Tocqueville and Weber on the state-level public administrations in the US. Tocqueville's analysis, and admiration, of state-level administration is famous, Weber's counterarguments are much more scattered and less well-known (Tocqueville's was published in 1835 and 1840¹º; Weber's remarks can be found in *Wirtschaft und Gesellschaft* from 1922 and elsewhere).¹¹

Tocqueville's main question in looking at the US state and especially town-ship-level administration was how diverse townships in New England, without central administration, can still provide relatively uniform public services, especially under an administrative system where most public functions are fulfilled by elected officials (1876, 92). He explained this with judicial oversight of administrations, and called both – decentralized administration and judicial oversight – innovations (ibid.). In Tocqueville's view, decentralized administration with elected officials and judicial oversight work better than centralized administrations (which, he argues, was an innovation of the French Revolution; 121): centralized administrations have more resources, are good at regulating business, maintaining social order and security but also keep society equally from improvement and decline (113); centralized administrations are good at mastering resources to combat problems, but they are poor at rejuvenating what might be called socio-political resources for change (109).

When we jump two-thirds of a century forward, we can see that all the ills of centralized administration described by Tocqueville become positives in Weber's view: in order to keep the social order, that is to keep authority and society functioning, centralized bureaucracy is the "technically" better instrument over elected

¹⁰ We refer here to the 1848 French edition, available via Project Gutenberg, and to the 1876 English translation.

¹¹ In Weber's case, we use the 2002 German edition. For a comparative discussion of Tocqueville's and Weber's discussions of America, see Kalberg 1997.

^{12 &}quot;C'est ce qui ne se découvre pas au premier coup d'œil. Les gouvernants regardent comme une première concession de rendre les fonctions électives, et comme une seconde concession de soumettre le magistrat élu aux arrêts des juges. Ils redoutent également ces deux innovations."/"The communities therefore in which the secondary functionaries of the government are elected are perforce obliged to make great use of judicial penalties as a means of administration. This is not evident at first sight; for those in power are apt to look upon the institution of elective functionaries as one concession, and the subjection of the elected magistrate to the judges of the land as another. They are equally averse to both these innovations."

officials (2002). Elected officials and other "schöpferische' Betätigung der Beamten" leads rather to unpredictability and a politically corrupt system.

While Tocqueville and Weber had different normative goals - the former describing the benefits of an active civic life, the latter describing the benefits of a well-functioning and predictable state apparatus – both discuss eventually how authority, to use Weber's term, is maintained in society with competitive interests via institutional and administrative innovations (although Weber does not use the term). We can paraphrase Weber: the modern state is defined by its authority to use violence to uphold the very same authority. Above all, Tocqueville and Weber show how such innovations lead to differing socio-political relationships and networks, institutional and organizational structures and cultures, in other words: how these innovations drive different evolutionary change. But both also show why evolutionary processes in the public sector are punctured by political, legal, institutional and administrative constraints. In fact, these very constraints are part of these evolutionary processes, forming simultaneously internal factors that are changed and external factors limiting changes. Constraints are intrinsic to the public sector. Thus, to use Tocqueville's example, judicial oversight in small townships acted as a constraint on elected officials, yet this same constraint led to better service for the citizens. Weber, on the other hand, writing two-thirds of a century later, argued that modern societies have become increasingly more complex and thus require centralized administrations that can act simultaneously as constraints and enablers.

Consequently, following Tocqueville and Weber, we can argue that *instead* of competition as driver and diffuser of evolutionary processes, as is the case in the private sector, *intrinsic public-sector features* act simultaneously as *constraints and enablers* and engender *punctured evolutionary processes* as a consequence of public-sector innovations. Notice that in both cases the innovations influence organizational-level capacities, institutional interactions and, eventually, the political authority of a state. Their recommendation, as it were, would be to look at changes in the public sector that lead to 1) changes in constraints and enablers that relate directly to how authority is obtained/retained and 2) engender clearly discernible evolutionary trajectories in their respective ecosystem; such changes could be termed public-sector innovations.¹³

Concluding remarks

Summarizing above 150 years of discussion on conceptualizing public-sector innovations and innovations generally, we can draw the following conclusions:

¹³ It can be argued that a recently emerging literature on social innovation tries to fill the gap in public-sector-innovation literature by looking at values and social relevance and thus moves the discussions towards issues of authority, trust, etc; see Bekkers et al. 2013 for an overview.

- A From the oldest literature discussing public-sector innovations (Tocqueville, Weber):
 - 1) Public-sector innovations are in the most abstract sense related to public authority and legitimacy;
 - 2) Innovations lead to evolutionary changes in constraints and enablers that are intrinsic to the public sector (rules, relationships, institutions);
- B From recent public-sector-innovation literature:
 - 3) Literature on public-sector innovations rarely deals with authority (and related phenomena such as legitimacy, trust, etc.) but rather with relatively specific features of these changes, e.g. with specific modalities (within public-sector organizations), agency (reactions to external stimuli such as technology, politics, social challenges) and morphology (incremental changes); most of these changes are in fact not evolutionary, or their impact remains difficult to discern:
 - 4) Innovation is too often defined from a normative viewpoint (as something leading to significant improvement in public-service delivery), rather than a process that explains how profound changes take place in the public sector.
 - 5) In defining innovation, the literature has focused mostly on organizational or policy levels, but in doing so it has neglected the wider, public-sector-level, constraints and enablers.

In sum, looking at these two strands of older and recent literature on PSI, we can see that disproportionally large areas of public-sector activity in relations to innovations are under-researched in current PSI research. Max Weber has given us perhaps the best possible roadmap for future PSI-related research.

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