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A contemporary history of Silicon Valley as global heterotopia: Silicon Valley metaphors in the French news media

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ABSTRACT

This paper explores the extraordinary symbolic resonance of Silicon Valley in global cultures. Through a case study examining a large electronic corpus of French newspaper articles (2014–2019), we demonstrate the extent to which the Californian tech hub's reputation has been repurposed worldwide, probing in particular metaphorical uses of its name in descriptions of countless other places around the globe. Harnessing the explanatory power of Foucault's concept of heterotopia, our analysis reveals how comparing a site to Silicon Valley carries a variety of discursive functions as a tool of political and commercial rhetoric with tangible advantages in a globalized setting. Uses of Silicon Valley to evoke a more prosperous future are, however, contested in the corpus, most visibly in interviews with political philosopher Eric Sadin. We argue that Silicon Valley as heterotopia thus reflects and reconfigures both our highest hopes and deepest fears amid the unsettling upheaval of the digital age.

KEYWORDS

Silicon Valley; metaphor; heterotopia; global cultures; France; news media

In this article, we aim to examine the pervasive symbolism in global cultures of Silicon Valley through a case study drawn from the French news media (2014–2019). While all places hold symbolic potential, not all enjoy an equal degree of symbolic resonance. Mention of some sites may trigger few connotations for populations located outside of their immediate social context; others appear to have become great reserves of the global imagination with symbolic currency influencing key actors in contemporary history. Often through the cumulative effect of their representation in the media, certain locales come to stand for a cocktail of abstract ideas in discourses shared transnationally, even across languages (Orgad, 2012). Such is Silicon Valley.

As argued below, the extraordinary symbolic power of Silicon Valley is evident in metaphorical usages of its name. The expression Silicon Valley does not always denote the geographical location associated with high-tech companies in California. Instead, it is used to evoke a varying set of sociocultural associations in descriptions of countless other cities, regions, countries and even continents. Crucially, we cannot interpret its representation in the global imagination only in terms of 'relations of power' (Orgad, 2012); rather, use of the term Silicon Valley usually aims to attribute cognate forms of power in new contexts, or to manufacture that power where it does not yet really exist. Thus, Lagos is dubbed Africa's Silicon Valley (Startup Grind, 2015), while Pyongsang is nicknamed North Korea's Silicon Valley (Pons, 2019). A website compiled by journalist Keith Dawson

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(n.d.) lists 79 'Siliconia' – a term coined by Dawson to refer to these discursive appropriations of the name Silicon Valley – associated with 105 individual locations, from the UK's Silicon Fen (Naughton, 2013), to Tel Aviv's Silicon Wadi (Keilaf, 2020). In French, Silicon Valley's symbolic potency is further evident in novel coinages such as 'silicolonisation', 'siliconien', 'psyliconisme' and 'siliconisme' (Sadin, 2016). These cases illustrate the extent to which observers across global cultures can internalize and redeploy the metaphorical power of the Valley in ways that can impact even on globalization itself.

Previous research on Silicon Valley has focused on the rise of this technological hub to its position of global prominence and influence. Scholars such as Saxenian (1996), Gillmor (2004) and Laws (2010) propose high-context historical narratives explaining why the digital revolution developed so rapidly in Santa Clara Valley before it emerged elsewhere. By contrast, a second category of more agent-focused histories places specific actors front and centre of the analysis, whilst often emphasizing the humble origins of their world-changing inventions. Widely cited publications in this vein include Fred Turner's *From Counterculture to Cyberculture* (2006) about Stewart Brand's contribution to the rise of digital utopianism, and Leslie Berlin's *Troublemakers: How a Generation of Silicon Valley Upstarts Invented the Future* (2017).

We have found little scholarship offering sustained discussion of Silicon Valley's discursive appropriation beyond this immediate context of California and the USA. Castells and Hall (1994) have examined how the 'technopole' model made so successful in Santa Clara Valley has been replicated in many different locations around the world, but their preoccupations are predominantly empirical in nature and policy-focused in outcome; their study also predates the mass proliferation of digital technologies and industries – with their multiple effects in the political, cultural and social domains – in the wake of the popularisation of the internet. While research has documented how Silicon Valley itself has built up its international reputation, almost no studies have addressed the discourses through which this reputation has been received, repurposed or sometimes wholly metamorphosized on the global stage. The one exception here is Carver's (2010) article which explores how the Silicon Valley metaphor was especially productive as a means of rebranding this global city as a hotbed of creativity and technological innovation. Carver's analysis, however, is based on a limited data set (mostly one document entitled *Report of the Singapore Remaking Committee*), produced by only a small number of speakers. Furthermore, his conclusions concern one very specific context and consequently shed only limited light on what we argue here is a far more pervasive phenomenon which transforms Silicon Valley into a major reference point in the magma of the global imagination.

In the present paper, we seek to investigate the diverse symbolic functions that Silicon Valley performs across a much wider variety of local contexts, using a large corpus of French newspaper articles to support and develop the analysis. The choice of a French case study is not arbitrary. France and French businesses have evinced a particular obsession with Silicon Valley, and its centrality to French discourses around economic and technological innovation has been pronounced since the Nicolas Sarkozy's presidency (Lacorne, 2019). The data this case draws on will allow us to track the translinguistic and transcultural adaptations of Silicon Valley in what is a markedly effervescent context for technologically-oriented discourses. While our conclusions will not be fully generalizable, they will provide researchers with a basis on which to hypothesize about, analyse and evaluate the uses to which Silicon Valley can be put in many other contexts, both as a feature of the myths shaping our recent global history, and as a resource for projecting visions of our international future. Expanding on Michel Foucault's concept of heterotopia, we argue that Silicon Valley has come to represent an almost utopian space in which the hopes and fears of other

communities and cultures around the world are both reflected and reconfigured. In the context of the Fourth Industrial Revolution (Schwab, 2017) and in this age of platform capitalism (Srnicek, 2017), this analysis of the heterotopic value of Silicon Valley will give researchers a means of charting more effectively some of the key discursive battles of our time.

Heterotopia and the symbolization of place

Before discussing our methodology, we consider here the theoretical justification for interpreting Silicon Valley as a heterotopia. All places carry a symbolic dimension. Humans constantly attribute meaning to the concrete locations we experience, associating their manifold tangible elements – including buildings, public spaces, cities, landscapes and regions – with intangible ideas, values and feelings. Paris, for example, is associated with romance (Higonnet, 2009), and buildings such as the Parthenon in Athens with democracy (Neil, 2018). We should, however, recognize that these meanings vary between people, communities and over time. Thus, even mundane sites of social life, such as the factory, may come to stand as 'a symbol of progress, of production and employment, of unemployment, of exploitation, or of pollution' (Monnet, 2011). The content of these symbolic meanings as well as their relative cultural dominance shape, and are shaped by, the ways in which other spaces, objects, events, activities, behaviours, individuals and groups are viewed in that society.

The process through which places acquire symbolic meanings in specific contexts has been studied with reference to a range of theoretical concepts and analytical frameworks, including Edward Soja's (1996) 'thirdspace'. Here, however, we harness the potential of Foucault's notion of heterotopia to characterize and make sense of sites such as Silicon Valley, imbued with exceptional symbolic power in many cultures around the world. For Foucault, heterotopias are 'other spaces' or 'counter-sites' which, as a consequence of a unique series of historical developments, have acquired special status in the social imagination and whose discursive resonance distinguishes them from most other sites of the social realm (Foucault, 1986, p. 27). Furthermore, the symbolic strength of heterotopias leads Foucault (1986, p. 24) to draw parallels with another spatial genre, that of the utopia or 'non-place'. Unlike utopias, heterotopias have a tangible, material presence whose form and features can be directly experienced. Nevertheless, like utopias, heterotopias may function as mirrors of the world in which they are created, reflecting both an idealized image of social life and specific cultural anxieties about the very elements of that society which threaten this image. Thus, although all societies may create heterotopias, (Foucault, 1986, p. 24), the forms and functions of these sites will vary across cultures and historical periods, in line with differences and changes in these community-specific ideals and insecurities.

Building on Foucault (1986) one of the most productive applications of this concept can be found in Beuka's (2004) analysis of American suburbia which mirror at once the fantasies and the phobias of US culture at large. Just as the suburbs emerged as the promised land of the post-war middle class, symbolizing the American Dream, the standardized sprawling housing developments also came to connote that dream's inverse: 'the vision of a homogenized, soulless, plastic landscape of tepid conformity, an alienating "noplace"' (Beuka, 2004, p. 4). Theorizing the suburban landscape in heterotopic terms thus allows Beuka to view this space as neither fully utopian nor entirely dystopian, but as a carrier of a multiplicity of interpretations, all deriving from the constellation of often contradictory values and concerns dominating contemporary US culture.

Importantly, heterotopias not only mirror society, but may additionally work to reconfigure it through their otherness, suggesting an alternative order of things. Foucault explores the

nineteenth-century museum as a discursively powerful and highly symbolic reconfiguration of 'all times, all forms, all tastes' (1986, p. 26): incompatible objects from diverse civilisations are juxtaposed in the normative format of the exhibition space, thus imposing a new rational order on the cultures and histories that each item is made to represent. Thus, the features of the museum heterotopia change how visitors behave – children are told not to run, the consumption of food or drinks is forbidden, visitors typically speak in hushed tones (Duncan, 1995) – and refashion how their public perceives the world outside through the narratives they tell and the hierarchy of cultural values and judgments that they assume.

To our knowledge, published scholarship has not made substantial use of Foucault's theory of heterotopia to analyse Silicon Valley, aside from brief discussions of specific buildings constructed in this region – such as Norman Foster's Apple Campus 2 – identified by one scholar as a heterotopic space (Malfona, 2018). Yet, as we argue below, this concept brings into sharper focus the precise features of Silicon Valley as an enacted utopia, a 'real-and-imagined space', actually lived and socially created, part of, and yet separate from, the world in which we live (Soja, 1996). Our hypothesis is that Foucault's framework will permit us to capture the ways in which Silicon Valley exists as much as a symbol as a physical reality, its name used not merely to refer to a region of the San Francisco Bay Area, but also as a powerful metaphor to conjure up a complex cocktail of values, aspirations and anxieties. Heterotopia thus helps us to account for the ways in which Silicon Valley is symbolically constructed as an 'other place' in culture, while keeping in view the materiality of this site, its tangible achievements and transformative global influence. What remains to be seen in the course of our analysis is the breadth and contradictions of the spectrum of meanings that Silicon Valley offers when it is heterotopicized, and the ways in which discourses relating to this heterotopia have real effects back in the world.

Methodology and data selection: French perspectives on a global phenomenon

Contemporary processes of globalization have led to the emergence of an interlinked constellation of global cultures, in which certain identities, beliefs, narratives, values and expectations have increasingly spread among transnational communities (Crane, 2016). For Kraidy (1999), however, these global cultures are negotiated by individuals and groups rooted in specific locales such that the tropes of global cultures can only be analysed from local perspectives. Accordingly, our analysis focuses on unpacking the symbolic functions of Silicon Valley as a heterotopia in global cultures as they are viewed from the perspective of mainland France.

While a wider sweep of languages and cultures would be necessary for an exhaustive analysis of the transcultural and translinguistic affordances of Silicon Valley, in this exploratory study the French case alone is rich enough to sample some of the key variables distinguishing Silicon Valley's recent translinguistic and transcultural permutations. On a linguistic level, English is certainly the language from which French borrows the most frequently, especially in fields such as technology, business and popular culture (Barffour, 2016). On a cultural level, twentieth-century France has a long history of both welcoming and contesting the cultural and economic influence of the USA (Kuisel, 1996; McKenzie, 2008). The mixed reactions to American culture in France make of it a more promising candidate for this analysis than nations where American transcultural influence has been more widely supported or resisted. By the time the novelist and essayist Georges Duhamel (1930) contentiously denounced France's lurch towards the siren attractions of the American way in the 1920s, French industry had already noted the leverage that Fordism and Taylorism could bring them and internalized the lessons of American industrial modernization (Clarke, 2011;

Tesi, 2008). The French lament over *coca-colonisation* (Kuisel, 1996) – a term coined by *Le Monde* in 1949 and an insult wielded by left-wing European intellectuals to denounce American influence – post-dated the decisions that saw post-war French governments adopting the strategic path of modernization with the help of American dollars (Chapman, 1999). More recently France has witnessed aggressive opposition to American hegemony and globalization – still epitomized by José Bové's illegal demolition of a McDonald's restaurant in Millau near Montpellier in 1999 (Ariès & Terras, 2000) – and the rather warmer feelings that some believe have underpinned superficial dismay at the America of Trump (Vergniolle de Chantal, 2020). Thereby, France continues to provide a wide spectrum of reactions to America and its influence which are never embraced without some form of opposite reaction. Thereby, the French case promises to account for a significant variety of transcultural transformations of Silicon Valley and to test a wide spectrum of Silicon Valley's translinguistic appropriations. Consequently, the French case has the potential to expose complex interactions between discourse, culture and the empirical world that will raise questions for globalization scholars working with other cases.

To explore the French discursive appropriation of Silicon Valley, our dataset comprises a large electronic corpus of all articles published between 2014 and 2019 from the six most widely circulated daily newspapers in mainland France (Statista, 2020): *Les Echos* (LesEchos.fr), *Le Monde* (LeMonde.fr), *Le Figaro* (LeFigaro.fr), *Libération* (Liberation.fr), *Le Parisien-Aujourd'hui en France* (LeParisien.fr) and *La Croix* (La-Croix.com). This 381-million-word dataset was compiled within the Sketch Engine corpus analysis platform (www.sketchengine.eu) from the Timestamped JSI Web Corpus, a vast collection of news content from around the world (Bušta & Herman, 2017). It was analysed with tools made available by Sketch Engine. Entering the keywords *Silicon Valley* into the concordancing tool made it possible to identify every mention of Silicon Valley across our French-language dataset (6,197 search hits) and to observe the ways in which this place is discussed by resorting and filtering the concordance lines generated. In this process, it quickly becomes clear that, while some of the news articles in our corpus focus directly on discussing Silicon Valley, in the main the Californian tech hub tends to be mentioned only in passing as journalists report on local developments and world affairs. The analysis of these texts thus provides crucial insight into the casual use in French media discourse of references to Silicon Valley across a wide variety of subject domains, from politics and business to sport and culture. Further study could benefit from analyses of other genres to capture more comprehensively the diversity of sites where Silicon Valley's international reputation has been appropriated. For now, however, the analysis of newspaper articles would seem an important first step, given their position of influence over the production and reproduction of discourses in culture and society (Baker, 2006; Fairclough, 1989).

Silicon Valley's symbolic functions

As noted above, the extraordinary symbolic power of Silicon Valley as a heterotopia in global cultures is especially evident in the metaphorical usages of its name in our corpus (cf. Baker, 2006, p. 167). Figurative language is a pervasive feature of media discourse (Steen et al., 2010) and, as Kennedy (2000, p. 209) has noted, 'metaphor is an essential part of the way we deal with novel and current events.' Thus, we are not suggesting the metaphorical comparison of two places is unique to Silicon Valley. In the corpus other place names – for example, Hollywood, Venise (Venice) and Paris – enjoy similarly metaphorical uses in descriptions of locations as diverse as Armenia ('une Hollywood du Caucase', 'a Hollywood of The Caucasus'),[1] Suzhou ('la Venise de Chine', 'the Venice of China') and Bucharest ('un Paris oriental', 'an oriental Paris'). Nevertheless,

few place names outside France attract such widespread and persistent comparisons as Silicon Valley: by filtering a concordance of the keywords *Silicon Valley* to display only constructions such as 'le/un Silicon Valley de X' ('the/a Silicon Valley of X') and 'le/un Silicon Valley' followed by a place name adjective (e.g. 'chinoise', 'Chinese'), 235 metaphorical uses of Silicon Valley can be identified in our news article corpus, against just 40 for Venice, for instance. While we cannot of course generalize too broadly on the basis of this exploratory case study alone, this finding would certainly appear to lend strong support to the claim that Silicon Valley stands out for its exceptional discursive resonance, a heterotopic 'other place' with immense symbolic power in the global imagination.

A key insight into the functions of metaphor in discourse is provided by Gluksberg and Keysar (1990, p. 16): 'metaphors are used to communicate a complex, patterned set of properties in a shorthand that is understood by the members of a speech community who share relevant mutual knowledge.' In other words, analogies simplify the communication of more complex and abstract ideas by relying on the reader's ability to draw inferences based on their prior culturally conditioned knowledge of the world. In Silicon Valley's case, to construct a place as the 'Silicon Valley panafricaine' (Amougou, 2019) or 'Silicon Valley d'Amerique Latine' (Saliba, 2014) appears to present it as the locally preeminent technology innovator. While commentators may disagree on which Chinese city-region merits the title – Zhongguancun (Hubert-Rodier, 2019), Shenzen (Malovic, 2018) or Hangzhou (Pedroletti, 2016) – a clear assumption underlies all such claims: that there can only be one 'Silicon Valley chinoise' ('Chinese Silicon Valley'). Accordingly, the corpus offers only rare cases of Silicon Valley's many imitators being discussed collectively as Silicon Valleys in a plural form.[2] These sites are discursively set apart from their regional competitors as uniquely worthy of symbolic comparisons with the Californian Silicon Valley. To label a place as a Silicon Valley then is to signal its own heterotopic exceptionality vis-à-vis all other local sites, and its comparability only at global scales. It is appropriate to note here that in addition to the first-order heterotopia of the Californian Valley itself, each place labelled as a Silicon Valley is at least discursively constructed as a second-order heterotopia, reconfigured by the real-world referent of Silicon Valley.

Logically, the innovations produced in many Siliconia (Dawson, n.d.) lie in the fields of digital technology and software development: Nairobi is repeatedly introduced as the 'Silicon Savannah', a moniker which is then glossed by one journalist as an indication that this city has become 'the crucible of digital innovation in Kenya, where every day start-ups find solutions to all sorts of problems through mobile apps' (Abdelkrim, 2015). Romania's reputation as a future Silicon Valley of Eastern Europe is likewise attributed to the rapid growth and expansion that its IT sector is currently undergoing (Le Figaro, 2019). Nevertheless, references in the corpus to Normandy as a potential Silicon Valley of equine health (Legueltel, 2016), Les Vosges as the Silicon Valley of the French wood industry (Kessler, 2019), Poland as the Silicon Valley of household appliances (Lenoir, 2017), Italy as the Silicon Valley of populism (de Gasquet, 2019) and Africa as the Silicon Valley of banking (Ramadier, 2018) indicate that this symbolic meaning has currency way outside the high-tech domain. Paradoxically, it is only Silicon Valley's ever greater abstraction from its technological origins that enacts its expanding discursive pervasiveness on the stage of global cultures. Furthermore, this discursive transferability of Silicon Valley into other domains suggest a broader 'Silicon Valley model' to the one identified by Castells and Hall (1994, pp. 21–28), although its emergence may well postdate their own analysis.

Part of the explanation for this transferability derives from the finding that in the corpus Silicon Valley appears to represent not merely success in creating new digital technologies but also commercial success more broadly. Poland, for example, is labelled the Silicon Valley of household appliances simply because many of the largest firms in this sector – including Whirlpool, LG and

Samsung – have set up their European factories there, much to the benefit of its local economies (Lenoir, 2017). According to journalist Emmanuel Kessler (2019), on the other hand, Les Vosges is deemed to merit metaphorical comparison with Silicon Valley because of the way this region has successfully integrated the activities of local businesses, professional associations and training colleges in order to better exploit new opportunities for economic growth and development.

Most of all, however, Silicon Valley appears to stand for an economic framework which encourages the creation of small start-up enterprises, beginning with various forms of venture capital and often in search of elusive 'unicorn' status (valuation of at least $1 billion upon public flotation). This seems something more extensive and ambitious than the *entrepreneurialism* identified by Castells and Hall (1994, p. 22). The collocation of Silicon Valley with terms such as *start-up* and *entrepreneur* is strong throughout the news corpus, and those authors analysing the replication of Silicon Valley invariably mention the importance of start-ups. According to one headline ('Quelles sont ces start-up qui font de Lagos la Silicon Valley de l'Afrique?' – Gonzalez, 2016), it is the prevalence of start-ups alone that may transform a place such as Lagos, Nigeria into a Silicon Valley. Similarly, the choice of the sobriquet 'Silicon Mountain' to describe the Cameroonian town of Buea is explained by another journalist as being made 'en référence aux nombreuses start-up de cette ville au pied du mont Cameroun' ('in reference to the numerous start-ups in this town at the foot of Mount Cameroon' – Kouagheu, 2017).

Tendencies towards financial deregulation also attract the Silicon Valley metaphor. The success of Dubai as a new 'Silicon Oasis' is attributed by Le Monde (2016) to its status as a 'zone franche' ('a free zone'), a region accorded special tax status in which new companies might thrive. Likewise, Hong Kong's unique business-friendly fiscal policy is a key asset which Beijing has sought to exploit through the creation of the Guangdong-Hong Kong-Macau Greater Bay Area, 'cette Silicon Valley à la chinoise':

> Le nouveau pont [entre Hongkong et Macao] doit être un catalyseur du projet de "Grande Baie" … Pour bâtir cette Silicon Valley à la chinoise, Pékin compte sur les atouts de Hongkong: son ouverture internationale, son système fiscal, son environnement favorable aux entreprises et sa solide protection de la propriété intellectuelle.
>
> (The new bridge [between Hong Kong and Macao] is to be a catalyst for the Greater Bay project. … To build this Chinese Silicon Valley, Beijing is relying on the assets of Hong Kong: its international openness, its fiscal policy, its business-friendly ecosystem and its solid protection of intellectual property.) (Brostra, 2018)

Thus, in many of the concordance lines Silicon Valley appears to symbolize the dream of a more prosperous future enabled by innovative technology, individual entrepreneurship and financial deregulation. Silicon Valley often stands for the almost messianic belief that new technology-driven start-ups hold the optimal solution to pressing socio-economic concerns. Perhaps unsurprisingly, the most vocal proponents of this utopian vision are business leaders and investors such as John Chambers, a former CEO of Cisco Systems. Chambers is quoted in *Les Echos* (Chambers, 2016) and *Libération* (Auffray, 2018), voicing his conviction that France will successfully overcome its macroeconomic problems thanks to the burgeoning start-up culture of this emerging Silicon Valley ('cette Silicon Valley en puissance'):

> [la France] parviendra à surmonter certains de ses problèmes macroéconomiques. Le pays est entré dans une nouvelle ère culturelle qui récompense les innovateurs et les soutient dans la mise sur le marché de leurs concepts, encourage la collaboration entre acteurs établis et jeunes pousses et incite les esprits entrepreneurs à monter leur start-up.

> ([France] will succeed in overcoming some of its macroeconomic problems. The country has entered into a new cultural era which rewards innovators and supports them as they bring their concepts to market, encourages collaboration between new and established businesses, and spurs entrepreneurial spirits to launch their start-up.) (Chambers, 2016)

A belief in the redemptive potential of the start-up is shared by a rare consensus among politicians too, no matter whether they are based on the political right or left, in France or internationally: the mayor of Copenhagen, Helle Adelborg (Allagui, 2019) has described her dream of constructing 'une Silicon Valley verte' ('a green Silicon Valley) along Denmark's Baltic coast; Rwandan President Paul Kagame's vision of transforming his capital Kigali into an African Silicon Valley is similarly laid out in a report published in *Libération* (Huon, 2016). Nowhere in the corpus do we find politicians evoking Silicon Valley as anything other than a symbol of a desirable future for their local region. As a tool of political rhetoric, therefore, the advantages of deploying the Silicon Valley metaphor in a globalized setting are tangible. These figures of speech are not 'mere adornments' in language use (Shapiro, 1985, p. 195). Silicon Valley's heterotopic function as a model of success offers politicians the chance to evoke aspirations electors can long for and that only the former can facilitate. Yet paradoxically, the gap between Silicon Valley and its international counterparts is suggestive of the Valley's inimitability, its radical otherness as a heterotopia, potentially absolving politicians from ever having to deliver on their promises. Thus, the metaphor of Silicon Valley is not merely an instrument of casual journalistic tokenism, nor is it merely a PR soundbite. Rather, it is also a weapon of political rhetoric that evokes, and has the pretension of enacting, desires whose similarities seem proof of their collective role in a globalized world.

La silicolonisation du monde

These wide-ranging surveys of the news corpus might suggest that Silicon Valley as heterotopia is universally celebrated. More fined-grained analysis seeking out dissenting voices, however, tells another story. While these voices are rare, the corpus contains a number of interviews with prominent technocritics such as Antoine Gouritin and the internationally renowned Evgeny Morozov (e.g. Guiton, 2016; Sugy, 2019; Untersinger, 2014). Yet, in our corpus the most outspoken and most frequently cited critic of Silicon Valley appears to be French political philosopher Eric Sadin whose presence in nine separate newspaper articles published in *Le Monde*, *Le Figaro, Libération* and *La Croix* between 2016 and 2018 marks him out as a distinctive voice whose views deserve closer scrutiny. Sadin's objections to Silicon Valley's globalized cultural and economic dominance shows why Silicon Valley as a heterotopia should be considered polyvalent: a toponym capable of articulating desirable goals and undesirable consequences. In substance, he argues that the Valley's dominance has brought about 'une conquête intégrale de la vie' ('a total conquest of life'), affecting the world of work, urban organization, education and health; this conquest is, furthermore, a 'marchandisation de la vie' ('commodification of life') that has likewise given rise to the automatized organization of society (Sadin & Trémolet de Villers, 2017). For Sadin, therefore, Silicon Valley symbolizes a most undesirable future in which our technologies – in our homes, workplaces and public spaces – are weaponized through digital infrastructures that facilitate the large-scale corporate collection and exploitation of consumer data.

As an insight into big data usage, Sadin's analysis anticipates strongly the case made by Shoshana Zuboff's (2019) theory of *surveillance capitalism* about the purposes of prediction and manipulation to which our digital footprints are now regularly directed – a case made earlier by journalist Andrew Keen (2015). In an interview with *Libération* (Féraud, 2016), Sadin summarizes the real-

world negative effects of Silicon Valley's promises, citing the precarity of employment in start-up cultures, the minimization of job security and collective bargaining rights, and the payoffs counted in stock options that may prove valueless. In the same interview Sadin – observing what separate social scientific studies have since substantiated (Clarke & Boersma, 2019) – equally draws attention to the appalling labour conditions of high-tech factory workers in countries such as China, Thailand and Malaysia, and Big Tech's aggressive avoidance of tens of billions of dollars in taxes (Tang & Ngo, 2012). Even if this is a minority report on Silicon Valley's effects, it is thus one whose foundations find substantial support in a diverse range of quarters. In the light of these observations, Sadin's Silicon Valley symbolizes a techno-driven project that is as exploitatively rapacious as it is virally reproductive. Thereby, Silicon Valley is indeed an archetypal heterotopia for Sadin, but in dystopic rather than utopic terms.

More crucially, the discrepancy exposed by Sadin's minority report evokes again the contextual nature of metaphor as a rhetorical figure that draws on 'relevant mutual knowledge' (Gluksberg & Keysar, 1990). For Sadin – and other critics who have exposed the shortcomings of businesses driven by the Silicon Valley model – the 'relevant mutual knowledge' that should inform the global imagination concerns the cultural servitude and hidden economic shortcuts that appear to accompany the Silicon Valley model. One man's empire is another man's colonized homeland. The heterotopicizing of Silicon Valley – the desire underpinning countless Siliconia on the global stage – depends on the suppression or concealment of the 'relevant mutual knowledge' that would make such a model not desirable but detestable. By corollary, we must observe that treating Silicon Valley as a desirable heterotopia is potentially much worse than lazy journalistic or political rhetoric. It ignores and perhaps even helps conceal the knowledge that would expose the deleterious effects of the Silicon Valley model, such as Sadin (and indeed others) understands them.

One last feature that distinguishes Sadin's analysis from that of others hostile to Silicon Valley concerns his coinage of new terms, specifically, *silicolonisation* (silicolonization), *siliconien* (siliconian) and *psyliconisme* (psyliconism).[3] S*ilicolonisation* is of course inspired by the neologism *cocacolonisation* noted above (Kuisel, 1996), and yet it goes significantly beyond it, not least because *silicolonisation* is a truly global and even anthropological phenomenon, crossing not only national and continental boundaries but also the porous membranes separating our inner life from our cultural and societal existences. This same ubiquity seems likewise tangible in the adjective *siliconien* and the noun *psyliconisme*: thus, for Sadin, 'la terre est devenue siliconienne' ('the Earth is siliconized', 2016, p. 23) and its inhabitants are afflicted by a psychological condition labelled 'le psyliconisme' ('psyliconism', 2016, p. 28). This diagnosis belongs to the category of the psychosociology of technology, as evoked by the French post-war techno-critic Gilbert Simondon (2014). Yet, as a cultural pathology, psyliconism also alludes to Frantz Fanon's analysis of the psychological trauma of French colonization in North Africa which, Fanon (1952) believed, left the colonized peoples in a state of *dessaisissement* ('a relinquishment' of being). Sadin thus reads the malaise induced by the ubiquity of Silicon Valley's heterotopic resonance as a form of collective and individual abandonment of deliberation and judgment before the invading powers of digital life. For Sadin, the heterotopia of Silicon Valley induces what might be called a *heterophrenia*, a mental iteration of the heterotopic process, rooted in a collective reticence to acknowledge our complicity in these exploitative business practices. This heterophrenia may even be part of a wider phenomenon more crucial than ever to global capitalism which benefits from our collective reticence to acknowledge our complicity in exploitative business practices in places distant from us in the global supply chain. While it is difficult to conceive of the means whereby this analysis could be validated experimentally, its general lines correlate strongly with the view that Silicon Valley prospers positively as a heterotopia

in a range of discourses that cross global boundaries only because its abuses tend to lie outside the mutually relevant knowledge that would render it an undesirable aspiration.

Silicon Valley heterotopicization: returning from the discursive to the empirical

Coming back to the French context, we have seen that Silicon Valley serves as a powerful 'nodal point' (Laclau & Mouffe, 2001, p. 112) around which various domestically-focused discourses can be organized and negotiated. Silicon Valley is a privileged and productive signifier in French media discourse about global change, linked to a chain of complex identities, discourses and values, whose meanings are contested by voices championing different visions of France's future. More than this, however, in the case of France the heterotopicization of Silicon Valley is further demonstrated by real-world changes that reflect the import, cultural internalization and export of the Silicon Valley discourse.

On a domestic level, France's internalization of Silicon Valley's dynamics stand out in current affairs. The values that the Valley stands for metaphorically find an echo in a series of wider legislative acts since 2014: the Loi Macron (2015), the Loi El Khomri (2016) and the Loi Pénicaud (2018), laws favouring the deregulation of work, the promotion of entrepreneurship, the lessening of social protections and the creation of new opportunities. Some have even begun to refer to France as a start-up nation, and Emmanuel Macron's own political party 'La République en marche' has been conceived of as a political translation of the logic of the start-up (Quijoux & Saint-Martin, 2020). Although many forces in France still resist it, this spirit of Silicon Valley, the heterotopic instantiation of the Silicon Valley metaphor in a French context, seems to have become tangible throughout Macron's presidency.

Yet these changes go back in inspiration to the presidency of Nicholas Sarkozy (2005–2012) who, for example, invited leading technologists to join him at the eG-8 Forum in 2011 to consider how the affordances of Silicon Valley could be exported across the globe (Charnock, 2011). Although the cause of French high-tech start-ups continued to struggle thereafter (Mawad, 2012), Sarkozy's preoccupations were echoed during François Hollande's term in office (2012–2017) and took shape in the government-funded initiative of *La French Tech* founded in 2013. *La French Tech* has attempted – arguably without great success (Lacorne, 2019) – to generate the right conditions for an incipient culture of high-tech start-ups in France. Even more significantly, its reach went international in 2016 when Axelle Le Maire, then Minister for Digital Affairs, extended the initiative to the global stage, naming twelve cities around the world (including San Francisco) as 'French Tech Hubs' (La French Tech, 2016). The significance of the French case for globalization studies here emerges definitively. Catalyzed by the heterotopicization of Silicon Valley, France's own global agenda in science and technology (Ruffini, 2020) has incorporated a French counter-proposition for the global high-tech frontier. In France's branding of San Francisco as a 'French Tech hub', do we not detect the desire, however illusory, to contest or even rival Silicon Valley as *the* high-tech heterotopia on the global stage, making San Francisco an outpost of French global ambition? Whether or not it is practicable, the French case shows, nevertheless, the power of Silicon Valley as a heterotopia to attend desires that shape global-facing policies.

Conclusion

This paper has investigated the symbolic functions of Silicon Valley in global cultures, as viewed from the perspective of mainland France and six of its most widely circulated newspapers.

Concentrating mainly on metaphorical usages of its name in descriptions of countless locales around the world, our analysis suggests that such discursive appropriations seek primarily to signal the exceptionality of a particular area in comparison with all other local competitors. This was found to be the case not only for places recognized for successes in their local IT sectors, but also across a surprising variety of further fields of specialization. We additionally noted the importance of Silicon Valley as a symbol of start-up culture, and more specifically its close associations with a sometimes-utopian belief shared by business leaders and politicians alike in start-ups as the solution to modern society's most critical socio-economic challenges. A significant exception was, however, identified in critical social commentary voiced by Eric Sadin, for whom Silicon Valley holds considerably more negative symbolic connotations: in his writings, Silicon Valley stands on a global scale for the colonization of every aspect of personal and public life by the digital industries, leading to the significant erosion of civil and labour rights and autonomy. In the final section, we showed how Foucault's concept of heterotopia helps us to recognize that these complex and contradictory symbolic functions have had a correlative impact on French domestic policy and even on France's own global ambitions, reconfiguring the high-tech industries and the way France attempts to position itself on the world stage.

This study of French news media is exploratory rather than exhaustive in its aims. We acknowledge thereby that other linguistic and cultural cases could isolate other variables in the symbolism of Silicon Valley. The analysis of perspectives on Silicon Valley drawn from Russia, Korea or China could present further significant case studies, given the complex relationship these countries too have developed with the USA through the twentieth and twenty-first centuries, as well as the specificities of their own national self-images. The Chinese technology industries in particular have increasingly established themselves as the primary competitors of American Big Tech, so an examination of the symbolic functions of Silicon Valley in Chinese culture could provide insights into how this shifting balance of power is evolving. Future research could also fruitfully explore other genres of text beyond news articles. The symbolic functions of Silicon Valley could be explored in government policy documents and political speeches, perhaps using existing corpora of political discourse, such as the Hansard corpus of British parliamentary speeches (https://www.english-corpora.org/hansard/), or through the creation of new resources compiling reports published by the Chinese Ministry of Industry and Information Technology (http://www.miit.gov.cn/). Finally, a more historical approach might uncover diachronic shifts in the reception and repurposing of Silicon Valley's reputation, and thus help us to identify turning points in the production and contestation of discourses shaping, and shaped by, the ongoing digital revolution.

Notes

1. All translations from the French are by the authors.
2. The exceptions here are found exclusively in articles which comment directly on the extent to which many new Silicon Valleys have sprung up around the world in recent decades, hoping to reproduce the Californian tech hub's model in their local region. Consider, for example: 'Des Silicon valley aux quatre coins du monde. La Silicon Valley américaine n'a plus le monopole de l'innovation. Singapour, Tel-Aviv, Dubaï sont devenues de nouveaux hubs technologiques et économiques mondiaux' (Le Monde, 2016). Nowhere in the corpus do we find, however, talk of a single country or region having more than one Silicon Valley.
3. Apart from Sadin, there was only one other instance in our corpus of a journalist neologistically adapting the word *silicon* as 'siliconisé(e)' (Pisani, 2017). By this term Pisani seemingly alludes to an understanding of Silicon Valley as the totem of economic individualism, but he does not repeat the term or treat it systematically.

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Data availability statement

The Timestamped JSI Web Corpus (French) used in this study is available via Sketch Engine (www.sketchengine.eu).

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