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## STRATEGY'S FUTURES

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Forthcoming in *Futures* Special Issue: Linking strategy, long term perspectives and policy domains in governance

### Abstract

If asked: "What is the time?" you will look at your phone or at your wrist and provide a swift answer; yet if asked: "What is time?" you will most likely struggle to provide a coherent answer, no matter where you look. This vignette is attributed to Augustinus, who, in the space of two lines, makes us painfully aware what difficult an idea time actually is. In this essay we set out to bring some of the subtleties and complexities of time to the discipline of strategy – a discourse that has been firmly focused on the future (and hence engaged with time) yet has shown little appetite nor much ability to problematize time adequately. We ask: what is the complex nature of time, and how does that nature alter strategy? By exploring this question we problematize the nature of the future, and discuss how the future is enacted in strategy practice and through which strategy tools the future is turned into an object of the present. We argue that a fruitful approach to the problem of time in strategy needs to be attentive to the multiple forms of futures at play (such as the common distinction between short term and long term futures), the actors who carry them and the tools through which they materialize. We illustrate this approach with two examples in which the relationship of strategy with the long term was problematized: debates on the management of forests in the 18<sup>th</sup> and 19<sup>th</sup> century, and debates on the financialization of corporations in the 20<sup>th</sup> century. We pursue the analysis of strategy's futures by examining the temporalities of three common strategy tools: models, plans, and discounting. The overall contribution of this essay to this SI is to make strategy researcher and practitioners aware of time's complex nature, and how this complex nature plays a critical role in the pursuit of strategy.

## Introduction: Problematizing strategy's concept of time

Once upon a time, past experiences created some sort of path dependency that kept future expectations on track; at least, past experiences were a handrail that provided some sort of guidance on the path towards the future. Just take identity as predictor of the future: for much of human history class, gender, ethnicity, religion, etc. fairly clearly (and unfairly) structured one's future. Like the QWERTY keyboard, one's biography was set by the accident of birth and few early decisions. Disruptive events which seem the hallmark of our day and age cut the link between past experience and future expectations. Black Swans, crises and the like create jolts and jumps that make time appear to move in a non-linear fashion. As Lepore (2014) put it, the ubiquitous notion of disruptive innovation is „competitive strategy for an age seized by terror“. Gone is the linearity in which yesterday flows smoothly into tomorrow. The future becomes a powerful force in its own right, as it threatens the present with its disruptive potential. The novelist Javier Marías described the force of this future as follows:

... perhaps the future has more influence and imposes more obligations on us than the past, the unknown more than the already known, the as-yet-untried more than the tried and rejected, the still-to-come more than what has already happened, the possible more than what has already been. (Marías, 2005, p. 142).

Enter strategy: we posit that the rise of strategy in theory and in practice is a response to the increasing power the future holds over the present. From an anthropological point of view, strategy is an anxiety-reducing answer to increasingly uncertain futures (Ouroussoff, 2010). Strategy is engagement with obligations that the future imposes on us. This claim resonates with the basic working definition of strategy: strategy is tasked with analysing the future in order to change it.<sup>1</sup> Therein lies the *raison d'être* of strategy: it aims at enhancing future performance; and in order to do so it must (1) hold assumptions about determinants of future performance (such as industry constellation, resource configuration, managerial capability, institutional or technological change etc.) and (2) it must provide tools to change these determinants in order to create a more inhabitable, prosperous future. Various examples from the strategy literature might differ in details, yet they share this pattern: Porter's Five Forces model for instance suggests is a diagnostic tool for industry structure and possible firm responses. In the public sector realm, and building on his Harvard colleague Porter, Moore proposed a "strategic triangle" to analyse the current state of affairs and disclose new ways of creating "public value" (Moore, 2000).

These dual account of role of time in strategy represents an analytical challenge. The future is thought to exist independent of the strategist's analysis – otherwise the idea of analysing it would not make sense. The

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<sup>1</sup> A common and useful definition of strategy is provided by Rumelt (2011) who suggests that "Good strategy has a simple logical structure I call the *Kernel*. These three elements are (1) a clear-eyed diagnosis of the challenge being faced, (2) an overall guiding policy explaining how the challenge will be met, and (3) a set of coherent actions designed to focus energy and resources."

strategist assumes a point in the future (t) and then reflects on how different futures might unfold from (t) onwards. But the strategist also claims to be able to alter different futures through her actions: she will produce a different version of the future, one that is more favourable and has come about as result of her strategic decisions. Thus, the strategist is operating with two strangely exclusive assumptions about time: once the future is set, read-only; and once it is open to manipulation, a read-and-write-version of the future. As Dupuy (2000, p. 329) summarized this puzzle, “if we accept the principle of the reality of the future, then it is nonsensical to believe that the future can be changed.”<sup>2</sup>

In this essay we want to unpack this analytical tension and offer a few research strategies to engage with it productively. We begin with elaborating on the role and meaning of the future in strategy. Follow two sections in which we discuss ‘what’ time comes to play a role in strategy and ‘how’ it does so. The ‘what’ question leads us to shift our analysis from “the future” as a monolithic category to the multiple forms of futures in play in strategy. We discuss in particular how short-term and long-term futures were problematized in debates on the management of forests in the 18<sup>th</sup> and 19<sup>th</sup> century and on the financialization of corporations in the 20<sup>th</sup> century. The ‘how’ question leads us to complementing the analysis of the actors associated with different forms of futures, by the analysis of the tools in which these different forms of future materialize. We discuss in particular the temporalities of three classic strategy tools: models, plans, and discounting. We conclude with a few implications for future research and practice.

### **Strategy’s futures: some clarifications**

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<sup>2</sup> We would like to thank one of our reviewers for pushing us to be clearer on this point as well as highlighting links to literature on anticipation (Fuller, 2019; Rosen, 1985). In this paper, we focus attention on how the future is dealt with in the field of strategy research which, as the introduction to this special issue reminds us, has been dominated by management and organization studies. One of the aims of this special issue is to position strategy as a relevant object for disciplines interested in policy, planning, administration and governance. These disciplines have paid little attention to strategy; conversely, they have benefited from advances in the field of future studies, with which we do not engage in this paper. The aim of this paper is complementary: discuss how strategy, both as an academic discipline and as a set of practices and tools, has dealt with the problem of the future, and contribute to developing a more complex notion of time in strategy.

Perhaps strategy researchers should invest in a more complex notion of time, one that escapes Dupuy's dilemma. Rather than assuming the linear sequencing of past-present-future, one can image time as more reflexive, more circular. This means that the future does not exist independently of the present, waiting to be annihilated by the present to become past. Rather, we suggest that there is a future that exists as present future: this present future is always our "current anticipation of the future" ((Esposito, 2011, p. 24), see (Luhmann, 1976)). This present future is quite different from the future present which represents a given moment along the time axis. In this sense, the future only "exists" in the present as present future. One can only speak of the future as an imagined future, a future that does not exist but that holds power over us nonetheless, as Mariás suggested.

The future exercises power because it is a present future, a here-and-now imagined future that causes people to act in one or the other way, in the hope that they can change that present future when it becomes their future present. The future in strategy is a set of images and narratives which "circulate in governance and which are accessible to the actors participating in governance" (see SI call for papers) in the here-and-now. This idea requires a few further qualifications and comments in relation to strategy.

First, following this line of thought, strategy can be conceived of as an organizationally sanctioned and societally institutionalized mode of creating legitimate present futures (Kornberger, 2012). The metaphorical *big picture* is the imagery of a future made visible in the present. One has to take the *big picture* quite literally: it is a picture, an aesthetic representation, ready for consumption, that makes the future (Mariás' "not-yet") visible in the present. In painting *big pictures* strategists create present futures that become the resource and constraint for action in the present.<sup>3</sup> Strategy, so to speak, is a way of consuming the future in the present. This has a crucial effect: strategy reverses the arrow of time: the imagined future becomes the reason for action in the present, something Esposito described as "retrospective causation" (2011: 16). The most well-known example of such retrospective causation is the self-fulfilling prophecy: people who are worried about the imminent collapse of a bank will start a run on that bank, which causes its collapse. The present future ("the bank will collapse") motivates people to act in the present ("let's get our money out as long as we can") which makes the imaged future the future present (run on the bank causing its collapse). Sociologists of finance (e.g. MacKenzie, 2008) showed how models, devices and tools bring about conditions they meant to monitor, evaluate or describe in the first place – a phenomenon known as performativity. Other research, such as work on university rankings, also shows that devices can become "reactive" and induce change (Espeland & Sauder, 2007; Wedlin, 2006). What these literatures show, and what strategy can learn from them, is that the future can act "backwards" onto the present. The future, that which is conditional upon so many actors, can become unconditional and condition the present. Strategy is a practice concerned with turning the conditional into the unconditional. Put differently, the future becomes reason for acting in the present; the arrow of time is reversed: the future causes the present.

Because there are many different actors engaged in the consumption of the future in the present as *big*

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<sup>3</sup> Of course, other modes of strategy – such as strategy as story told or narrative – are equally future-oriented and may have the same effect than the proverbial 'big picture'. We focus on the 'big picture' as it emphasises the aesthetic nature of strategy.

*picture*, the complexities increase dramatically: because my rivals' present future looks like this, I will adapt my strategy to change the future present in my favour, which leads my rivals to re-assess their present future and so on, just like in Keynes' famous beauty contest.<sup>4</sup> Time is not linear but knotted, a circular, reflexive movement where the present always creates imagined (present) futures that struggle to alter the future presents.

This leads to a second, closely related set of questions around the politics of strategy. With the notion of politics we hint at strategy's ability to change and thus exercise power (Kornberger, 2013). If strategy is about *big picture* issues that make the future visible in the present, it is implicitly about framing; and framing is inextricably linked to the exercise of power. Framing means including and excluding, highlighting and making disappear, remembering and forgetting. From this perspective it becomes interesting to study strategy's potential to mobilize people and engender collective action, something the social movement literature is studying without much recourse to strategy research. Again, on a bigger canvas: what strategy and its *big picture* metaphor alludes to is the relation between aesthetics and politics (Benjamin, 1935; Rancière, 2004). Strategy makes the present future somehow visible and tangible, turns it into an object of consumption in the here-and-now. This happens through a whole array of diagrams, models, pictures, an imagery and aesthetic language. The relationship between epistemic representation of an invisible, unknowable future and what Bourdieu called "symbolic violence" (Oakes et al., 1998) are written into the heart of strategy.

Focusing on the interface between time, power and strategy we arrive at a constructive definition of strategy, borrowed from a military historian: strategy is the *art of creating power* (Freedman, 2013, p. xii). Understood this way, strategy is the art of turning objects (including the future) into allies that shift the game in one's favour. Through manipulating future presents and making them effective in the here-and-now, strategy mobilizes an important resource for change. Such a political, and more complex notion of time opens up several possibilities for future strategy research, which we discuss below in more detail.

### **Bringing futures into the present: strategy and the long term**

Embracing a political, and more complex notion of time, leads us to recognizing the multiple forms of futures that have (co)existed in strategy practices, and begs the question of their performative effects, and their emergence, transformation and decline. In other words, it leads to historicizing strategy's futures and examining the evolution of conceptions of time over time. The foundational work of sociologists and historians like Max Weber (1930), Pierre Bourdieu (1963), or Sidney Pollard (1965), is an indispensable starting point. They have shown that learning to look at the future, and envisaging this future as open-ended, distinct from the past, and

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<sup>4</sup> In Keynesian beauty contest one has to guess who the majority of people will find most beautiful, which means that one's decisions cannot be based on one's own tastes; but on the anticipation of how others will vote – who themselves calculate an imaginary average as the basis for their decision: "It is not a case of choosing those [faces] that, to the best of one's judgment, are really the prettiest, nor even those that average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees". (Keynes, 1936: 156)

ripe with opportunities, has been central to the development of capitalist society. Jens Beckert (2016) has continued on this path by documenting the contemporary relationships between the dynamics of capitalism and actors' temporal dispositions and their ability to form what he calls "fictional expectations" – fictional, rather than rational expectations as in economic theory, because the future is uncertain and cannot be known in the present.

But what does it mean to look at "the future" or to form expectations about "the future"? What is this thing that we are looking at or trying to know or predict? The future may be misleading when conceived as a monolithic category, a homogeneous domain contained by clear boundaries that delineate it from other temporal domains such as the present or the past. The most common distinction between different forms of futures is that between the "short term" and the "long term". In a linear conception of time, the short term and the long term can be depicted as a partition of the future, each of them being defined by the distance that separates it from the present. How this distance is measured, and where exactly the milestones are which indicate that one is leaving the short term and entering the long term, vary across actors and sectors. Companies, for example, are accused of thinking short term when they think in terms of their quarterly results or of the daily evolution of their share price, espousing the temporality of financial markets. When governments are charged with short termism, the temporalities evoked are that of elections, and time ranges are expressed in years rather than months or days. Individuals are urged to consider the long term by saving money and preparing for the pension they will need in perhaps a few decades. Governments are led to consider the long term when they are to build long lasting infrastructure or to fight climate change to avoid environmental damage that will occur as far as a hundred years ahead.

In the perspective that we propose here, what matters is not how exactly the short term and the long term are defined as distinct segments of a line called the future, but how they are brought into the present, how they are made to matter, by whom and with what effects. We illustrate this perspective with two examples from the history of strategy's futures in which the definition of the long term and the short term, and the identity of the actors able to espouse these temporalities, were made the object of debate.<sup>5</sup> The first example deals with forests: an object of great analytical interest to think of the relationship between long temporalities, the formulation of strategies (both military and economic, public and private, national and global) and the problems of governance involving a variety of actors. The second example deals with an episode in the "financialization of strategy" (Froud et al., 2006) in which managers' short termism was linked to the decline of American industry and transformed into a public concern.

The history of forest management has been read as an illustration of state-led rationalization and economization (Scott, 1998) and the role of forests in the formation of early modern states has been documented by historians of the environment (Radkau, 2008; Warde, 2006). Certainly less known, but crucial for our argument here, are analyses of the history of forest management as a history of the long term and of the

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<sup>5</sup> These examples are drawn from Doganova (under preparation).

notion of sustainability (Hölzl, 2010; Nordblad, 2016). In the 18<sup>th</sup> and 19<sup>th</sup> century in Europe, forests were the object of vivid debates in which featured prominently the “posterity” and “offspring” for whom forests had to be preserved, prefiguring the “future generations” that often provide an embodiment of the long term today (Hölzl, 2010). Short termism, by contrast, was embodied by the behavior of local populations who used forests for pasture, cutting grass, and collecting litter, fallen branches and fruits. In the first half of the 19<sup>th</sup> century in Germany, the implementation of state-led scientific forestry, which aimed at maximizing forest growth in the long term, for the production of timber which was not only highly priced on European markets but also necessary for construction, industry and warfare, clashed with the ways in which villagers used and valued the forests nearby which they lived (Hölzl, 2010; Linebaugh, 1976). The state was positioned as the guardian of the long term, the only entity capable of keeping the forests for the future and preserving them from the short termism of actors whose thinking appeared to be deeply anchored in the present and driven by the logic of necessity, rather than rationalization, and immediate needs, rather than strategic planning.

Debates on forests in France in the 18<sup>th</sup> and the 19<sup>th</sup> century opposed the figure of the state as the guardian of the long term to another figure marked by short termism: the private owner (Vatin, 2008, 2013). Addressing the question of when trees should be felled, and writing in a period in the wake of the French revolution when the problems of the liberalization of the exploitation of forests and of the appropriate nature of their ownership were burning, authors discovered that optimal rotation lengths depended on the objectives pursued by the forest owner. They demonstrated the divergence between the interest of the private owner, which resided in maximizing the value of the forest viewed as capital, and the interest of the public, which resided in maximizing the volume of wood produced by the forest, irrespective of the capital locked in it. Pursuing the private interest, by taking into account what modern economic theory would call the opportunity cost of not felling trees to sell the wood immediately, and of waiting for them to grow further, resulted in shorter rotation lengths. In other words, the view of the future that private owners held was inevitably shorter term than the view of the future that the state could afford. In the words of a French forest surveyor writing at that time, while coppice forests, whose rotation lengths ranged from 10 to 40 years, could be managed by private owners, high forests, whose rotation lengths ranged from 80 to 300 years, called for “owners with unlimited existence”: “an imperishable being” such as the state (Noirot-Bonnet, 1842).

Forests were the arena of clashes between different conceptions of the future and the actors who carried them: the short-term future of rural populations who used the wood and fruits that forests offered them readily; the long-term future of the state which saw forests as a source of fiscal revenues and valuable timber; and, somewhere in between, the future of private owners who managed forests as a form of capital whose returns were to be maximized. The example of forests teaches us that the short term and the long term are two forms of “present futures” which are mobilized by different actors (in particular, public vs. private actors) and produce tangible effects in the present (and hence in the future): they grant trees more or less life, and they grant actors more or less power, understood as the capacity and legitimacy to act over certain domains. With this insight in mind, let us now take a look at a more recent debate on long term and short term futures in strategy.

Managers' short-termism was a key issue in the debates on the decline of American industry that took place in the 1980s. Strategy scholars were worried by the financialization of strategy and the prevalence of shareholder value theories which led managers to focus on managing the share price in the short term, rather than on investment decisions, production activities and market positioning in the long term. Journals like the *Harvard Business Review* hosted heated debates on whether by forgetting the long term managers were not "managing our way to economic decline" (Hayes & Abernathy, 1980) and how they could start (again) "managing as if tomorrow mattered" (Hayes & Garvin, 1982). The observation that worried strategy scholars, and policy makers alike, was the decline in the rate of productivity growth in the United States. This was attributed to managers' unwillingness to make investments, which in turn was related to modern management principles that favored "short-term cost reduction" over "long-term development of technological competitiveness" (Hayes & Abernathy, 1980, p. 68). Two academic disciplines were identified as responsible for the "myopia" (p. 68) from which American managers suffered: finance and marketing. The attack on finance was particularly vigorous, and pointed in particular to the transposition of theories of portfolio management from financial markets to corporate operations, which led managers to envisage investment projects as assets, compare them to other assets outside their company, and engage in a never-ending search for higher rates of return.

Does this mean that finance is short term while strategy is long term? And that strategy has become short term because it has been penetrated by the principles of finance theory — in other words, it has become yet another victim of "financialization" (Froud et al., 2000)? Can the tension between the short term and the long term be analyzed as a struggle between different types of actors who, by virtue of their nature, support different temporalities: finance vs. strategy, rural populations vs. the state, private owners vs. public owners? Such an analysis would be not only too simplistic but empirically erroneous. Take finance for example (Muniesa & Doganova, 2020). It is often viewed as the practice of speculation, trapped into monitoring and profiting from the day-to-day, if not high-frequency and real-time, variation of prices in financial markets. At the same time, it is founded on a theory in which value is derived from the future: the future flows of money that something (redefined as an asset by the very fact of being valued in this way) is likely to generate are the indicator of its value (referred to as its "fundamental" value), not the price that it has in the present on the market. If the present is the valuation principle of the market, the future is the valuation principle of finance (Esposito, 2011; Vatin, 2016). The use of financial terminology as an instrument of thinking about sustainability — like in the notion of "natural capital", or the idea that to preserve nature we need to conceive of it as a form of capital — illustrates the potential of finance to be positioned as a guardian of the long term, endorsing a role akin to that of the state in the example of forests discussed above.

How can we develop a political, and more complex notion of time, which allows us to account for the capacity of different actors to turn different forms of "present futures" (such as the short term and the long term) into allies, without assuming that certain types of actors are defined by certain types of temporalities by virtue of their nature? A fruitful way forward is to shift focus from "what" to "how" time comes to play a role

in strategy, and to turn attention to the tools of strategy and the different temporalities that they enact and perform.

### **The temporalities of strategy tools: on modelling, planning and discounting the future**

Studies adopting the strategy-as-practice perspective have shed light on a wide array of strategy tools and have discussed their role in the making of strategy in organizations (Jarzabkowski & Kaplan, 2015; Spee & Jarzabkowski, 2009). We will focus on three strategy tools that consistently appear in endeavors to deal with the future across a variety of organizations: economic and business models; strategic and business plans; and a valuation and decision-making tool known as discounting. Models and plans have been widely studied in the literature, in the field of strategy and beyond; here, we will briefly mention a few findings from the literature that allow us to sketch the kinds of temporalities that these tools enact and perform. Discounting has been mainly studied in the literature in economics; yet, it deserves special attention in relation with our analysis of the tensions between long term and short term futures, and the ways in which these different forms of futures are “made present”.

Models create hypothetical future states of the world, which appear as variations of the present produced by the modification of parameters whose overall structure remains stable over time. Thus, they readily embrace the analytical tension of time in strategy that we discussed in the introduction: the idea that the future is both given and amenable to change. The future states that models produce are derived from the observation of the past, and it is precisely the fact that they adhere to the past that provides them with legitimacy and credibility. The uncertainty of the future is contained within a pre-determined world; it is akin to variability rather than unpredictability.

Does this mean that models are not apt to deal with the uncertain future? Or worse, that they create the illusion of predictability when actors behave “as if” their models could forecast accurately (Beckert & Bronk, 2018)? Such accusations dissipate when one looks at how models are used in practice. The work of historian of the economy Mary Morgan is enlightening in this respect: she has shown that models are not abstractions, but forms (diagrams, equations, pictures, physical models...) that economists manipulate in order “to enquire into the world of the model and to enquire into the world that the model represents” (Morgan, 2012, p. 30). In scientific and economic practices alike, models can be analyzed as “mediating instruments” (Miller & O’Leary, 2007; Morrison & Morgan, 1999) whose efficacy is to be assessed not according to their capacity to predict, but to their capacity to circulate across a variety of actors. This feature of models becomes particularly salient in the case of business models in entrepreneurship: that the future company depicted in the PowerPoint slides of a high-tech start-up founder will bear little resemblance with the company that may be observable a few years later (if it ever or still exists) should not lead us to conclude that the business model, as a tool to deal with the future, is failing. Rather, it invites us to abandon a representational paradigm focused on the “truthfulness” of models, and to adopt a pragmatic perspective attentive to the performative role played by models (Doganova & Eyquem-Renault, 2009; Perkmann & Spicer, 2010).

Plans differ from models in so far as they deliberately challenge the uncertainty of the future and explicitly aim at acting upon it by creating a path that gradually leads from a present situation into a future state of the world that the plan, be it successful or not, will help bring into being. If the model proceeds from the present to the future, the plan goes in the opposite direction, from the future to the present.<sup>6</sup> It asks: what is the future state of the world at which we want to arrive, and how can we go there starting from here and now? Like the model, the efficacy of the plan is not to be sought in its ability to predict what will happen in the future, and to ensure that the itinerary that it draws will be accomplished accurately. Probably counter-intuitively, the matter of the plan is the present rather than the future. A plan that works is not a plan that predicts future states of the world, it is a plan that engages allies in the present (Kornberger & Clegg, 2011).

Martin Giraudeau's analysis of business plans demonstrates this point. Delving into the history of business plans, Giraudeau (2012) reminds us that the plan is not only a cognitive tool, meant to augment the entrepreneur's capacity to imagine a future business, but an enrolment tool, which circulates and is addressed to a particular audience: investors. The examination of business plans should then be attentive to both how they are written (by entrepreneurs) and how they are read (by investors). A good business plan is seen as a plan that wins the investor's "confidence" by exciting her imagination, creating "dreams about the future", but also providing "proofs" in the present – in particular proofs that the business has already started to exist. The business plan is thus caught in a tension between "excessive unreality and immediate actualization", between the future and the present, between dreaming and proving, between "theory and theology" (Kornberger, 2012). Observing the proliferation of this tool in spite of the tensions in which it is caught and the critiques that it has received, in particular after the dot-com bubble, Giraudeau concludes that "its success may be attributed precisely to its ability to 'colonise the future' (Giddens, 1991) not only by providing a means to represent this future, but also by fostering the continuous actualisation of the future during the planning process itself".

Analyses of strategy tools like models and plans thus show that their role lies not in forecasting the future (assuming that the future is one and unknown) but in making (possible) futures visible in the present and opening them up for intervention. They serve as devices for exploring and acting on the future and the present alike. They both embed, however, a linear conception of time which hinges on the delineation of the present and the future as two distinct temporal domains, one subject to a problem of action (what should we do now?), and one subject of a problem of knowledge (what will the future look like?). The third strategy tool that we will examine here, discounting, does not share the same assumption. Discounting refers to techniques used to calculate the value of something (the something in question can be a piece of machinery, a R&D project, an environmental policy, infrastructure...) by estimating the future flows of costs and benefits (or revenues) that it is likely to generate, and reducing the amounts of these flows by a certain factor, called the discount rate, due to their distance in time and their degree of uncertainty. The origins of discounting reside in the theory and practice of finance; its principle can be summed up in the deceptively simple idea that "one dollar today is worth more

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<sup>6</sup> As suggested by one of our reviewers, reversing the arrow of time from the future to the present is a common characteristic of backcasting methods.

than one dollar tomorrow” (because it can be put in the bank and generate a rate of interest), and hence that a dollar tomorrow is worth less than a dollar today. The implication of this principle is that the future is worth less than the present, and therefore has to be “discounted” when brought back into the present, through the application of a discount rate.

While much less familiar than models and plans, discounting is one of the key tools used by firms and policy makers to make decisions about matters involving the future (Doganova, 2014, 2020; Miller, 1991; Svetlova, 2012). It is thus central in public and private actors’ strategy practices. For example, to decide whether it should fund a new drug development project, a pharmaceutical company will calculate the costs that its development will incur and the revenues that it will generate once on the market. Costs and revenues that occur at different points in time (a drug development project may take more than 10 years) are all translated into their “present value” by means of a discount rate which, within firms, usually corresponds to their cost of capital. To decide whether it should implement an environmental policy, a government will make a very similar calculation: the costs that such a policy will incur (for example, by harming the competitiveness of national industries) and the benefits that it will produce (corresponding in particular to the avoided costs of environmental damage) will be estimated and discounted in order to be translated into present values. Only, the discount rate used (called the social discount rate in this case) will generally be lower than the discount rate used by firms (the cost of capital). Albeit lower, the discount rate still produces a troubling effect: it devalues the future. The more distant an event (namely, a flow of money) is in the future, the less value it is granted. And since often costs are more proximate than revenues or benefits, they end up weighing more in the calculation. The value of long term projects becomes lower than that of short term projects, and sometimes even negative, thereby indicating that, to take the same examples again, a drug is not worth developing or an environmental policy is not worth implementing.

Discounting is of particular interest for our argument because it has been central to debates on the long term, and in particular the two episodes that we discussed in the previous section. It is not surprising that the first applications of discounting beyond finance can be traced back to the debates on forests in the 18<sup>th</sup> and 19<sup>th</sup> century, which we discussed above. By the long temporalities that they espouse, forests urged those who attempted to manage them to delve into the question of how the future should be taken into account in calculations of value and the quest for rational decision making. In 1848, the German forester and mathematician Martin Faustmann proposed a method for calculating the value of forest land and of the trees standing on it, which consisted in summing the future costs and revenues that the forest is likely to produce, discounted at a rate of around 4%, corresponding to the rate of interest. This calculation, known as the Faustmann formula, is often cited as one of the first formulations of discounting beyond finance. Its appearance had little to do with the spread of finance; it was the result of the development of scientific forestry as part of the cameral sciences which aimed at rationalizing the practice of government. Moreover, it came as an answer to a problem of valuation and price setting; this problem, however, was not a market problem but a problem for government (in particular, the calculation of the amount of the compensation to be paid to forest owners whose land was to be cleared). It simultaneously became an answer to a problem of management: the Faustmann

formula could indicate not only what the value of a forest was, but also how this value could be maximized, by adjusting the parameters of the formula, in particular the forest rotation length. The results that such calculations produced were controversial because they recommended shorter rotation lengths and went counter established forestry practices which did not assume that time had a cost.

Discounting was also identified as an explanation for managers' short-termism in the 1980s. Probably the harshest attack on discounting was that of two Harvard Business School professors who argued that "the willingness of managers to view the future through the reverse telescope of discounted cash flow analysis is seriously shortchanging the future of their companies" (Hayes & Garvin, 1982, p. 52). At the time when they were writing, discounting had become the main tool used by managers to make decisions about investments. The tool provided managers with a simple rule: if a project's present value, calculated with a discount rate often as high as 10 or 15% or even 20%, was positive, it was worth investing in. The debates centered on the high level of the discount rates used by managers, which even finance scholars such as MIT professor Stewart Myers acknowledged to be "unrealistically high" (Myers, 1984, p. 132) and set out to correct by producing evidence on the appropriate levels of the cost of capital and by identifying managers' "misapplications" of finance theory, namely "the typical mistakes made in applying DCF (that) do create a bias against long-lived projects" – a bias which, Myers argued, discounting does not have "in principle" (p. 131).

Interestingly, discounting has not been challenged per se, for the peculiar theory of value that it carries or for the paradoxical relationship that it entertains with the future – paradoxical in so far as discounting simultaneously makes the future count because it derives the value of entities from their future becoming, rather than from their past or their present, and discounts the future because it considers that the more distant an event is in time, the less value it has in the present. In spite of the debates in which it was involved, the tool gradually expanded beyond the practice of corporations and penetrated the practice of government, driven in particular by the spread of cost-benefit analysis techniques.

Through the analytical lens opened by following a strategy tool like discounting, the question of the capacity of different actors to form different "present futures", such as the short term and the long term, can be translated into a simpler, empirical question: what are the discount rates used by different actors, for what reasons and with what effects? The difference between public and private actors' capacity to engage with the long-term future then boils down to differences in the definition and the level of their discount rates. Striking here are both the omnipresence of the tool of discounting across different actors, in spite of variations in the discount rates that they apply, and its stability over time, in spite of the controversies that it has triggered. Its use by private actors was not shaken by the debates on the decline of American industry in the 1980s. Neither was its use by public actors, although they are increasingly urged to think and act with the long term futures drawn by issues like sustainable development and climate change. The Stern report on the economics of climate change, which recommended the use of very low discount rates in order to make the future count in the present (Stern 2006), and the debates that followed its publication, are a powerful illustration of the conflation between the discount rate and the capacity to make the future present, or between the tools and times of strategy.

The comparison between models, plans and discounting also allows us to revisit the analytical tension of time in strategy that we discussed in the introduction: the idea that the future is both given and amenable to change. We argued that models and plan embed a linear conception of time which hinges on the delineation of the present and the future as two distinct temporal domains, one subject to a problem of action, and one subject of a problem of knowledge. By contrast, discounting problematizes the very separation between the present and the future. With a discount rate equal to zero, the future becomes worth as much as the present, and there is thus no longer any difference of nature between these two temporal domains in terms of valuation and decision making. The issue at stake is not knowing the future (as if it were one and unknown), but lending it the capacity to act in the present.

We could then venture the following hypothesis. Could the recurrence of discounting in current debates on strategy and policy making be read as a signal of an ongoing transformation of our conception of the future, from an object of knowledge into an object of care? Firms and governments increasingly talk about the impossibility to plan, evoking global uncertainties, “disruptive” technological innovation and the overall acceleration of the pace of change. Strategy is then no longer about planning but about “preparedness” (Collier & Lakoff, 2008). What is left for us is to be “prepared” for a future that is deemed radically unknowable, somehow out of control, more and more distant but approaching faster and faster. While calls for taking the long-term future into account are amplifying today with the rise of concerns about climate change, sustainable development and future generations, one of the key problems of our times seems to be to make ourselves capable to care about the future, notably the distant future; capable to act now in order to generate effects in a time that probably we may not even witness. What is surprising is actually how difficult this appears to be. Neither scientific numbers about the rise in temperature in the next decades, nor frightening images of forthcoming disasters, seem to create enough leverage for action in the present. And the reason for that does not seem to reside in our ability to know a future deemed uncertain, but in our ability to care for futures by making them part of our present.

### **In conclusion**

Summing up, in this essay we suggest problematizing time, and more specifically: the future in strategy research. Starting with the claim that the future has been naively (if at all) conceptualized in extant research in the field of strategy, we proposed several ways to study the future and its roles in strategy practice, including the power inherent in temporality, the importance of the historical contextualization of futures (such as short and long term) in strategy work; and the tools with which this contextualization or enactment actually takes place. Time is a critical resource in any evolutionary process – not only because evolution itself takes time, but because it is at least partly guided by ideas about the past and the future. We analysed in detail how the future is brought into the present and made an object for intervention and consumption through strategy work.

This argument led us to proposing a definition of strategy as the art of making futures present and turning them into allies. Consequently, we proposed to shift the unit of analysis from the future as a monolithic

category, a single temporal domain that can be more or less well known (through exercises of prediction, forecasting, anticipation, etc.), to the multiple forms of futures, the actors who carry them, and the tools through which they are made visible and palpable as part of narratives and calculations. We focused in particular on two commonly evoked forms of futures – the long term and the short term – and discussed how the tensions between them have been problematized in terms of the definition of the actors and the tools that are able to safeguard long temporalities and take care of the distant future. Our analysis thus contributes to shedding light on the relationship between strategy and the future, and on the capacity of strategy to embrace long term perspectives. Moreover, exploring how multiple forms of futures are made present, translated in strategy tools, and mobilized by actors appears as a necessary step towards understanding the linkages that can be made between temporal perspectives embedded in different organizations, communities, and policy domains (see the introduction to the special issue).

Going forward, future research could investigate in how far a similar logic applies to other temporalities than the future. Think of the past: research has shown that memorizing is socially accomplished and memory is such a collective achievement that evolves over time (Halbwachs, 1992; Van Assche et al., 2009). To illustrate our idea, just take the transformational project of the Renaissance as example: it was disruptive – but not because of its future-orientation; rather, the *Re-* in Renaissance was the revolutionary bit: it was a re-discovery of antique philosophy (such as Lukrez' *De Rerum Natura*), the re-reading and re-interpretation of the past that opened the doors to the future (Greenblatt, 2011). Like in the Renaissance, perhaps any strategic claim to the future starts with re-claiming the past, be it as resurrection of a forgotten tradition, re-imagining of the meaning of a historical personality or re-interpretation of a specific event. History is what we re-member, actively, collectively, selectively (Zerubavel, 2012); the past is as malleable as the future, as Kierkegaard reminds us: history is prophecy turned backwards. Thus, perhaps we need to think more about the future and the past as resource for transformation, if we want to understand how strategic change occurs. Our reflections represent a few vantage points for further inquiry that may help to problematize the relationship between strategy and time more profoundly. Whether these ideas could help improving practice is less certain, for as Hirschman (1981, p. 270) cautioned, increased understanding may lead to a decreased (belief in) ability to shape the future.

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