

9 How Innovation Evolved from a Heretical Act to a Heroic Imperative

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It were good, therefore, that men in their innovations would follow the example of time itself; which indeed innovateth greatly ... but quietly, by degrees scarce to be perceived.

—Francis Bacon, *Of Innovation*, 1625

Innovation is a concept that everyone understands spontaneously—or thinks he understands. Every theorist talks about innovation in glowing terms, everyone likes to be called an innovator, every firm claims it innovates, and every government espouses programs to make whole nations innovative. Yet it has not always been so. For most of history, “innovation” has been a dirty word.

There are many words and concepts that we use with no knowledge of their past. Such concepts are taken for granted and their meaning is rarely questioned. Innovation is such an *anonymous concept*.

Today, the concept of innovation is wedded to an economic ideology, so much so that we forget it has mainly been a political—and contested—concept for most of history. Before the twentieth century, innovation did not have anything to do with creativity and progress. And there was no economic or social theory of innovation. The concept instead had a “negative history,” to use French historian Pierre Rosanvallon’s phrase: a history of contestations, refutations, denigrations, and denials.¹ “Innovation” was a term that conservative opponents of change used to describe deviance—a vice, something explicitly forbidden by law and used as a linguistic weapon by the opponents of change.

The history of “innovation” is an untold story of myths and conceptual confusions that both innovation experts and historians have misunderstood.

Most attribute innovation's conceptual origin to the twentieth-century economist Joseph Schumpeter.² Others, following the historian George Pocock, attribute a typology of innovators to the Renaissance statesman Niccolò Machiavelli.³ A few historians trace innovation's lineage to ancient Greece but fail to distinguish the term's meaning from mere "novelty."⁴ Still other scholars suggest that what some called innovation in the past was not real innovation.⁵ Throughout these accounts, anachronism is omnipresent. "Social innovation," for example, is often claimed to be a recent alternative to industrial or technological innovation; in fact, the notion of social innovation appeared one hundred years before the phrase "technological innovation."⁶

The history of the concept of innovation raises critical questions about how and why innovation has become a valorized force of social progress. When exactly did the concept of innovation first emerge? How could people of the previous centuries constantly innovate but at the same time deny they innovate?⁷ Finally, through what *route* did innovation change in meaning, and why?

Over the last ten years, I have traced the meanings of innovation across centuries.⁸ I have searched for antecedents of the modern concept of innovation in Greek and Roman sources from ancient times. I have collected over five hundred documents with titles containing "innovation," from the Reformation to the late nineteenth century, including pamphlets, public speeches, sermons, and legal proclamations. I have also studied hundreds of titles from the twentieth century, when the idea of innovation crystallized in modern theories. In a second phase, I have supplemented these titles with searches through hundreds of other texts online.⁹

In this chapter, I study how thoughts about innovation in early modern society gave rise to innovation theory in the twentieth century. I describe how, when, and why a pejorative word with negative moral connotations shifted to a much-valued concept. I offer a history of the concept of innovation going back to antiquity, a history that takes the *use* of the concept seriously, from polemical to instrumental to theoretical (figure 9.1). I argue that innovation acquired a positive meaning because of its instrumental function to the political, social, and material change that could "create, even sanctify," a progressive future.¹⁰ I further contend that innovation has become a basic value of twenty-first-century society because the concept



Figure 9.1

Frequency of the term “innovation” over time (Google Ngram).

of innovation itself contributes to defining society, both as an idea and in practice.

Subversives and Heretics: 2500 BCE to the Sixteenth Century

The word “innovation” was coined in the late 1200s, but the concept underlying the term originated in both Greek and Roman antiquity with distinct meanings that evolved and intermingled in the preceding millennia (table 9.1). The ancient Greek *kainotomia*, meaning “introducing change into the established order,” had a negative political connotation from its very emergence. The word is a combination of *kainos* (“new”) and the radical *tom* (“cut; cutting”). It described changes that were subversive, or revolutionary as we say today. Such were Plato’s and Aristotle’s meanings, the former focusing on cultural innovation (games, music) and its effect on society, and the latter on changes to political constitutions. Aristotle, for example, wrote dismissively of innovation that

[if] people abandon some small feature of their constitution, next time they will with an easier mind tamper with some other and slightly more important feature, until in the end they tamper with the whole structure.... The whole set up of the constitution [is] altered and it passed into the hands of the power-group that had started the process of innovation.¹¹

Certainly there were a few positive uses of the concept in classical Greece. The polymathic scholar Xenophon, for example, interpreted *kainotomia*

Table 9.1
Origins of the Word “Innovation”

	France	England	Italy
Innovation	1297	1297	1364
Innovate	1315	1322	14th century
Innovator	1500	1529	1527

Sources: *The Oxford English Dictionary* (Oxford: Clarendon Press, 1989); O. Bloch and W. Wartung, *Dictionnaire étymologique de la langue française*, 5th ed. (Paris: Presses Universitaires de France, 1968); C. Battisti and G. Alessio, *Dizionario Etimologico Italiano* (Florence: Barbèra, 1952); M. Cortelazzo, *Dizionario etimologico della lingua italiana* (Bologna: Zanichelli, 1979).

literally in his writings on political economy. Xenophon’s use of “innovation” is interpreted as “making new cuttings,” namely, opening new mine galleries, with the objective of increasing the revenues of the city of Athens.¹² But in general, the concept of innovation appeared infrequently during Greek antiquity and usually in a negative connotation.

“Heresy” ascended to central importance in religious and political life in the Middle Ages and the Renaissance and the concept is central to understanding “innovation.” As St. Isidore of Seville (ca. 570–636) put it in *The Twenty Books of Etymologies*, “*Haeresis* is called in Greek from choice...because each one chooses that which seems to him to be the best...since each [heretic] decides by his own will whatever he wants to teach or believe.” Isidore continues: “Whoever understands scripture in any sense other than that which the Holy Spirit, by whom it was written, requires...may...be called an heretic.”¹³ By the early thirteenth century, Robert Grosseteste, bishop of Lincoln and first chancellor of Oxford, gave what became the standard definition of heresy: “[1] an opinion chosen by human faculties, [2] contrary to sacred scriptures, [3] openly held, [4] and pertinaciously defended [preached].”¹⁴

For a long period in Western history, the innovator was a heretic and called as such.¹⁵ Medieval and Renaissance writers spoke of both heresy and innovation in terms of evil, sickness, and disease; they spoke of innovators as flatterers and seducers eager for novelty. Opponents of both heresy and innovation accused the enemy of similar acts: rebellion, civil wars, instability, and disorder. The vocabulary of royal proclamations against heresy and heretics was similar to that against innovation and innovators.¹⁶ Both

heresy and innovation shared the idea of liberty or “private opinion” or “private design,” especially in religious conflicts and debates.¹⁷

Soon this idea of innovation as deviant liberty traveled from the religious to other spheres of society. For example, accusations of “private design” abound in politics, such as the royalist Robert Poyntz on the abuse of parliaments—one of the first political pamphlets to carry a form of “innovation” in the title.¹⁸ In sum, “innovation” was the secularized term for heresy and included the religious, political, and social “heretic” or deviant. The concept served as a linguistic weapon or label in the arsenal of those opposed to change: clerics, monarchists, and conservatives alike.

While the Greek meaning of “innovation” was negative, the concept made its entry into Latin vocabulary with a more positive inflection. In contrast to the Greeks, the Romans had no word for “innovation,” although they had many words for “novelty” (*novitas, res nova*). In addition, the verb *novare* carried a pejorative meaning similar to *kainotomia/mein*, depending on the context. Yet from the fourth century, Christian writers and poets coined *in-novo*, which means “renewing,” in line with other Christian terms of the time: regeneration, reformation, renovation.¹⁹ *Innovo* had no future connotation as such, although it signaled movement toward a “new order.” *Innovo* referred to a return to the past: going back to purity or the original soul.²⁰

Revolution and *renewing* are the two poles of a spectrum of meanings that defined innovation in the following centuries, both in dictionaries and lay discourses. *Renewing* pointed to the past (return to the old, changing or renewing the old), and *revolution* pointed to the future (introducing something new, entirely new). For example, Catholic popes in the fifteenth century used “innovation” in a legal context as renewing previous statutes, and Machiavelli did so in the sense of imitation. In spite of his revolutionary political morality, Machiavelli’s understanding of “innovation” was introducing new laws similar to those of great rulers of the past. On the other hand, reformers and counterreformers from the sixteenth century used the concept of innovation as an accusation for changing things with “revolutionary” consequences.

Innovation as Polemic: The Sixteenth to the Eighteenth Century

The Reformation was a key moment in the history of the concept of innovation. Catholics accused Protestant reformers of innovating. The Puritans served the same argument to the Anglican Church and accused it of

bringing the church back to Catholicism. The word served both sides of the debate—reformers and counterreformers.

Innovation lost its positive valence of renewal when it moved to the politico-religious sphere of the Reformation. As Protestant reformers such as Martin Luther and John Calvin separated themselves from the Catholic Church, royal and ecclesiastical authorities started using innovation in discourse. In 1548, Edward VI, king of England and successor to Henry VIII, issued a *Proclamation against Those That Doeth Innouate*. The proclamation first places innovation in context, then admonishes subjects not to innovate, and finally imposes punishments on offenders:

Certain private Curates, Preachers, and other laye men, contrary to their bounden duties of obedience, both rashely attempte of their owne and singulet witte and mynde, in some Parishe Churches not onely to persuade the people, from the olde and customed Rites and Ceremonies, but also bryngeth in newe and strange orders ... according to their fantasies ... is an evident token of pride and arrogance, so it tendeth bothe to confusion and disorder....

Wherefore his Majestie straightly chargeth and commandeth, that no maner persone, of what estate, order, or degree soever he be, of his private mynde, will or phantasie, do omitte, leave doune, change, alter or innovate any order, Rite or Ceremonie, commonly used and frequented in the Church of England....

Whosoever shall offende, contrary to this Proclamation, shall incur his highness indignation, and suffer imprisonment, and other grievous punishmentes.²¹

The proclamation was followed by the *Book of Common Prayer*, whose preface enjoined people not to meddle with the “folly” and “innovations and new-fangledness” of some men.²²

It was precisely in the context of the Reformation that the concept entered everyday discourse. The English Puritan Henry Burton was an emblematic writer. Every later argument on innovation would be found in his pamphlet *For God and the King* (1636), the sum of two sermons preached on obedience to God and the king in times of “innovations tending to reduce us to that Religion of Rome.”²³ Innovators were those who transgressed the disciplinary order and intended to change it for evil purposes, namely, bringing the Protestant Church back to Catholic doctrine and discipline. Innovating was considered a private liberty—like heresy—that crept imperceptibly and, with time, led to dangerous consequences.²⁴ Archbishop William Laud and his supporters produced replies that opposed Burton’s argument entirely: *we are not innovating but bringing the church back to purity*. Burton was brought to the court, was put into prison, and had his ears cut off.

In the mid-seventeenth century, King Charles prohibited innovation again.²⁵ The proclamations required bishops to visit parishes to enforce the ban; instructed bishops, university scholars, and schoolmasters to take an oath against innovations; and ordered trials to prosecute the “innovators.”²⁶ Advice books and treatises for princes and courtiers supported this understanding and included instructions not to innovate. Books of manners urged people not to meddle with innovation.

This was only the beginning. First, the pejorative meaning of innovation expanded in the political realm, with monarchists of the seventeenth and eighteenth centuries accusing the republicans of being “innovators.” Such was the accusation made against Henry Neville in England and his pamphlet *Plato Redivivus: or, a Dialogue Concerning Government* (1681).²⁷ Innovation was revolutionary and violent. No republican—not even the most famous Protestant reformers or the French revolutionaries—thought of applying the concept to his own project. In contrast, and precisely because the word was morally connoted, the monarchists used and abused the word and labeled the republican as an innovator.²⁸ This linguistic practice continued until the French Revolution, when a general disgust of novelty emerged on the idea of innovation.²⁹

Second, innovation widened its meaning to the social. The social reformer or socialist of the nineteenth century was called a social innovator, as William Sargant put it in *Social Innovators and Their Schemes*.³⁰ His aim was to overthrow the social order, namely, private property. Innovation was a *scheme* or *design* in a pejorative sense—much as it was a conspiracy in political literature (described with words such as “project,” “plan,” “plot,” or “machination”).³¹

Everyone shared this essentially social and political representation of innovation. Natural philosophers from Francis Bacon onward never referred to innovation as what was certainly the most innovative project in science: the experimental method. Equally, very few artisans and inventors talked of their inventions in terms of innovation.

To the ruling classes, the concept of innovation served to discipline people and regulate society. To writers and pamphleteers, “innovation” was a word used to exploit emotions. In *Studies in Words*, literary scholar C. S. Lewis speaks of a “tendency to select our pejorative epithets with a view not to their accuracy but to their power of hurting... not to inform... but to annoy.”³² He also writes that “we call the enemy not what we think he is but what we think he would least like to be called.”³³ From antiquity

through most of the nineteenth century, “innovator” was one of the most odious epithets one could hurl at a rival.

Rehabilitating Innovation as Progress: The Eighteenth to the Nineteenth Century

The concepts of innovation and revolution each changed meaning and started to be used in a positive sense at about the same time. The “spirit of innovation,” a pejorative phrase of the previous centuries, became one of praise. This occurred gradually over the nineteenth century and received full hearing in the twentieth century.

Two rehabilitations of the concept served the purpose. One was a semantic redescription: people began producing reflexive thoughts on the meaning of innovation and concluded that the concept admitted different interpretations. Innovation was neutral. There were good and bad innovations. Yet innovation was still a word of accusation—the “war cry of the fools,” as Jean d’Alembert put it; a “damned word,” as the Fouririst Victor Considérant claimed.³⁴ Yet innovation could also be a good and useful thing. As philosopher Jeremy Bentham wrote in *The Book of Fallacies*:

Innovation means a *bad* change, presenting to the mind, besides the idea of a *change*, the proposition, either that change in general is a bad thing, or at least that the sort of change in question is a bad change.... [But] to say all new things are bad, is as much as to say all things are bad, or, at any event, at their commencement; for of all the old things ever seen or heard of, there is not one that was not once new. Whatever is now *establishment* was once *innovation*.³⁵

Here was a second rehabilitation, an instrumental one. During and after the French Revolution, “innovation” repeatedly came to describe a means to political, social, and material *progress*. “We must never fear to innovate, when the public good is the result of innovation,” wrote one anonymous commentator, “every century having other morals and new usages, every century must have new laws.”³⁶ The aristocratic revolutionary Charles Pigott similarly argued, “If it had not been for this happy spirit of innovation, what would be the state of mechanics, mathematics, geography, astronomy, and all the useful arts and sciences?”³⁷

Nineteenth-century scholars began to rewrite the story of the Reformation and the French Revolution in terms of innovation and even began to

speak of innovators in superlative terms—declaring, for example, that the “Government of the Church by bishops is an innovation,” the British constitution “owes its beauty to innovation,” and “the great charter and the bill of rights are innovations.”³⁸ To Alexis de Toqueville, innovation even became a source of national pride:

The American must be fervent in his desires, enterprising, adventurous, and above all, innovative. This spirit can be found in everything he does: he introduces it into his political laws, his religious doctrines, his theories of social economy, and his private industry; it remains with him wherever he goes; be it in the middle of the woods or in the heart of cities.³⁹

This sentiment was codified by Auguste Comte, who asserted that innovation was a distinguishing quality between animalism and humanity.⁴⁰ Finally, writers also discussed the feelings of the people toward innovation. For example, anthropologists looked at how the “primitives” reacted to innovation, as opposed to the moderns.⁴¹ The dichotomy of tradition-innovation/*conservateur-novateur* became a common framework for understanding the past, the present, and the future.

Yet the transition of “innovation” from negative to positive was not sudden. First, the neutral use of the concept coexisted with the pejorative before the nineteenth century.⁴² Second, the pejorative use of “innovation” continued to share a place with the positive over the nineteenth century.⁴³ One had to wait until the twentieth century for a complete reversal in the representation of innovation.

Theorizing and Enhancing Technological Growth: The Twentieth Century to Today

Early in the twentieth century, “innovation” increasingly appeared as a common and positively connoted word in law, education, literature, arts, sciences, medicine, and the social sciences. Innovation began to be cast in terms of a vocabulary of *initiative*, together with *entrepreneurship* and *creativity*.⁴⁴

Two discourses encapsulated this change in a story that is essential to innovation as a phenomenon: a theoretical discourse and a public (government) discourse. Theorists began to study innovation and, in doing so, embraced a eulogistic view of innovation, or “pro-innovation bias,” as the sociologist Everett Rogers put it. The aim was to understand innovation in

order to serve the practical: the development of strategies and policies to accelerate and get more out of innovation.

Beginning in the 1940s, theoretical thoughts on innovation appeared, and theories of innovation began to multiply. Psychological, sociological, and economically oriented theories followed one after the other from economic historians, anthropologists, sociologists, educators, political scientists, management theorists, engineers, mainstream economists, and evolutionary economists.⁴⁵ What had been called “change” (e.g., social change) and “modernization” before now became “innovation.” Everyone and everything was studied through the lens of innovation, from the individual to organizations to nations. Innovation was “any thought, behavior, or thing that is new because it is qualitatively different from existing forms,” suggested the anthropologist Homer Barnett in one of the very first theories of innovation in the twentieth century.⁴⁶ To Everett Rogers, innovation was “an idea perceived as new by an individual” or another “unit of adoption.”⁴⁷ The definitive transition from the negative to the positive connotation occurred after World War II. Ironically, those governments that contested innovation in the past started promoting innovation and producing reflexive thoughts on innovation as a policy tool. One after another, international organizations and governments embraced innovation as a solution to economic problems and international competitiveness.⁴⁸

At that precise moment, the dominant representation of innovation shifted to that of the economy: *technological* innovation—a phrase that emerged after World War II—as commercialized invention.⁴⁹ Technological innovation served economic *growth*. It became a tool to reduce *lags* or *gaps* in productivity between countries and was conducive to industrial *leadership*. Theorists developed a linear model in which basic scientific *research and development* (R&D) led to innovation, and innovation to prosperity.⁵⁰ Statisticians developed sophisticated metrics to support the idea—for example, officials administered innovation surveys to firms and collected the results into “innovation scoreboards” that served as so-called evidence-based information to policymakers. Innovation became a basic concept of economic policy. In a matter of decades, science policy shifted from technology policy to *innovation policy*, and indicators on science and technology were relabeled *indicators of innovation*. In all these efforts, academic consultants supported the governments by imagining models of innovation

by the dozens as a way to frame and guide policies. *Model* itself became an integral concept in the literature on innovation.

Two theoretical perspectives particularly—economics (technology) and policy—served a new ideology, and the theorists rapidly got the government's hearing. To paraphrase Kevin Sharpe on revolutions, the study of innovation—particularly “innovation studies” (i.e., the management, policy, and economics of innovation) established a cultural dominance that contributed to political discourse.⁵¹ “Innovation studies” became part of the political culture that was essential to its ascendancy and was instrumental in its creation and survival.

To be sure, many of the twentieth-century terms of innovation's semantic field—such as “change”—were in place in the previous centuries. But innovation now suggested intentional or *planned change*. It necessitated strategy and investment. Innovation also retained the idea of revolution. There were *major* innovations, so it was said, and they were the most studied innovations because of their revolutionary impacts on society.

In spite of these continuities, a new vocabulary emerged during the twentieth century. Innovation now suggested *originality* in three senses. First, innovation connoted difference, departure.⁵² Second, innovation was creativity in the sense of *combination*. Innovation recombined ideas or things in a new way.⁵³ Third, innovation referred to origin, namely, being *first* to originate (initiate) or use a new practice. To economists, innovators were the first to commercialize a new invention. This connotation owed its existence to the market ideology. For example, the organizational theorist David Teece discussed the “strategies the firm must follow to maximize its share of industry profits relative to imitators and other competitors.”⁵⁴

For sociologists, innovation was the first adoption of a new practice within a group or a community; it included the economists' focus on technology, plus a far larger range of practices. This meaning was heavily influenced by governmental institutions' objective of modernizing agriculture and diffusing new techniques among farmers.⁵⁵ It gave rise to a whole vocabulary on innovators *versus* laggards.⁵⁶

Both the sociologists' and economists' vocabulary encapsulated the fundamental representation of innovation in the twentieth century. Innovation was a source of revolutionary change (terms used were *major*, *structural*, *systemic*, *paradigmatic*), hence the need to support innovators (*change agents*,

entrepreneurs) and turn everyone, even laggards, into innovators. This was an ironic reversal. To Machiavelli, “all human affairs are ever in a state of flux and cannot stand still,” and therefore there was a need for (political) innovations to stabilize the world.⁵⁷ In contrast, to twentieth-century moderns, the world was too stable and needed revolutionary innovations.

Originality was only one basic concept of the semantic field of innovation. There were also counterconcepts that emerged during the twentieth century. For example, innovation was contrasted with imitation. Imitation was not considered original or creative. When discussing the strategies of firms, technology theorist Chris Freeman limited and contrasted “the traditional strategy” [use of invention] as “essentially non-innovative, or insofar as it is innovative it is *restricted* to the adoption of process innovations, generated elsewhere but available equally to all firms in the industry.”⁵⁸ To Freeman and his colleagues, innovation “excludes simple imitation or ‘adoption’ by imitators.”⁵⁹ Such a view was contested. To a few others, like Charles Carter and Bruce Williams, a firm “may be highly progressive [innovative] without showing much trace of originality [research]. It may simply copy what is done elsewhere.... It is nonsense to identify progressiveness with inventiveness.”⁶⁰ As Barnett put it, the imitator does something new (if not original) “instead of doing what he is accustomed to do.”⁶¹

Another counterconcept to innovation was *invention*. Invention was the (often mental, sometimes manual) act of creating technology, literature, or art. Innovation was putting invention to work. As Schumpeter, among others, put it, “Innovation is possible without anything we should identify as invention and invention does not necessarily induce innovation.”⁶² Yet invention played the role of a basic concept to innovation at the same time. While science and innovation were two separate things to natural philosophers of past centuries, they were now part of the same process. Invention (or science or research; these terms are not always distinguished in the literature) was the first step in the *process* of innovation. Innovation started with basic research, followed by applied research, and then development. This view gave rise to what is known as the “linear model of innovation,” a much-criticized view but one that remains in the background of policies and theories.⁶³

However, the most basic concept of the semantic field was “action” or action-related concepts (box 9.1). Action went hand in hand with another concept, *usefulness/utility*, which is typically described in terms of *progress*

Box 9.1

Innovation as Action

introduction. The presenting of something new to the world. This concept first appeared among anthropologists and sociologists but is most popular among economists and management scholars.

application. Assimilation, transformation, exploitation, translation, implementation; applying (new) knowledge in a practical context. Innovation is the application of ideas, inventions, and science.

adoption. Acceptance, utilization, and diffusion; adopting a new behavior or practice. These concepts are mainly used by sociologists.

commercialization. The bringing of a new good to the market. Used concurrently with “introduction” or “application,” this concept applies to industrial innovation.

(modernization, advancement, development), *economic growth* (productivity, competitiveness, profits), *organizational efficiency*, and *social needs*.

By the end of the twentieth century, innovation was no longer an individual liberty but a collective process. To be sure, the twentieth century had its individual heroes—namely, the entrepreneurs. Yet entrepreneurs were only one part of the process of innovation: a *total* process as some called it, or a socioeconomic process. Jack Morton, former research director at Bell Laboratories, who brought the transistor from invention to market, and an author of numerous articles and a book on innovation, suggested:

Innovation is not a single action but a *total* process of interrelated parts. It is not just the discovery of new knowledge, not just the development of a new product, manufacturing technique, or service, nor the creation of a new market. Rather, it is *all* these things: a process in which all of these creative acts, from research to service, are present, acting together in an integrated way toward a common goal.⁶⁴

From the mid-twentieth century, innovation has been studied as a “process,” a sequential process in time.⁶⁵ Herein lies a semantic “innovation,” an innovation that has had a major impact on the modern representation of innovation. Innovation was no longer a thing or a single act but a series of events or activities (called *stages*) with a purpose. The theorists have made themselves “innovative ideologists” and brought in a new definition of innovation, in reaction to earlier ones.⁶⁶

The nuance between “innovation” as a verb and innovation as a process is not as clear-cut as it might appear at first sight. This is not unlike the distinction between “innovation” as substantive or verb. In fact, “innovation” is an abstract word that admits of two meanings: action (introduction of something new) and result/outcome (the new). For example, sociologists use “innovation” as a substantive but focus on the verb (diffusion). Similarly, economists stress the verb form (commercialization). Be that as it may, innovation as a process has contributed to giving the concept of innovation a very large function: innovation encompasses *every* dimension of an invention, from generation (initiation) to diffusion. To the sociologists, the process is one from (individual) adoption to (social) diffusion; to the economists, from invention to commercialization; to management schools, from (product) development to manufacturing. Everywhere, this process is framed in terms of a sequence (with stages) called *models*.

By defining innovation as *process*, it became a counterconcept to science—and more particularly to basic research—as a dominant cultural value of the twentieth century. Technological innovation sprang from a tension between science (for its own sake) and society, or an aspiration to action. It emerged as a category in the twentieth century because in discourse, action, and policy, it was useful to include a larger number of people (other than scientists) and activities (other than science or basic research). Innovation is a *process* that includes several people and activities, so it was claimed. Science or research was only one step or factor in the process of innovation, and often not even a necessary step.

Conclusion

Today, the word “innovation” seeps into almost every sentence.⁶⁷ The spontaneous and dominant representation of “innovation” is technological innovation. There also is a profound absence of reflexivity in the imperative to innovate; innovation is always good. Innovators are the panacea to every socioeconomic problem. One need not inquire into the society’s problems; innovation is the *a priori* solution.

The present myths of innovation result from a lack of historical understanding of the *concept* of innovation. Concepts are context-bound.⁶⁸ As political philosopher Gordon J. Schochet has suggested, “Civil Societies require common or shared vocabularies that contain their identities and

act as centralizing and nearly sovereign forces.”⁶⁹ These shared vocabularies accrete and change over time.

As the nineteenth century ended, the word “innovation” had accumulated four characteristics that made it a powerful (and pejorative) term. From the Greeks, the representation of innovation had retained its subversive (revolutionary) character. The Reformation added a heretic dimension (individual liberty), and the Renaissance a violent overtone. Together, these characteristics led to a fourth one: innovation as conspiracy (designs, schemes, plots). Yet in spite of these connotations, “innovation” seems to have escaped the attention of intellectual or conceptual historians. Many concepts of change (crisis, revolution, progress, modernity) have been studied in literature, but innovation has not. Is “innovation” only a word—a mere word—in the vocabulary of adherents to the *status quo*—churches, kings, and their supporters—and devoid of sociological meaning?

In a certain sense, it is. Before the twentieth century, no theory of innovation existed. Innovation was a concept of limited theoretical content, a linguistic weapon used against one’s enemy. In another sense, innovation is not devoid of sociological meaning. The opponents of innovation in the seventeenth and eighteenth centuries provided the first image of innovation and innovators, one that lasted for centuries. What constitutes innovation and who is an innovator were defined by the enemies of innovation and innovators. It is against this pejorative image or representation that innovators had to struggle in the nineteenth century when they started making use of the concept in a positive sense.⁷⁰

The history of the concept of innovation is not different from that of many other concepts, such as curiosity, imagination, originality, and, in the world of action, revolution.⁷¹ In his study on the idea of happiness, Robert Mauzi suggests that some ideas belong “at the same time to thought, to experience and to dreams.”⁷² Before the twentieth century, the idea of innovation belonged to experience, but very rarely to thoughts and dreams. The innovator himself makes no use of the word. For centuries it was not innovation itself that shocked humanity but the word describing it.⁷³ The novelty (the “innovation”) of the twentieth century was to enrich the idea of innovation with thought, dreams, and imagination. Innovation took on a positive meaning that had been missing until then, and became an obsession.⁷⁴

Innovation is a synthesizing concept, like civilization, that is defined by way of associations and analogies to existing concepts.⁷⁵ Of these, four

are fundamental. The first is the concept of change. Intentional change (scheme, design, and the like) gave rise to planned change, which has been a common definition and synonym of “innovation” over the twentieth century. Another concept is heresy, which gave way to thinking about innovation as intention or liberty, and then *initiative* or *initiation*. A third concept is revolution, which led to the idea of revolutionary or major innovation and the metaphor of “creative destruction.”⁷⁶ A fourth is combination. Before innovation was equated to creativity in the twentieth century, there was *combination*, a concept from philosophy and the doctrine on the association of ideas in the eighteenth century.⁷⁷ Combination brings ideas, things, and exciting inventions into a new whole, which is precisely how innovation is defined in many theories today, although usually more as a slogan than a substantial concept.⁷⁸

The changing fortune of innovation over the centuries sheds light on the values of a time. In the seventeenth and eighteenth centuries, the uses of the concept were essentially polemical. It served as a linguistic weapon, attaching a pejorative label to the innovators. In contrast, from the nineteenth century onward, innovation started to refer to central values of modern times: progress and utility. As a consequence, many people started appropriating the concept for their own ends. Innovation became quite a valuable buzzword, a magic word. Yet there is danger here that innovation as a “rallying-cry” may become “semantically null.”⁷⁹ Like the term “revolution” before it, “innovation” “may soon cease to be current, emptied of all meaning by constant overuse.”⁸⁰

Notes

1. Pierre Rosenvallon, *Pour une histoire conceptuelle du politique* (Paris: Seuil, 2003), 43–45.
2. John M. Staudenmaier, *Technology's Storytellers: Reweaving the Human Fabric* (Cambridge, MA: MIT Press, 1985), 56; Norbert Alter, *L'innovation ordinaire* (Paris: PUF, 2000), 8.
3. John G. A. Pocock, *The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition* (Princeton, NJ: Princeton University Press, 1975).
4. Armand d' Angour, *The Greeks and the New: Novelty in Ancient Greek Imagination and Experience* (Cambridge: Cambridge University Press, 2011).

5. To Anthony Milton, the innovation the English Puritans accused the bishops of in the seventeenth century is not real innovation because it was symbolic or minor, as we say today—a myopia shared centuries ago by, at least, Jacques Bossuet. Anthony Milton, *Catholic and Reformed: The Roman and Protestant Churches in English Protestant Thought, 1600–1640* (Cambridge: Cambridge University Press, 1995); Jacques Bénigne Bossuet, *Opuscules de M. Bossuet, évêque de Meaux*, tome 5 (Paris: Le Mercier; Dessaint & Saillant; Jean-Th. Herissant; Durand; Le Prieur, 1751), 225.

6. Julie Cloutier, *Qu'est-ce que l'innovation sociale?* (Montreal: Crises, 2003).

7. I suggest that the paradox, as David Zaret calls it, is best explained linguistically. Zaret, *Origins of Democratic Culture: Printing, Petitions, and the Public Sphere in Early-Modern England* (Princeton, NJ: Princeton University Press, 2000), 37–43, 254–257.

8. Benoît Godin, *Innovation Contested: The Idea of Innovation over the Centuries* (London: Routledge, 2015).

9. I have used archival databases such as Perseus Digital Library, British History Online, Early English Books Online (EEBO), Eighteenth Century Collection Online (ECCO), Gallica (Bibliothèque Nationale de France), the ARTFL Project, and Google Books (Ngram). This chapter is based on the analysis of these documents, concentrating on documents of English and French origin.

10. Gordon J. Schochet, “Why Should History Matter? Political Theory and the History of Discourse,” in *The Varieties of British Political Thought, 1500–1800*, ed. J. G. A. Pocock (Cambridge: Cambridge University Press, 1993), 322. Innovation is a linguistic construct that is maintained, as Reinhart Koselleck says of modern concepts, by continuous expectations toward the future, about how the future should be. Koselleck, *Futures Past: On the Semantics of Historical Time* (New York: Columbia University Press, 2004).

11. This quote is from Aristotle, *Politics*, X, xii, 1316b, trans. R. Rackham, Loeb Classical Library (Cambridge, MA: Harvard University Press, 2005). For Plato’s understanding of cultural innovation, see Plato, *Laws*, VII 797b, trans. Trevor J. Saunders (London: Penguin Classics, 2004); Plato, *Laws*, Plato in Twelve Volumes, vols. 10 and 11, trans. R. G. Bury (Cambridge, MA: Harvard University Press; London: William Heinemann, 1967–1968). For Aristotle’s interpretation, see Aristotle, *Politics*, trans. T. A. Sinclair, rev. Trevor J. Saunders (London: Penguin Classics, 2004).

12. Xenophon, *Ways and Means*, in *Xenophon in Seven Volumes*, ed. E.C. Marchant, G.W. Bowersock, trans. Constitution of the Athenians (Cambridge, MA: Harvard University Press, 1925). Plutarch’s biography of Greeks and Romans is another example of positive uses. Plutarch, *Lives*, trans. Bernadotte Perrin (Cambridge, MA: Harvard University Press, 1919). Additionally, in his *Histories*, Polybius coins *kainopoiein*, the meaning of which is “making new,” a term that he applies to himself as inventor of

a new kind of history. Polybius, *Histories*, trans. Evelyn S. Shuckburgh (London, New York: Macmillan, 1889).

13. Isidore of Seville, *Etymologies*, in *Heresy and Authority in Medieval Europe*, ed. Edward Peters (Philadelphia: University of Pennsylvania Press, 1980), 49–50.

14. Peters, *Heresy and Authority*, 167.

15. According to James S. Preus, during the Middle Ages “innovation and heresy are practically synonymous.... We frequently find [the innovator and heretic] accusing each other of innovation.” Preus, “Theological Legitimation for Innovation in the Middle Ages,” *Viator* 3, no. 3 (1972): 2.

16. Paul L. Hughes and James P. Larkin, *Tudor Royal Proclamations* (New Haven, CT: Yale University Press, 1964), 1:57–60, 181–186.

17. See, for example, England and Wales, Sovereign (Elizabeth I), *By the Queene a proclamation for proceeding against Iesuites and secular priests, their receiuers, relieuers, and maintainers* (London: Robert Barker, 1602); England and Wales, *England* (London: Bonham Norton and Iohn Bill, 1626); England and Wales, Sovereign (Charles I), *His Maiesties declaration to all his louing subiects, of the causes which moued him to dissolue the last Parliament published by His Maiesties speciall command* (London: Bonham Norton and Iohn Bill, 1628).

18. Robert Poyntz, *A VINDICATION OF MONARCHY and the Government long established in the Church and Kingdom of England, Against The Pernituous Assertions and tumultuous Practices of the Innovators during the last Parliament in the REIGN of CHARLES the I* (London: Roger Norton, 1661).

19. Gerhart B. Ladner, *The Idea of Reform: Its Impact on Christian Thought and Action in the Age of the Fathers* (Cambridge, MA: Harvard University Press, 1959).

20. The Vulgate—the Latin translation of the Bible—was influential here. In 382, Pope Damasus I commissioned St. Jerome to produce a “standard” version of the *Vetus Latina*, which made use of *innovo* in a spiritual context in the books of Job, Lamentations, Psalms, Wisdom.

21. England and Wales, Sovereign (Edward VI), *A proclamation against those that doeth innouate* (London: In aedibus Richardi Graftoni regij impressoris, 1548).

22. Church of England, *The booke of common prayer and administracion of the Sacramentes, and other rites of the Church: after the use of the Church of England* (London: in officinal Edouardi Whitchurche [and Nicolas Hill], 1549).

23. Henry Burton, *For God and the King* (Amsterdam: Theatrum Orbis Terrarum, 1636; Norwood, NJ: W. J. Johnson, 1976).

24. This chain reaction or slippery slope argument goes back to Plato, Aristotle, and Polybius. It was served regularly against innovators, from the Reformation

onward. "All Innovations in Government are Dangerous," wrote an anonymous writer against the English republican Henry Neville. It is "like a Watch, of which any one piece lost will disorder the whole." W.W., *Antidotum Britannicum: or, a counterpest against the Destructive Principles of Plato Redivivus ... , against ALL INNOVATORS* (London: Richard Sare, 1681), 172.

25. England and Wales, Sovereign (Charles I), *The King's Proclamation on Religion*, in *The Constitutional Documents of the Puritan Revolution, 1625–1660*, ed. S. R. Gardiner (Oxford: Clarendon Press, 1906).

26. Church of Scotland, *Act of the Commission of the General Assembly, Against Innovations in the Worship of God* (Edinburgh, 1707).

27. Henry Neville, *Plato redivivus, or, A dialogue concerning government wherein, by observations drawn from other kingdoms and states both ancient and modern, an endeavour is used to discover the present politick distemper of our own, with the causes and remedies ...*, 2nd ed. (London: Printed for S. I. and sold by R. Dew, 1681).

28. Anonymous, *Antidotum Britannicum*; Thomas Goddard, *Plato's Demon: or, the State-Physician Unmasked, Being a Discourse in Answer to a Book call'd Plato Redivivus* (London, H. Hill, 1684).

29. See, e.g., François Dominique de Reynaud de Montlosier, *De la monarchie française, depuis son établissement jusqu'à nos jours; ou recherches sur les anciennes institutions françaises, leur progrès, leur décadence, et sur les causes qui ont amené la révolution et ses diverses phases jusqu'à la déclaration d'empire; avec un supplément sur le gouvernement de Buonaparte, depuis ses comencemens jusqu'à sa chute; et sur le retour de la maison de Bourbon*, 3 vols. (Paris: H. Nicolle/A. Édrion/Gide fils, 1814).

30. William L. Sargant, *Social Innovators and Their Schemes* (London: Smith, Elder and Co., 1858).

31. This connotation remained in vocabulary until late in the nineteenth century—although some writers discuss social innovation using the positive idea of (social) reform. For example, in 1888, a popular edition of the *Encyclopedia Britannica* included a long article on communism which begins as follows: "Communism is the name given to the schemes of social innovation which have for their starting point the attempted overthrow of the institution of private property." *Encyclopedia Britannica*, 9th ed., s.v. "Communism" (New York: Henry G. Allen, 1888), 211–219.

32. C. S. Lewis, *Studies in Words* (Cambridge: Cambridge University Press, 1960, 1967), 323.

33. *Ibid.*, 122.

34. Jean le Rond d'Alembert, *Histoire des membres de l'Académie française, morts depuis 1700 jusqu'en 1771, pour servir de suite aux éloges imprimés & lus dans les Séances*

publiques de cette Compagnie, tome 3 (Amsterdam: Moutard, 1786); Victor Considérant, *Destinée sociale* (Paris: Librairies du Palais-Royal, 1834), 1:312.

35. Jeremy Bentham, *The Book of Fallacies: From Unfinished Papers of Jeremy Bentham* (London: John and H. L. Hunt, 1824), 143–144, 218.

36. Anonymous (Comte de M***), *L'innovation utile, ou la nécessité de détruire les Parlements: Plan proposé au Roi* (Paris: La Gazette infernale, 1789), translated from the original French.

37. Charles Pigott, *The Jockey Club or a Sketch of the Manners of the Age* (London: M. D. Symons, Paternoster-Row, 1792), 171.

38. François Dominique de Reynaud de Montlosier, *De la monarchie française, depuis son établissement jusqu'à nos jours; ou recherches sur les anciennes institutions françaises, leur progrès, leur décadence, et sur les causes qui ont amené la révolution et ses diverses phases jusqu'à la déclaration d'empire; avec un supplément sur le gouvernement de Buonaparte, depuis ses comencemens jusqu'à sa chute; et sur le retour de la maison de Bourbon*, 3 vols. (Paris: H. Nicolle/A. Édron/Gide fils, 1814); Louis Blanc, *Histoire de la Révolution française* (Paris: Librairie internationale, Lacroix et Cie 1847; 1878); Edgar Quinet, *La Révolution* (Paris: Félix Alcan, 1891); Jean-Marie Dubeuf, *Revue rétrospective des principaux faits, innovations et événements acquis à l'histoire depuis le règne de Napoléon III* (Caen: Emile Alliot et Co., 1866);

39. Alexis de Tocqueville, *De la démocratie en Amérique I* (Paris: Gallimard, 1835; 1992), 201, translated from the original French.

40. Auguste Comte, *Cours de philosophie positive*, tome quatrième (Paris: Bachelier, 1839), 558–559, 636, 642.

41. Arthur Comte de Gobineau, *Essai sur l'inégalité des races* (Paris: Pierre Belfond, 1853).

42. Louis de Rouvroy Saint-Simon, *Mémoires*, tome 11 (Paris: Chéruel, 1697–1700).

43. Hubbard Winslow, *The Dangerous Tendency to Innovations and Extremes in Education*, delivered before the American Institute of Instruction (Boston: Tuttle and Weeks, 1835); Richard Frederick Littledale, *Innovations: A Lecture Delivered in the Assembly Rooms, Liverpool, April 23rd, 1868* (Oxford: A. R. Mowbray; London: Simpkin, Marschall & Co., 1868).

44. One of the firsts, if not the first to talk of innovation in terms of “initiative” is Gabriel Tarde in *Les lois de l'imitation* (Paris: Seuil, 1890; 2001).

45. Benoît Godin, *Models of Innovation* (Cambridge, MA: MIT Press, 2017).

46. Homer G. Barnett, *Innovation: The Basis of Cultural Change* (New York: McGraw Hill, 1953), 7.

47. Everett M. Rogers, *The Diffusion of Innovation* (New York: Free Press, 1962), 13; Everett M. Rogers, *Diffusion of Innovation*, 3rd ed. (New York: Free Press, 1983), 11.

48. OECD, *Government and Technical Innovation* (Paris: OECD, 1966); OECD, *The Management of Innovation in Education*, Center for Educational Research and Innovation (CERI) (Paris: OECD, 1969); OECD, *Gaps in Technology: Comparisons between Countries in Education, R&D, Technological Innovation, International Economic Exchanges* (Paris: OECD, 1970); Keith Pavitt and S. Wald, *The Conditions for Success in Technological Innovation* (Paris: OECD, 1971); US Department of Commerce, *Technological Innovation: Its Environment and Management* (Washington, DC: USGPO, 1967); UK Advisory Council for Science and Technology, *Technological Innovation in Britain* (London: HMSO, 1968); Keith Pavitt and W. Walker, "Government Policies towards Industrial Innovation: A Review," *Research Policy* 5 (1976): 11–97.

49. A few exceptions before that date are Thorstein Veblen, *Imperial Germany and the Industrial Revolution* (London: Macmillan, 1915), 118, 128–129; Bernhard J. Stern, "Resistance to the Adoption of Technological Innovations," in *Technological Trends and National Policy*, Report of the Subcommittee on Technology to the National Resources Committee (Washington, DC: USGPO, 1937), 39–66; Joseph A. Schumpeter, *Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process*, vol. 1 (New York: McGraw Hill, 1939).

50. Simon Kuznets, *Six Lectures on Economic Growth* (Glencoe, IL: Free Press, 1959); Keith Pavitt, "Research, Innovation and Economic Growth," *Nature* 200, no. 4903 (19 October 1963): 206–210. This model was first explained in detail in the report on science to the US president from Vannevar Bush, director of the Office of Scientific Research and Development; Vannevar Bush, *Science: The Endless Frontier* (Washington, DC: United States Government Printing Office, 1945)—but without the word "innovation." Economic historian Rupert Maclaurin, secretary to one of the four committees, assisted Bush (William Rupert Maclaurin, *Invention and Innovation in the Radio Industry* [New York: Macmillan, 1949]).

51. Kevin M. Sharpe, *Reading Revolutions: The Politics of Reading in Early Modern England* (New Haven, CT, and London: Yale University Press, 2000), 6–7; Benoît Godin, "'Innovation Studies': The Invention of a Specialty," *Minerva* 50, no. 4 (2000): 397–421; Benoît Godin, "'Innovation Studies': Staking the Claim for a New Disciplinary 'Tribe,'" *Minerva* 52, no. 4 (2014): 489–495.

52. Alphonse de Candolle, *Histoire des sciences et des savants depuis deux siècles, d'après l'opinion des principales académies ou sociétés scientifiques* (Genève: Il Georg, 1873), 56.

53. Barnett, *Innovation*.

54. David J. Teece, "Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing, and Public Policy," *Research Policy* 15 (1986): 285–305.

55. Subcommittee on the Diffusion and Adoption of Farm Practices, *Sociological Research on the Diffusion and Adoption of New Farm Practices: A Review of Previous Research and a Statement of Hypotheses and Needed Research* (Lexington: Kentucky Agricultural Experimental Station and Department of Rural Sociology, University of Kentucky, 1952).
56. Rogers, *Diffusion of Innovation*.
57. Niccolò Machiavelli, *The Prince and the Discourses* (New York: McGraw-Hill Humanities, Social Sciences and World Languages, 1950); see *The Prince* I, 6; see also *The Discourses*, II, preface.
58. Chris Freeman, *The Economics of Industrial Innovation* (Harmondsworth, UK: Penguin Books, 1974), 257.
59. SPRU, *Success and Failure in Industrial Innovation: A Summary of Project SAPHO* (London: Centre for the Study of Industrial Innovation, 1972), 7.
60. Charles F. Carter and Bruce R. Williams, *Investment in Innovation* (London: Oxford University Press, 1958), 108.
61. Homer G. Barnett, "The Innovative Process," in *Alfred L. Kroeber: A Memorial*, Kroeber Anthropological Society Papers (1961), 25:25–42. Seventy years earlier, Tarde discussed imitation in similar terms: "Le plus imitateur des hommes est novateur par quelque côté." (The most imitative man is to a certain extent an innovator [Tarde, *Les lois de l'imitation*, 46]).
62. Schumpeter, *Business Cycles*, 84–85.
63. Benoît Godin, "The Linear Model of Innovation: The Historical Construction of an Analytical Framework," *Science, Technology, and Human Values* 31, no. 6 (2006): 639–667; Benoît Godin, "In the Shadow of Schumpeter: W. Rupert Maclaurin and the Study of Technological Innovation," *Minerva* 46, no. 3 (2008): 343–360.
64. Jack A. Morton, "The Innovation of Innovation," *IEEE Transactions on Engineering Management* (1968) EM-15 (2): 57–65 (emphasis added).
65. Maclaurin, *Invention and Innovation*, 208; Subcommittee on the Diffusion and Adoption of Farm Practices, *Sociological Research on the Diffusion and Adoption of New Farm Practices*.
66. Quentin Skinner, "Classical Liberty, Renaissance Translation, and the English Civil War," in *Visions of Politics: Regarding Method*, ed. Q. Skinner (Cambridge: Cambridge University Press, 2002), 2:308–343; Quentin Skinner, "Moral Principles and Social Change," in Skinner, *Visions of Politics* (Cambridge: Cambridge University Press, 2002), 1:145–157.
67. Some words, Lewis suggests again, have nothing but a halo, a "mystique by which a whole society lives." Lewis, *Studies in Words*, 282.

68. Quentin Skinner, "Meaning and Understanding in the History of Ideas," *History and Theory* 9, no. 1 (1969): 3–53.

69. Gordon J. Schochet, "Why Should History Matter? Political Theory and the History of Discourse," in *The Varieties of British Political Thought, 1500–1800*, ed. J. G. A. Pocock (Cambridge: Cambridge University Press, 1993), 322, 352.

70. This story is not very different from that of the Enlightenment and its enemies—the *anti-philosophes*—as Darrin McMahon has documented: "Anxiety arose first and foremost from [religion]. Other concerns—civil, political, and economic—flowed from this basic preoccupation." Darrin M. McMahon, *Enemies of the Enlightenment: The French Counter-Enlightenment and the Making of Modernity* (Oxford: Oxford University Press, 2001), 197.

71. Neil Kenny, *The Uses of Curiosity in Early Modern France and Germany* (Oxford: Oxford University Press, 2004); James Engell, *The Creative Imagination: Enlightenment to Romanticism* (Cambridge, MA: Harvard University Press, 1981); Roland Mortier, *L'originalité: une nouvelle catégorie esthétique au siècle des lumières* (Genève: Droz, 1982); Rolf Reichardt, "Révolution," in *Dictionnaire européen des Lumières*, ed. M. Delon (Paris: Presses universitaires de France, 1997), 939–943.

72. Robert Mauzi, *L'idée de bonheur dans la littérature française au XVIIIe siècle* (Paris: Albin Michel, 1979), 9.

73. Reinhart Koselleck, "Begriffsgeschichte and Social History," in *Futures Past: On the Semantics of Historical Time*, ed. R. Koselleck (New York: Columbia University Press, 2004), 75–92.

74. "At certain stages in social evolution, innovation becomes, in turn, its own value." Célestin Bouglé, *Leçons de sociologie sur l'évolution des mœurs* (Paris: Armand Colin, 1922), 113.

75. Brett Bowden, "The Ideal of Civilization: Its Origins and Socio-political Character," *Critical Review of International Science and Political Philosophy* 7, no. 1 (2011): 30.

76. Melvin Lasky suggests that innovation is a precursor term to revolution. I would say instead that innovation (as sudden and violent) simply has connotations of revolution. Melvin S. Lasky, *Utopia and Revolution* (Chicago: University of Chicago Press, 1976), 311.

77. For example, Schumpeter's main concept in the first two editions of *The Economic Theory of Development* (1911 and 1926) is combination—not innovation—combination shifting its characteristics to innovation in the 1934 edition. Schumpeter makes no use of innovation in the German edition of 1911. In the 1926 edition, innovation appears regularly, but as a secondary idea to that of combination. It is novelty of any kind and is used interchangeably in the sense of a "new task," "doing something differently," or simply "something new" and, in one place,

“the function of entrepreneurs.” J. A. Schumpeter, *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle* (Cambridge, MA: Harvard University Press, 1934), 89. This “carrying out of new combinations” is composed of five cases: new good, new method, opening of new market, conquest of a new source of supply, and new organization (66). See also Vilfredo Pareto’s instinct of combination in Pareto, *Traité de sociologie générale* (Paris-Genève: Droz, 1968 [1917]).

78. Benoît Godin, “Innovation and Creativity: A Slogan, Nothing but a Slogan,” in *Routledge Handbook of the Economics*, ed. Cristiano Antonelli and Albert N. Link (New York: Routledge, 2015).

79. Lewis, *Studies in Words*, 86, 328.

80. John G. A. Pocock, “Languages and Their Implications: The Transformation of the Study of Political Thought,” in *Politics, Languages and Time: Essays on Political Thoughts and History* (Chicago: University of Chicago Press, 1989), 3.