When innovation implied corporate reform: A historical perspective through the writings of Walther Rathenau

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[French version: September 2016 - n°125]

The work of Walther Rathenau (1867-1922), the head of Allgemeine Elektricitäts-Gesellschaft (AEG) and a minister in the early days of the Weimar Republic, casts a historical light on the ideas that intellectuals and corporate executives in the 1910s had about the modern firm and its social responsibilities. For Rathenau, the modern firm stands out owing not to its size but to its capacity for collective innovation. Seeing this capacity as the grounds for new responsibilities, he proposed institutionalizing a form of governance that would articulate the firm's private status with its finality as a community of interest. Now that corporate social responsibility is being discussed in terms ranging from voluntary ethics to a utilitarian approach, reading Rathenau leads us to understand that history could have carried this concept in a different direction: perspectives open for the future...

alk about corporate social responsibility is becoming more earnest as firms grow and have a global reach. Given the ecological disequilibria caused by corporate activities, some pundits have denied that business can voluntarily take account of social and environmental preoccupations (CRANE et al. 2014, FLEMING & JONES 2013, KARNAN 2011). As a private party pursuing its own interests, a firm might, of course, pay heed to stakeholders when doing so stimulates its growth. But is it able to actually take into account social preoccupations that do not serve its interests or might even disserve them?

These questions are not new, as history shows (ACQUIER & AGGERI 2009, MARENS 2008). The paternity of the concept of corporate social responsibility is usually attributed to Howard Bowen's book published in 1953. (ACQUIER & GOND 2007). Questions about social responsibility arose, it has been attested, from the birth of big firms and modern management at the start of the 20th century. Modern managers did not just "rationalize" operations; they purposed to be progressist. Corporate leaders frequently drew attention to their responsibilities and the services of public interest rendered by their firms

(ACQUIER & GOND 2007, BOWEN 1953). Referring to corporate leaders as "quasi-public servants", George Walbridge Perkins, a director at US Steel Corporation and then Harvester International, wrote in 1908 (p. 393): "Many of our corporations, being of comparatively recent origin, have, at the outset, been managed by men who were previously in business, in some form or another, for themselves; and it has been very difficult for such men to change their point of view, to cease from looking at questions from the sole standpoint of personal gain and personal advantage, and to take the broader view of looking at them from the standpoint of the community-of-interest principle." Such talk has often been interpreted as a legitimation of firms (HEALD 1957 &1961), an interpretation that is partially reductionist.

Let us, herein, look back on the origins of corporate social responsibility by setting our sights on Walther Rathenau (1867-1922), one of the few corporate directors at the time who put his conception of the firm and of its social responsibilities in writing. The thoughts of this author, who was both a captain of industry and a minister during the Weimar Republic, had a resounding echo during his lifetime. In Germany, more

than 65,000 copies of his book, Von kommenden Dingen, were sold during the year of publication in 1918; and an English translation came out in 1921. Rathenau was "the most read and passionately discussed German author" at the time (KESSLER 1933:179). Berle and Means quoted from this book in the conclusion of their well-known The Modern Corporation and Private Property, published in 1932, in order to suggest that a firm might serve not only its owners or shareholders but also society as a whole. Nevertheless, Rathenau has had few disciples. Given the current "crisis" of corporate social responsibility, it is worthwhile looking back on his contribution, since it opens toward another understanding of the firm's social responsibility.

For one thing, Rathenau, writing while radical changes were taking place in German industry, based corporate responsibilities on an analysis of the firm as such. Once it had caught up with England, Germany experienced a period of unprecedented growth during the second half of the 19th century. In particular, the iron and steal, chemical and machine tool industries transformed, within a few decades, a country achieving unification. In the early days of the 20th century, much thought was being devoted to big firms. Recent studies have shed light on both the influence of Taylorists and the drive toward rationalization in Germany (NYLAND et al. 2014), in particular the acceptance of rationalization, including by labor unions, who saw this process as a way to make their factories more competitive (REHFELDT 1988). Rathenau showed, however, that the modern firm is not to be reduced to this process. For him, what characterized manufacturing firms at the start of the 20th century was their exceptional capacity for making collective innovations: precisely because of their power to undertake social and economic transformations, firms had new responsibilities to assume.

For another, Rathenau stands out owing to his proposals. He did not expect firms to spontaneously place their power for making transformations at the service of society; yet he did not propose assigning them new obligations. The scope of transformations implied, in his opinion, redefining the corporation and changing the principles underlying corporate government. In the world they have created, firms should, according to Rathenau, no longer be classified as private persons. Nor should the economy be interpreted as a set of players interacting via the markets. These models needed to be overhauled along with the corporation's legal status and statutes.

Our rereading of Rathenau will enlighten us about how intellectuals and corporate leaders conceived of the modern firm at its birth and of its social responsibilities. (1) Questions will be raised about the history, as usually recounted, of corporate social responsibility. This article opens with a quick presentation of Walther

Rathenau's life and dazzling career and of the lukewarm reception given to his ideas. A reinterpretation of his writings will then be proposed that insists on innovation. It will be shown how his analysis led to a critique of economic theories and to proposals for reforms that would link corporate autonomy to the aforementioned community-of-interest principle.

Walther Rathenau (1867-1922), "A man with his contrary"

Walther Rathenau's life was hardly ordinary. We might say it was threefold: he was an industrialist, politician and essayist — the links among the three not always being evident.

From childhood to chairman of AEG

Walther Rathenau was the son of Emil Rathenau, AEG's well-known founder. Emil started his education as an apprentice in a farm machinery factory inherited by his grandfather. He then worked in building, and even more designing, machinery for the purpose of systematizing mass production at the lowest cost. After having bought Edison's patent, he founded Deutsche Edison Gesellschaft, which would become Allgemeine Elektricitäts-Gesellschaft (AEG). Faced with the mighty Siemens, AEG cleverly staked out its position in electricity, a state-of-the-art science at the time, by inventing techniques for systematically designing machines. By playing a part in the country's rapid electrification, AEG soon became the biggest electricity company in Germany (RIEDLER 1916).

Emil's son, Walther, had a formal education in electrochemical engineering, the only field of electricity in which AEG was wanting. In 1889, Walter defended, in Berlin, a dissertation in physics on the absorption of light by metals. This marks the start of his career in this field of engineering. He soon filed several patents on the electrolysis of alkanes. His discoveries were apparently significant enough for him to be asked to present them to Emperor Wilhelm II. He founded Electrochemische Werke, an AEG subsidiary, where he was broken in as a young top executive, before joining AEG's board in 1899. He proved his mettle by piloting several projects, such as having the group's factories rebuilt with the help of R. Behrens, a well-known Bauhaus architect. Walther Rathenau successfully headed electrochemical plants in Austria and Germany, including the one in Bitterfeld. After his father withdrew from business, he was in charge of AEG. However he quickly moved into the chairmanship of the supervisory board and busied himself with public relations. He devoted efforts to several other companies. On the eve of World War I, he was sitting on the boards of 86 companies in Germany, and of 21 outside the country!

Walther Rathenau is better known for his other careers as essayist and politician. Put in charge of the Raw Materials Department during WW I, he organized and coordinated supply chains. He also headed a company that produced substitutes for raw materials in many

⁽¹⁾ This article has come out of a research program on the theory of the firm, which was supported by the Collège des Bernardins in Paris. It has been translated from French by Noal Mellott (Omaha Beach, France).

fields. After the war, he sided with the Weimar Republic, and became minister of Reconstruction in 1921, then minister of Foreign Affairs in 1922. He adopted certain positions, in particular his support for reaching an agreement with Russia, that were strongly criticized. A Jew, he was assassinated by the far right in 1922.

A thinker pondering industrial transformations

Rathenau's principal legacy is his analysis of the transformations wrought by industrialization. The concepts he molded in his writings have been frequently borrowed in various fields. Keynes, the economist, referred to Rathenau's concept of the "autonomy of firms" in a lecture in Berlin in 1926 (GELTER 2010). He also mentioned Rathenau when discussing the difference in corporate management between Germany and the United States: the power of managers tended to be feared in the United States given the dispersion of shareholders, whereas the power of controlling shareholders in Germany led Rathenau to criticize their eventual interference in management. Berle and Means (1932) also cited Rathenau in their conclusion.

Jurists have seen in Rathenau the harbinger of a conception of the firm that came under earnest discussion in Germany during the 1920s and 1930s. His idea of the "enterprise as such [Unternehmen an sich]" presents the firm not as a node of contracts but as a given entity pursuing its own finalities.

Rathenau has also been seen as a promoter of economic planning or "organized capitalism" (SVENSON 1961, REHFELDT 1990).

A controversial essayist

The various elaborations made in the course of the 20th century on Rathenau's writings in law, economics and management have had difficulty grasping this author's thoughts. There are several explanations of this.

First of all, Rathenau's essays were very controversial. For instance, in an opuscule on business and c orporate law (RATHENAU 1917), he decried shareholders' inability to take part in managing modern firms and pointed out the contradictions between their legal empowerment and their usual incompetence. He also criticized the lawyers, courts and journalists who, failing to understand the watershed in economics, too often exhorted corporate executives to follow or even anticipate what the general assemblies of shareholders decided without any regard for the consequences on the firm. In other writings, he was less on the offensive, but leaves the impression that he was a utopian or even a mystic.

When he wrote *Von kommenden Dingen* in 1917, Europe was at war; and Rathenau was striving to build the future. Critics thus thought they saw enormous contradictions between, on the one hand, his position as a partisan of industry and rationalization and, on the other hand, his social views and political commitments. Contemporaries described him as a very paradoxical

figure. His biographer, Count Kessler, said he was like a "man with his contrary": "At first, he was ignored. Then, when he went on, in the 'Critique of the Present Time' and 'Mechanics of the Spirit', publishing his thoughts, murmurs were heard, voicing the annoyance of seeing the member of eighty boards of directors still busy writing books. This businessman preaching about the birth of the soul was considered ridiculous; this rich man attacking luxury was an embarrassment" (KESSLER 1933:116).

But were Rathenau's careers as an industrialist and essayist all that contradictory? After all, his position as a corporate leader in a world in the throes of change induced him, I would like to show, to propose an original interpretation of industrialization. Mechanization and rationalization were not, in and of themselves, vectors of servitude, impoverishment or social violence. Instead, Rathenau saw them as bearing an unparalleled potential for progress and a source of promises of social advancement. Consequently, a new system of thought and a new type of organization were required.

This formed the core of his writings, which were, as we understand, not well received, even less so given that the translations of them (when they exist) are often problem-ridden. His landmark, *Von kommenden Dingen*, on which I have relied, was soon translated and widely commented. Although the German title means "the things to come" or, even better, "things still unknown" or "things to imagine", the title of the English translation is *In Days to Come*, which evokes a prediction. As for the title in French, *Où va le monde*? [Where is the world going/headed?], it suggests another, perhaps more critical or polemical, connotation.

Before presenting Rathenau's ideas, a few points of methodology and a few precautions are worth mentioning.

I have not consulted Rathenau's complete writings, mainly because they are not, to the best of my knowledge, all available in translation. In particular, I have not consulted the earlier *Zur Mechanik* des Geistes (1913) to which Rathenau made many a reference. It seems to have given rise to a quid pro quo since "mechanics of the mind" refers to the creative spirit/genius, but the full title continues with Vom Reich der Seele, "the realm of the soul". However several other texts are available (KESSLER 1933, RATHENAU 1913, 1917, 1918, 1921a & 1921b), and Létourneau (1995) has provided an exhaustive bibliography. In French, La Triple Révolution (RATHENAU 1921b) brings together three essays that, to my knowledge, make no mention of the word "revolution": Die neue Wirtschaft (1918), Die neue Gesellschaft (1919) and Der neue Staat (1919). Thanks to colleagues, (2) access was obtained to Rathenau's untranslated Vom Aktienwesen. Eine geschäftliche Betrachtung (1917), which might be rendered as "On the role of joint stock companies: Commercial considerations". I have also

⁽²⁾ I cannot thank enough Regina Bornfeld, Guillemette de Courtivon and Pascal Le Masson for their patient, qualified help in deciphering Rathenau's original 1917 text.

relied on several studies (BUENSTORF & MURMANN 2005, GELTER 2011, KESSLER 1933; LÉTOURNEAU 1995, McGAUGHEY 2015 & TEUBNER 1985).

Insofar as possible, I have compared different versions of Rathenau's texts and tried, if need be, to resort to the meaning of the original terms in German. References are made to the (unpaginated) translations in French or English available on line, but page numbers refer to the original in German.

"Mechanization", the defining feature of the modern world

Management, or the "art of creating"?

A key concept in Rathenau's essays is *mekanisierung*, translated as "mechanization" in the English version or "machinism" in Kessler (1933). It is ambivalent. In Kessler's words, mankind is imprisoned in a world "mechanized from top to bottom and amalgamated in an iron organization by material interests". Accordingly, Rathenau was seeking to augment freedom in the business world. My interpretation is quite different.

Owing to his experiences as an entrepreneur and executive in firms, Rathenau saw the 20th century as marked by technological changes. Considerable progress had been made in science and technology, and in the power to control things in nature and establish new infrastructures. All this was changing the face of the world. For management, this implied the capacity to imagine the future, to make things till then unknown happen. Rathenau conceived, therefore, of the firm's function in terms of creativity. The word "create" in its various forms (creation, creative, creator, creating, etc., in German: schöpfung, schaffen, etc.) crops up 179 times_in the 360 pages of Von kommenden Dingen. Rathenau made recurrent analogies with the world of art. This means that, although scientific and technological progress was indispensable, since it was the source of development, today's knowledge did not suffice for creating tomorrow's world: "Nowadays, science itself is starting to realize that its most perfected material is for the human will what a good map is for a traveler [...]. But a map cannot tell me which road is prescribed for me, the one toward which my heart and sense of duty attract me" (RATHENAU: 1918:14). Science and knowledge were not, therefore, sufficient.

The firm was society's organ for adventuring into the unknown, exploring new possibilities and pushing back the bounds of what was known; and the managerial function was fundamentally creative. Significantly, Rathenau came to the conclusion that the German language lacked a word for this; so he proposed a derivative of the word "creation": "What is specific to all these men [those capable of governing: politicians and, too, organizers and entrepreneurs] is the faculty of envisioning what does not yet exist, of feeling that they are in communication with the organic world and of undergoing [its] deep influence, of intuitively grasping and comparing incommensurable effects and motives, of making the future emerge in their own

minds. What characterizes their forms of action is the realistic imagination, the force of decision [...]. It is not surprising that the German language does not have a word to refer to this synthesis, this set of forces. I have chosen the phrase 'art of affairs' based on the former meaning of the word 'affair' [Geschäft], which comes from 'create' [Schaffen]" (RATHENAU 1919:327-328).

Mechanization, its potential and risks

Mechanization thus had special significance. It was the defining feature of the modern era, but did not refer just to a mechanized, routinized or rationalized world. Quite to the contrary, Rathenau (1918:29) wrote about the "creative frontier where we are [auf der Schöpfungsgrenze, auf der wir stehen]" since the era of mechanization was, in fact, a period when collective action became able to change the face of the world. It is, we might say, the era of what is man-made, as we enter a universe "created" by man.

Several writers at the time thought that policies of innovation were a source of new responsibilities for leaders (HATCHUEL 2016, SEGRESTIN 2016). According to Fayol (1917), leaders, facing the unknown, had to foresee contingencies and provide for the cohesion of society. For Perkins (1908:394) too, the responsibility of corporate executives was future-oriented: "The foresight, the planning ahead, the putting the house in order for the storms of the future, are the true measure of the best and highest stewardship, as well as of the highest order of managerial ability."

Rathenau dwelled on the responsibility of leaders less than on the overall organization of the economy. Liberal economics had made mechanization possible but, too, had left it up to the game of competing interests. Instead of reducing poverty, mechanization tended to worsen inequality. What was to be reformed was not so much the process of mechanization as the framework in which it fit.

Toward a revamping of economic theory

Rathenau was not an economist and did not stake out a position as such in economics. As a manager however, he seemed to have measured the distance between corporations and economic theories. A theory of modern firms as agents independent of each other and a conception of production or consumption as functions of the choices made by individuals seemed to him thoroughly out of step with the issues. For this reason, he inveighed against classical liberal theories: "An economic and social science is but applied ethics [...]; a state, an economy, a society deserve to vanish when they mean only a state of equilibrium of interests held in check, when they are only associations for production and consumption, armed or unarmed" (Rathenau 1918:167).

Take note that he also rejected socialism. For him, abolishing property or profits was nonsense. To explain his conception of profit-making, he asked: what if the state has a certain amount of money to invest in the

general interest? If it has to choose between several development programs for different groups, what choice should it make? For Rathenau, it was not necessary to want to make a choice. Instead, ask each program to replenish the resources it consumes — to make a profit — so that the program is carried out while allowing for the realization of other programs. This is the true function of profits: the firm needs to make a profit to replenish its resources and pursue its — useful — work.

This leads to the idea that property entails responsibility: "the owner's arbitrariness [must be] replaced with responsibility." As Acquier and Gond (2007) have pointed out, this idea was widespread at the turn of the century, even among businessmen. It was highly tinted with religion (BOWEN 1953). According to Rathenau (1918:167), "the world is [...] an association of creators [Schaffender]; whoever wastes work, worktime or the means of work steals from the group. Consumption is not a private matter: it is a matter for the group, for the state, for morals, for humanity." However the intent was not to orient the individual's behavior through ethics or religion.

The deeper purpose was to revamp the theoretical grounds on which the modern firm had been built. The economy was not seen as a network of individual, individualistic actors. Rathenau seems to beckon us to give thought to concepts such as "communal economy", where actors create a world in common and where the responsibility for things to come (*Von kommenden Dingen*) is assumed.

Toward new statutes for firms

The issue of the firm's autonomy

According to Rathenau, firms are hemmed in by a set of institutional arrangements that no longer fit them. The legal framework, in particular shareholder corporations, was set up to organize trade but is still in use. What this framework regulates — collective actions — no longer has anything to do with its reason for being. Rathenau wrote about a "substitution of contents [Substitution des Grundes]": corporations are no longer associations of merchants involved in a joint venture. These shareholders no longer manage the firm and are very often not even familiar with it. Their "shares" are, at best, a bet they have made on the state of health of a given branch of the economy.

Rathenau (1918:141) called, therefore, for a thoroughgoing reform of corporate governance, for "breaking away from the convenience of liberal theories and imagining institutions adapted to creation". He set off a debate that the current of thought *Unternhemen an* sich ("The firm as such") would amplify during the 1920s (GELTER 2011).

But what were the guidelines for this reform? Coherent with his view of profit-making, Rathenau formulated two main proposals. First of all, the firm should become "autonomous" by acquiring its own shares in equity. The need for capital was not so pressing that a firm could not rely on banks or

foundations, or even, if need be, emit bonds. Secondly, the firm, thus "depersonalized", should be devoted to a creativity useful for society. While retaining a private status, it should pursue a specifically public finality.

Shareholder foundations: A community of interests

These proposals were not all that unrealistic; for Rathenau mentioned shareholder foundations. By ceding their shares to a foundation, the partners in a business would be effectively "depersonalizing" the firm. They could assign the foundation its mission through its statutes. Rathenau probably had in mind certain pioneering experiences in Germany, where shareholders had ceded their shares to a foundation for the purpose of ensuring through "impersonal property" (the only means of doing so) an orientation and stability (ABBE 1896). The Carl Zeiss Foundation was exemplary in this respect (See the boxed insert), but it was not the only example.

The Carl Zeiss Foundation

Since the end of the 19th century, the firm Carl Zeiss, an international leader in optics and optoelectronics, has experimented with a quite original form of governance: the shareholder foundation, of which there are several examples in Germany and Scandinavia (GOYDER 1951).

In 1846, Carl Zeiss set up a workshop of optical instruments. He soon recruited a physicist, Ernst Abbe, to help understand the distortion of images and produce microscopes. This was one of the first companies to have installed a system of management "by science" (BUENSTORF & MURMANN 2005). After Zeiss died in 1888, Abbe was the senior partner in the company. In 1896, he set up a foundation and endowed it with all shares in the firm. As the single shareholder, the Carl Zeiss Foundation is bound by the very precise principles that Abbe set down in a long constitution of 122 paragraphs.

Under this constitution, the firm has an innovative assignment with respect to a community of interests:

- "Cultivate the branches of precise technical industry, which have been introduced into Jena by the Optical Works and the Glass Works" and thus guarantee the economic security of wage-earners and serve "the scientific and practical interest":
- "Promote the general interests of the branches of precise technical industry [... and] take part in organizations and measures designed for the public good of the working population of Jena and its immediate neighborhood";
- "Promote study in natural and mathematical sciences both as regards research and teaching".

This assignment carries implications for all levels of management. For example, investments should not be made as a function of profitability alone. Instead, they should contribute to the firm's learning and long-term viability by taking into account all dimensions, including the interest that wage-earners take in their work. The Foundation's Council, which includes representatives of Saxe-Weimar and of the university, has the task of overseeing corporate management and seeing to it that management fulfills its assignment.

For managers, setting up a foundation is a way to actually provide for the firm's autonomy so that it leads its life — like an artwork, which, once created, pursues its own existence independently of its maker (RATHENAU 1918:124). Rathenau thus considered the firm to be a new type of institution. As private organizations pursuing a public purpose, firms had to be endowed with new structures so that mechanization's full potential could be realized.

A question remained to be settled for this "autonomous" firm, this private organization with a public interest: who would head the firm? How to understand the function of leadership when shareholders are no longer

Creative government: The capacity for discussion

For Rathenau, the "orientation of the world" should not be left to the course of things, in particular the clash of individual interests. He argued against a government by the people or by experts or even by the educated, whose knowledge might turn out to be an impediment to action. Leadership implies a creativity for forming a conception of the world to come, a capacity for shaping and federating individuals' actions into a productive collective action. Those who govern are in charge of making a projection of the world and defining its strategic orientations.

Rathenau cited as example the political organization of the state. Parliament's role in the political system should not, in any case, be the same as the government's. Its function is not to make decisions but rather to serve as an "agency of consultation". A parliament parleys ["Das Parlament redet"]. It is a place for debate; it is not an organ of representation. A parliament does not draw up political or strategic orientations: instead, it debates them and makes them public, disputes them and subjects them to sound, open criticism.

Rathenau thus suggested: a) setting an assignment related to the firm's community of interests; b) naming directors capable of envisioning and organizing innovative collective actions; and c) submitting these plans for action to discussion in a council or "agency of consultation". The firm's leaders would be subject to a form of democratic oversight, instead of a board of directors. Their responsibility would no longer be a matter for a code of professional conduct; nor would it be a strategic necessity for the firm's development. It would be related, on the one hand, to the firm's assignment of general interest and, on the other, to the requirement to refer matters related to this interest to a multiparty organ of supervision and discussion.

Conclusion and perspectives

Rathenau's writings were read and discussed in Germany in the early 1920s. His views weighed on discussions for drafting the Weimar Constitution (1919) and for adopting the principles of wage-earner participation ("codetermination") on supervisory boards (McGAUGHEY 2015). Nonetheless, his direct influence

has been limited. Although some authors, such as Berle and Means (1932), clearly understood the theoretical and institutional revolution suggested by Rathenau, his ideas, in general, did not lead to concrete results; and the concept of corporate social responsibility ended up taking another road. Nevertheless, Rathenau pointed out a major element in the way that managers in the early 20th century conceived of their firms. He also suggested an alternative way of understanding the firm's social responsibility.

Rathenau clearly thought that a new social and industrial order was arising at the start of the 20th century. It was emerging neither out of a balance of power nor owing to the growing size of corporations, even though this growth would entail a program of rationalization. For Rathenau, the modern world could not be understood, nor oriented, without realizing the full import of "mechanization", i.e., the capacity for collective actions to shape the world to the point of creating a man-made universe. The modern era signaled, above all, the advent of an unparalleled capacity for innovation and collective creation. As a consequence, leaders had a very strong responsibility for the world they were helping to create.

Like other contemporaries, Rathenau did not think that firms should be likened to private parties pursuing their own interests. The classical economic theory about actors independent from each other was outdated. The firm's power to act should not be left to the free play of the market, nor to the contingency of the composition of general assemblies of shareholders. Rathenau deemed it indispensable to reform the institutions of corporate government. He considered the firm to be a private institution, obviously, but one endowed with a finality related to a community of interests. Consequently, he proposed drawing on concrete experiences to adapt corporate governance. In particular, he suggested that the directors should guide the firm in line with the objectives related to this community of interests and under a set of supervisory arrangements aligned with these objectives.

Given their power of innovation and their potential impact on society, firms must be committed to programs related to a "collective" interest. This reinterpretation of the grounds underlying the concept of corporate social responsibility is worthy of our full attention during this 21st century.

References

ABBE (E.), Statute of the Carl Zeiss Stiftung in Jena, translation of the revised version of the statutes of 1906 (Jena, DE: Carl Zeiss Stiftung, 1896).

ACQUIER (A.) & AGGERI (F.), "Une généalogie de la pensée managériale sur la RSE", Revue française de gestion, 180, pp. 131-157, 2009.

ACQUIER (A.L.) & GOND (J.P.), "Aux sources de la responsabilité sociale de l'entreprise: à la (re)découverte d'un ouvrage fondateur, Social Responsibilities of the Businessman, d'Howard Bowen", Finance Contrôle Stratégie, 10(2), pp. 5-35, 2007.

BERLE (A.) & MEANS (G.), *The Modern Corporation and Private Property* (London: Transaction Publishers, 1932/1968/1991).

BOWEN (H.R.), *The Social Responsibilities of the Businessman* (Iowa City, IA: University of Iowa Press, 1953/2013).

BUENSTORF (G.) & MURMANN (J.P.), "Ernst Abbe's scientific management: Theoretical insights from a nineteenth-century dynamic capabilities approach", *Industrial and Corporate Change*, 14(4), pp. 543-578, 2005.

CRANE (A.), PALAZZO (G.), SPENCE (L.J.) & MATTEN (D.), "Contesting the value of 'creating shared value'", *California Management Review*, 56(2), pp. 130-153, 2014.

FAYOL (H.), Administration Industrielle et Générale (Paris: Dunod et Pinat, 1917).

FLEMING (P.) & JONES (M.T.), The End of Corporate Social Responsibility: Crisis and Critique (London: Sage, 2013).

GELTER (M.), "Taming or protecting the modern corporation? Shareholder-stakeholder debates in a comparative light", European Corporate Governance Institute, September 2010. Available at:

http://www.ecgi.global/working-paper/taming-or-protecting-modern-corporation-shareholder-stakehold-er-debates-comparative

GELTER (M.), "Taming or protecting the modern corporation? Shareholder-stakeholder debates in a comparative light", *NYU Journal of Law & Business*, 7(2), pp. 640-730, 2011.

GOYDER (G.), The Future of Private Enterprise, a Study in Responsibility (Basel, CH: Blackwell, 1951).

HATCHUEL (A.), "Henri Fayol et la théorie du chef d'entreprise: une nouvelle figure de l'autorité au tournant du XX° siècle", *Entreprises et Histoire* 2, pp. 108-120, 2016.

HEALD (M.), "Management's responsibility to society: The growth of an idea", *Business History Review*, 31(4), pp. 375-384, 1957.

HEALD (M.), "Business thought in the twenties: Social responsibility", *American Quarterly*, 13(2), pp. 126-139, 1961.

KARNAN (A.), "CSR stuck in a logical trap", *California Management Review*, 53(2), pp. 105-111, 2011.

KESSLER (C.H.), *Walther Rathenau*, translated from German by D. Van Moppès (Paris: Grasset, 1933).

LÉTOURNEAU (P.), Walther Rathenau (1867-1922) (Strasbourg, FR: Presses Universitaires de Strasbourg, 1995).

MARENS (R.), "Recovering the past: Reviving the legacy of the early scholars of corporate social responsibility", *Journal of Management History*, 14(1), pp. 55-72, 2008.

McGAUGHEY (E.), "The codetermination bargains: The history of German corporate and labour law", *LSE Working Papers*, 10/2015, London School of Economics and Political Science, 43p., 2015.

NYLAND (C.), BRUCE (K.) & BURNS (P.), "Taylorism, the International Labour Organization, and the genesis and diffusion of codetermination", *Organization Studies*, 35(8), pp. 1149-1169, 2014.

PERKINS (G.W.), "Corporations in modern business", *The North American Review*, 187(628), pp. 388-398, March 1908. Available at:

https://archive.org/stream/moderncorporatio00perk/moderncorporatio00perk djvu.txt

RATHENAU (W.), *Zur Mechanik des Geistes* (Berlin: G. Fischer, 1913).

RATHENAU (W.), Vom Aktienwesen. Eine geschäftliche Betrachtung (Berlin: G. Fischer Verlag, 1917).

RATHENAU (W.), Von kommenden Dingen (Berlin: G. Fischer, 1918). English translation by E. & C. Paul, In Days to Come (New York: Alfred A. Knopf, 1921a). Available at

https://archive.org/details/bub_gb__p8W0XI-U2UC in German

and

https://archive.org/details/indaystocome00paulgoog in English.

RATHENAU (W.), La Triple Révolution. Essais (Die neue Wirtschaft. 1918, Die neue Gesellschaft. 1919, Der neue Staat. 1919) (Paris: Éditions du Rhin, 1921b). Available at

https://archive.org/details/latriplerevoluti00rath.

The second of these essays, "The new society" is available in English at:

http://www.gutenberg.org/files/20936/20936-h/20936-h.htm

REHFELDT (U.), "Les racines du consensus. Stratégies syndicales et 'rationalisation' en Allemagne de 1910 à 1933", *Gérer et Comprendre*, 11, pp. 81-90, June 1988.

REHFELDT (U.), "Démocratie économique et cogestion: une mise en perspective historique", *Revue de l'IRES*, 3, 1990, pp. 59-80.

RIEDLER (A.), *Emil Rathenau, und das Werden der Grosswirtschaft* (Heidelberg, DE: Verlag von Julius Springer, 1916).

SEGRESTIN (B.), "Le tournant fayolien: des révolutions industrielles à la naissance de l'entreprise moderne", *Entreprises et Histoire*, 83, pp. 5-12, 2016.

SVENSON (A.L.), "Pioneers of management organization theory", *Management International*, 5/6, pp. 115-127, 1961.

TEUBNER (G.), "Corporate fiduciary duties and their beneficiaries" in K.J. HOPT & G. TEUBNER (eds.), Corporate Governance and Directors Liabilities, pp. 149-177 (Berlin: Walter de Gruyter, 1985).